



176BHP KAD TWIN-CAM RACER INSIDE

enjoy

mini
made



BEST BUDDIES

Retro-style eight-port Clubman... and a matching Minivan!

PLUS:
BROOKLANDS MINI DAY
FULL EVENT REPORT INSIDE



150BHP!

Vmaxcart blower, unique retro touches, Delta buckets, Rose Petals, Yokohamas - the full works!

THE ART OF DECEPTION

Timeless '60s looks and supercharged performance... with a 1998 MPi Cooper!

Future

DIGITAL ISSUE
MAY 2014
ISSUE 224

UNIQUE W&P COOPER S SPRINT



DREAM MACHINE ESTATE RESTO



HOW TO: FIT A HEATED SCREEN



BODYWORK: BLAST RUST AWAY





Prices shown include VAT @ 20%

Please note that prices can change during the period that the magazines are printing - check website for up-to-date prices

mini spares.com
See web site for up to date prices

Why buy from Mini Spares Centre?

Our sole business is selling Mini spare parts and we make it our business to check out the quality and fitment of all items available, including the large influx of cheap untried and untested imports available from our competitors.

You do not know what you are buying from some vendors but when purchasing from us you can be assured the part has been tried and tested—if there are any problems we listen and react immediately - we get professional material analysis and testing done, plus trying the parts on racers and known customer's cars.

If an advertised part looks cheaper than ours - it probably is inferior as the market is being swamped with cheap imports. We take the spurious parts problems away from you and you can be assured our prices are rarely beaten on like for like quality.

Maybe this is why we were voted No1 for best aftermarket supplier—best tuning product retailer and best mini specialist website by mini magazine readers.

However we also know we are No1 for quality of parts, the largest stock holding, which means the best availability for you the customer.

Owners and stockists of RC40 systems.

• Flowbench tested and using proven optimum size 1.75" (1.625") internal tubing for maximum efficiency and performance.

• Even our Mild Steel versions have stainless steel tailpipes and inner baffle box pipes. Most competitors don't even have these stainless internals in their 'stainless steel' silencers!

Rose Petal Alloys



The Rose Petal (John Cooper Design) as per Appendix K Historic Racing design. 4.75x10 in alloy inc. spacers + special sleeve nuts £146.39
We are main dealers for **Minilife/Minilite**

and Rose Petal wheels and stockists of Yokohama, Falken, Dunlop R7 and Nankang Tyres

Fuel Systems

Fuel system-full stock of SU carb and facet fuel pump parts.

Right Hand Tank 21A2183	£333.24
Genuine Van Tank 21A291	£210.60
Van Tank - S/Steel Version 21A291MS	£162.00
Genuine SU Electric Fuel Pump AUF214	£71.56
Non Gen Electric Fuel Pump AUF214MS	£57.60
Fuel Pump Only SPI - WFX100811	£65.28
Fuel Pump Only MPI - WFX100812	£53.76

Brakes

We keep a full range of road and race brake parts

Visit our website for all your needs.

Cooper S 7.5" Disc and EBC Pads MS35	Pr £53.60
8.4" Disc and Mintex Pads MSSK014	Pr £29.32
8.4" Vented Disc and Pads MS39	Pr £42.35
S Caliper Mini Spares R/H 27H4656MS	£69.00
S Caliper Mini Spares L/H 27H4657MS	£69.00
8.4" Type Mini Spares Caliper R/H 37H8128	£60.84
8.4" Type Mini Spares Caliper L/H 37H8129	£60.84
S Disc Conv. + Mini Spares Caliper C-AJ4028MS	£430.42
S Disc Conv + AP Caliper + Timken Bearings	£540.00
S Brake Disc Shield Set MSSK1400 R/H	£21.90
S Brake Disc Shield Set MSSK1401 L/H	£21.90

Brake Master Cylinders and Servos

Mk1/2 Brake Servo Cast Body 21A1293	£216.00
Mk3 Servo and Non Gen Fitting Kit SEN43	£144.00
Servo 1988 on GSM119	£134.40
Sing Line Plastic Canister GMC171	£44.40
Sing Line Metal Canister GMC171ORIGINAL	£66.96
Sing Line Cooper S - just larger metal tank GMC172	£72.00
Diagonal Split GMC167	£102.00
Front to Rear Dual Line - Pre Servo GMC227	£73.20
Front to Rear Dual Line 1988 on GMC90376	£80.40
Rear Brake Pressure Valve 21A1774	£73.20
Brake Limiter Valve PDWA 1978 on FAM7821	£87.60

Exhausts

RC40 Range

RC40 classic twin box system & d/pipe	£68.44
Single box system from cat back	£64.27
Single box system for van/estate	£71.26

RC50 Millennium range

Designed for all classic and injection Minis

A range of exhausts in stainless and mild steel including large bore outlets -

See AKM2 Catalogue or web site for full range

Twin DTM large bore centre exit	£138.78
Original type standard mini exhaust systems made in 2 halves for ease of transportation and fitment.	
Single silencer saloon GEX106	£30.17
Twin silencer saloon GEX177	£39.60
Twin silencer van/ estate GEX155	£51.82

Manifold Exhausts

Most popular types stocked (inc. Van) Others available.

Side exit 1.75" bore twin box C-ARA331	£97.20
Single Box C-ARA331SB	£75.60
Centre exit twin box C-ARA332	£97.20
Single Box C-ARA332SB	£75.60

Manifolds

We stock a whole range of exhaust and inlet manifolds

FROM £71.94	Freeflow Manifold	FROM £71.94
Freeflow Manifold for std RC40 Exhaust C-STR816	£71.94	
LCB std bore for RC40 - C-AEG365	£71.94	
Millennium LCB - C-AEG364	£54.00	
ST Alloy torquemaster inlet C-AHT770	£35.40	

Cooling

We keep a super range of our own

Radiators for all Minis PLUS

Radiator Hoses - Plain Rubber or

Silicone including Real Kevlar

Stranded Hoses unlike others

advertised on the market. Heater

Valves & Matrix + Operating Cables

Alloy Rad C-ARA5000

Radiators

Std Mini 3 Core Radiator ARP2000	£57.54
3 Core Rad. Historic Racers ARP1106	£108.00
Mini Spares Unique 2 Core Radiator C-ARA4442	£114.96
As above but with sender unit '91 on C-ARA4443	£123.36
Mini Spares Orig. Larger Capacity 4 Core C-ARA4444	£117.60
MPI All Metal Radiator GRD974	£82.68
Minispares Electric Fan Kit C-ARA4401	£155.63

Oil Coolers

13 Row Oil Cooler - Union Fitting C-ARH221	£36.24
Mini Oil Cooler Pipe Kit, Pre Engd Starter MOC1015	£25.58
Mini Cooler Pipe Kit, Inertia Starter Type MOC1013	£22.68
Oil Pipe Kit 1992 On 11/16" UNF Threads MOC1014	£36.43

Bumper and Brightwork

All our chrome and bright work finish items are tooled up to produce quality items to the original specification to fit correctly.

£55.20

Our own stainless steel bumper - fits BETTER

than Rover original! Part No.DPB10166

(Wrap Around Ends) £55.20

Non-Genuine S/Steel DPB10165MS £33.60

Non-Genuine Chrome 14A6779MS £24.00

Brightwork

S/Steel Mk1 Overider/Corner Bar Kit MSSK025 £102.88

Inner/Outer Door Moulding Car Set Mk4 > MSSK2104 £43.91

Minispares S/Steel Headlamp

Ring 500929MS £9.42

Chrome-on-brass Headlamp Ring

17H5143 £15.60

S/Steel Inner Headlamp Ring DHF100010SS £10.00

Fluted Deluxe Chrome Wheel Arch Trim GZF105A £15.60

Flat Std. Chrome Wheel Arch Trim GZF107A £7.80

Subframes and Body Panels

See AKM2 Catalogue or website for our full extensive range. Full range of standard and aftermarket subframe kits stocked

MSSK3010 - All metal real solid mount kit for front subframe	£42.00
MSSK3009 - Front solid and poly mounting kit.	£26.50
	£380.00

Rear

Subframes

Genuine rear subframe FAM6292	£380.00
Genuine KHB10024 1991 on	£380.00
Non Genuine rear subframe MS45D	£193.78
Non genuine powder coated FAM6292MS	£225.00
Non Gen rear subframe MS45LATE 1991 on	£202.00

Body Panels

We keep one of the largest stocks of best fitting body panels from BL Heritage using Rover tooling and every good aftermarket supplier. All parts have been tried and tested by our customers to their satisfaction - See AKM2.

Examples

'A' panel MK3 Upgraded Thickness	£12.85
'A' panel MK3 Budget	£11.02
Mini Wing Genuine	£95.00
Non Gen from £43.20	
Front Panel Genuine	£175.00
Non Genuine	£61.02
Narrow Sill Panel Gen.	£37.50
Non Genuine	£13.42
Bonnet Mk2 Genuine	£165.00
Non Gen	£90.00
Bootlid Mk3 Genuine	£185.00
Non Gen	£65.29
Mk3 door hinge car set 1970 on	£72.00
MSSK017B	£72.00

Engine Electrics

All new - outright sale. Up rated

Alternators with pulleys

NEW!

£43.49

16/17ACR 45 amp to 1980	£43.49
A127 70 amp 1980 - 1996	£60.00
Twin Point Std. Alternator GNU2521	£102.00
Hi Torque Starter, pre-eng. or inertia	£172.80
Pre-engaged Starter Motors	£93.81
Inertia Early Starter Motor	£86.40
Dynamo	£51.04
Original Push Button Starter Solenoid	£16.80
Printed Circuits behind speedo - All types	£61.23
Original Type Gold Sports Performance Coil	
Pre 1982 MSC105	£18.60
Lumenition coil 1982 to 92 DLB111	£30.00

Grilles and Grille Kits

All manufactured by UK craftsmen

AS AN ORIGINAL SUPPLIER TO ROVER

all our grilles and surrounds are

manufactured by craftsmen in the UK to the

quality you would expect.

Beware of inferior cheap imported grilles offered by

some competitors.



Mk 1 Classic Grilles



Grille plus surround and end finishers with all fixings available as kits. All grilles (except Mk1 wavy grille) also available with full top slats for internal bonnet release use.

Austin Mk1 wavy grille slat grille

14A7299 £67.73

Mk2/3 style

also available

8B12507 £67.48

Austin Cooper and

"S" Mk1

- 11 thin slats

24A198 £68.71

Morris Cooper and

"S" Mk1 Wide slats

24A2158 £66.48

Morris Cooper

Mk1 6" Stainless

steel, with

spotlamp holes

8B12506 £73.04

Mk 2/3 Grilles

Black grille Mk2/3

CZH4015MS

£42.12

Black grille Mk2/3

with 3 surrounds/seatings and fixings

Order as GRILLE 03 £69.12

Brightwork grille Mk2/3

ALA6654MS £46.26

Brightwork grille

with 3 surrounds,

seatings and fixings

Order as GRILLE02

£72.97

Cooper Grilles

As original suppliers to Rover, our grilles

and surrounds are the original quality you

would expect, so please do not confuse these

with products offered by others.

Internal release, full

slat, alloy, Genuine,

brightwork grille

ALA6669 £45.11

Above grille

with 3 surrounds/seatings and fixings

Order as GRILLE 05 £64.97

External release alloy

genuine brightwork

grille

ALA6668 £45.11

Above grille

with 3 surrounds/seatings and fixings

Order as GRILLE 04 £64.97

Also available in GOLD, BLUE or

RED anodised finish £49.62

£51.66

Mk2 Stainless Steel Grilles

Heavier duty 430

automotive quality s/steel

grille £59.66 - 8B12504

As above, with spotlamp

holes £76.61 - 8B12502

Grille Surround - Mk2

Grille surround kit - Order

as Grille 10 - £37.98

Also available separately

Sides each £9.32

Centre bonnet £13.38

Includes plastic seatings

FULL KIT £36.34

Grille Surrounds - Mk1

Mk1 surround £70.62

Side Finishers each £8.52

Each Mk1 Sides

£7.92

Cable Bonnet Lock

£18.60

Order as GS10273

Internal release type,

as fitted to all the late

Minis FROM 1982/3

on. Includes catch with

bolts, correct length

cable and bracket.

Tel: (Parts) 01249 721421 Fax: 01249 721316 Email: spares@somerfordmini.co.uk
Unit 2, Broadfield Farm, Great Somerford, Chippenham, Wiltshire SN15 5EL

NEW LOOK WEBSITE! More than a website, this is the most useful resource tool in the business.
Over 12,500 parts fully illustrated and many are available to buy online, visit...

www.somerfordmini.co.uk

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all over the
world!

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RESTORATION
We have unrivalled knowledge and experience. With full workshop facilities and highly skilled staff, we can restore your Mini to the highest standards. We cater for all types and years of Minis and can make your dream come true!



REFURBISHMENT
Sadly every Mini succumbs to the dreaded rust. Our Refurbishment service could be the answer. Typically all 'skin' panels are replaced and the car receives an external respray. This will bring your Mini to its former glory and give it at least another 15 years of life!



OTHER SERVICES
We have a fully equipped workshop and carry over 9000 new parts. We have over 20 years experience and a very skilled, knowledgeable workforce. We are able to carry out any job here is a list of some of our services, please contact us with your requirement: accident repair, mechanical repair, servicing, MOT tests, modification & tuning and re-shells.

Somerford Mini also have a FULL workshop facilities. We are experts at restoring Minis and turn out some of the BEST IN THE COUNTRY. We also offer other services from general repairs and servicing to up-rated engines and suspensions. In fact we cater for anything connected with a Mini. We offer expert advice and professional honest service. Why not visit our ever expanding shop and workshops?

ONE OF THE LARGEST STOCKISTS OF MINI PARTS IN THE WORLD, WITH OVER 12,500 PARTS AVAILABLE!



MM denotes M. Machine
NG denotes Non Genuine

WHILST WE ENDEAVOUR TO SOURCE AND SELL THE BEST QUALITY PARTS AVAILABLE, WE REGRET WE DO NOT CATER FOR CONCOURSE CARS.

GENUINE HERITAGE PANELS (Unless otherwise stated)

1 Bonnet MK1, MK2 & MK3	£165.00
2 Front wing with or without side repeater	£95.00
3 Full scuttle repair	£125.00
4 A post stiffener - internal hinges only	£23.50
5 A post boxing plate - MK1 & 2 (MM) / MK3	£14.29/£14.00
6 A post stay repair - internal hinges	£75.00
7 Rear wing MK3 / MK1 & 2 (MM)	£105.00/£88.09
8 Backpanel - Screens down/outlet down	£199.99/£270.00
9 Full boot hinge plate	£175.00
10 Inner A panel (including scuttle closing panel)	£64.99
11 Outer A panel MK1 & 2 / MK3	£32.50/£39.99
12 Scuttle closing plate	£12.00
13 Door - MK1 & 2 / MK3	£550.00/£425.00
14 Door skin - MK1 & 2 / MK3	£90.00 each
15 Rear valence / closing plate (Partial/Full)	£49.00/£25.60/£34.18
16 Stiffener - boot floor to arch / Rear bulkhead	£18.60/£11.66
17 Companion bin closing plate / Inner sill stiffener	£12.70/£13.35
18 Heelboard - Full / Half	£67.00/£32.50
19 Full wheel housing	£81.00
20 Rear turret repair / Mudguard	£46.50/£34.00
21 Full floor pan / Half floor (rod change)	£205.00/£95.00
22 Floor sling shoe	£6.85
23 Jacking point / Seat belt anchor	£14.83/£9.91
24 Boot floor / Seat pan skin	£175.00
25 Inner wing bare / comes with A post & A panel	£107.00/£185.00
26 MK1 & MK2 van pickup inner wings	£107.00
27 Fitch repair panel (NG)	£21.60
28 Radiator cow / Vent panel	£55.00/£42.75
29 Boot floor side repair / Rear repair (MM)	£23.76/£21.60
30 RH tank stand	£13.35
31 Front panel Pre 1976 / Post 1976 (rubber mounted)	£175.00
32 Boot lid MK3 / MK1	£185.00/£300.00
33 Waild rail below (V4 light) Pre 70 / Post 70	£25.54/£42.40
Clubman wings / Front panel	£105.90/£104.33
Clubman bonnet / Inner wing	£159.88/£176.00
Mini under wing liners (helps prevent corrosion)	£85.26

SUBFRAMES & COMPONENTS

1 Non Genuine rear subframe - Wet/Dry	£217.50/£190.80
2 Genuine rear subframe Wet or Dry	£380.00
3 Genuine front subframe, Pre 76/MPI	£426.10/£405.00
4 Front subframe assembly includes all running gear, suspension, brakes, etc.	£718.52
5 Rear subframe assembly includes all running gear, suspension, brakes, etc.	£1335.83
6 Rear subframe mount kit - bushes, pins, bolts, etc.	£45.10
7 MK3 front subframes	£426.11

VAN/ESTATE REAR VALENCE PANELS

1 Rear number plate backing	£11.75
2 Rear number plate bracket	£8.20
3 V4 valence seam capping	£6.64
4 Rear V4 valence Genuine/Non Genuine	£201.4/£11.88
5 Rear V4 valence closing plate	£5.40
6 Centre valence Genuine/Non Genuine	£35.09/£13.86
7 Centre rear valence closing plate	£27.72
8 Van or Estate - Fuel tank / Fitting kit	£210.00/£13.33
9 Rear valence seam capping	£6.64

FLOORING PANELS

1 Radius arm nipple throud	£7.20
2 Saloon outer sill - MK1 & 2, 4 flute (MM)	£18.36
3 Saloon outer sill - MK3 Genuine / Non Genuine	£37.50/£10.20
4 Van & Estate outer sill MK1 & 2, 4 flute (MM)	£17.64
5 Van & Estate outer sill - MK3 Genuine / Non Genuine	£30.66/£13.14
6 Seat cross member - Pre 1974 / Post 1974	£56.17/£61.12
7 Seat cross member end repair	£18.90
8 Companion bin - Saloon MK1, 2, 3 / Clubman Estate	£31.98/£12.66 each
9 Genuine companion bin MK3 onwards	£34.18
10 Lower companion bin repair Saloon MK1, 2, 3 / Club Estate	£20.70/£4.86 ea
11 Wide front to rear floor of outer sill and jacking point	£135.29
12 Narrow front to rear floor of outer sill and jacking point	£88.22
13 Full length inner sill - Saloon / Estate	£26.46/£28.80
14 Battery cover cover	£16.66
15 Complete floor assembly Heritage	£575.00
16 Front foot well repair - Budget / Restoration	£22.06/£35.75

BRAKES

M. Cyl - single line (plastic tank) / Dual line	£48.22/£90.08
Wheel cylinder - all types in stock	From £8.28
M. Cyl seal/gaskets - Large / Small	£1.69/£1.13
Brake flex hose - Front / Rear	£7.02/£7.80
Rear brake adjuster / Wedge	£212 each/£4.27 each
Handbrake bellows	£2.28 each
Brake backplate - Front / Rear	£41.19/£34.12
Brake shoes - Front / Rear	£12.74/£12.29
Handbrake cables - Twin / Front / Rear to rear	£4.75/£4.20/£4.74
Brake drum - Standard / Spaced	£13.99/£14.58
Brake disc - 8.4" / 7.5" / Vented	£10.20/£28.80/£14.40
Brake disc 997 / 998 Cooper	£48.72 each
Brake pads - S / Late / Vented	£20.64/£13.80/£19.30
Complete brake pipe kit (copper/brass unions)	From £80.54
Individual brake pipes	From £8.99
Brake servo MK1 & MK2 / Brake servo kit MK3	£356.70/£161.82

CARBURATION

Air filter - HS2 / HS4 / Injection Cooper	£6.82/£51.00/£8.10
Carb rebuild kit - HS2 / HS4 set / HIF44	£42.88/£46.98/£45.82
Carb jets - Standard / Wastal	£16.85/£32.68
Heat shield kit - HS2 / HS4 Stainless	£12.72
Throttle cable - HS / HIF	£3.88/£9.31
Choke cable - MK1 & S / 1969 & 1989	£14.40/£14.80/£19.30
Carb Needle / Spring	£10.20/£5.94
Twin carb link pipe	£10.08
Fuel pump - Manual N Gen / Manual Gen/Electric N Gen	£21.60/£37.20/£69.60
Electric fuel pump mounting Bracket / Clamp	£7.15/£6.76
S.U. pump banjo union	£4.27
Fuel filter in-line (replaceable element)	£9.00
Fuel hose - Rubber / Braided (per metre)	£5.06/£7.38
Front/rear copper fuel pipe - Saloon / Van & Estate	£13.97/£28.37
Carb return spring - Standard / Twin carb	£2.54/£2.56
Twin carb linkage kit	£36.26
Fuel pump blanking plate	£3.78

CLUTCH

Clutch kit - Diaphragm / Verto / Injection	£59.05/£113.83/£188.80
Slave cylinder - Diaphragm Gen/Vero/Gen/N Gen	£28.64/£14.44/£15.44/£25.91
Flexi hose - Diaphragm / Verto	£8.68/£4.74
Clutch cover - Standard / Orange / Grey	£27.95/£28.28/£47.00
Master cylinder - Plastic tank / Tin tank	£54.48/£82.62
Release bearing - Diaphragm / Verto	£9.68/£12.25
Return spring	£2.34

GENERAL RESTORATION PARTS & NEW PRODUCTS

Radiator cooling upper & lower - 60"74" Cooper & S 16"74" £77.71 each

COOLING

Standard Radiator - 3 Row/Comp 2 Row/MPI	£64.38/£91.78/£162.06
Oil cooler - 13 row	£42.62
Braided pipe kit - Mini / Clubman	£32.99/£37.13
Thermostat / Blanking sleeve / Housing	£4.92/£8.82/£13.14
Radiator cooling rubber	£5.40
Radiator hoses to 990 - Top / Bottom	£3.30/£3.64
Top hose 'S' / GT	£4.20/£5.74
Heater control valve MK1 / MK3 / MK4	£19.98/£35.00/£30.18
Water pump	£22.19
Cooling fan - 2 Blade / 6 Blade	£29.54/£37.07
Top radiator bracket - 'S' or GT	£8.99
Heater hose	£3.30 per metre
875 fan spacer	£8.38
Heater cable - MK1 / MK2 & MK3	£14.40/£11.94

ELECTRICAL

Fuel sender Saloon/Estate	£25.54/£25.54
Indicator switch MK1 / MK2 / MK3	£33.06/£30.60/£38.10
Fuse box - 2 Fuse / 4 Fuse	£10.08/£8.00
Front starter switch	£27.84
Solexoid - Standard / Push button	£10.20/£23.50
Floor mounted dip switch	£19.92
Headlamp switch - MK1 / MK2 / MK3	£12.18/£21.60/£30.60
Battery cable - front to rear	£32.60
Battery - Clamp / Rod	£6.76/£1.91
Dynamo - Outright	£63.00
Alternator - Outright	From £45.90
Voltage regulator	£22.07
Starter motor - Outright - Inertia/Pre-engaged	£105.84/£84.40
Complete wiring looms	From £179.83
Wiper wheelbox - MK1 / MK3	£51.66/£17.36
Washer pump - Electric / Manual	£19.94/£22.92
Wiper park switch / Multi-speed	£13.20/£16.96
Wiper motor - twin speed	£44.24
Indicator flasher unit MK1 / MK2 & 3 / 1991 onwards	£5.99/£4.68/£10.36

IGNITION

H.T. leads & plug caps - Period MK1	£32.05 set
H.T. lead set - Various colours / MK1	£12.25/£15.32
Electronic ignition kits - Aldon / Lumenition	£97.87/£87.36

Service Parts and Owners Manual DVD (All Models) £29.99

Aldon competition dizzy	£176.17
Ignition switch MK1 & 2 / MK3 & MK4	£10.36/£54.82

LIGHTING

Clubman side indicator unit	£68.74
Rear light - MK1 / MK2 / MK3	£47.86/£48.72/£49.60
Rear lens MK1 - Red / Amber / Screw kit	£8.10/£5.05/£5.04
Rear lens MK2 & MK3	£15.66
Headlamp sealed beam unit	£10.74
Quadrupole halogen headlamp kit RHD/LHD	£39.95/£49.85
Steel headlamp - Bowl / Rubber gasket	£10.80/£4.20
Plastic headlamp bowl (including rim, gasket & adjuster)	£19.57
Headlamp bezel - Genuine / Non Genuine	£16.27/£1.30
Front indicator unit - Genuine / Non Genuine	£15.32/£7.74
Works' chrome bolt mounted spot lamp	£89.90
6" driving lamp set - Black / Chrome	£33.17/£22.20
Stainless spotlight bracket	£7.20
Pick-up rear light - 1976 onwards	£35.63
Rear number plate MK1 & 2 - Genuine / Non Genuine	£29.58/£8.02
MK3 Interior light / Interior light switch	£9.90/£5.94

PLUGS/CONTACTS/CONDENSERS (All types in stock)

Standard coil/Balast/Electronic/Sports	£19.03/£19.67/£22.28/£21.31
Low tension lead (MK1 / MK2 250)	£5.34
Distributor vacuum unit 250 / 450	£46.55
Engine splash guard kit (includes clips, etc)	£35.75
Standard battery / Heavy duty	£47.72/£59.16
Metall vacuum advance pipe with fuel trap	£25.20

RUBBER BUSHES/MOUNTINGS

Rear sub mounting - Large / Small	£3.53/£1.14
Rear sub mounting pin	£7.26
Tie bar - Standard / Heavy duty	£1.08 each/£7.66 set of 4
Bottom arm - Standard / Heavy duty	£1.80 each/£11.23 set of 4
Rear shock top rod	£4.08
Top arm rebound buffer	£1.80
Front bump stop (not hot/hot) - 1 Bolt / 2 Bolt	£7.05/£7.66
Bump stop cylinders / Front / Rear	£7.20/£6.60
Shock absorber - Front / Rear top	£2.28/£4.86

Front subframe - Front mount / Rear mount	£3.60/£5.70
Rubber suspension cone - Genuine	£49.60
Rod change mount	£4.38
Remote housing mount	£4.92
Engine mount manual	£3.05
Engine mount auto - RHD / LHD	£26.98/£12.34
Engine tie bar kit - Standard / Upgraded	£2.38/£7.66
Remote to gearbox - Front	£3.54

SUSPENSION/STEERING

Radius arm rebuild kit	£14.29 each
Knuckle joint	£4.08 each
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WELCOME

The purists may not agree, but one of the best things about the Mini is that it can be whatever you want it to be regardless of age and type. I'm not talking about creating a fake Cooper S and trying to con a buyer into thinking it's genuine - that should have no place in the Mini scene. But where's the harm in cherry picking your favourite bits from the Mini's long and rich history, and bringing them together to create your own unique car?

Take our cover car for instance. It looks every inch the period '60s race car, but it's actually a late MPi Mini from 1998 with fuel injection and a MINI supercharger. By combining these seemingly opposite end of the Mini spectrum, Paul has a car that not only looks the part, but has heaps of tractable power too. I don't think I'm overstating things when I say it's one of the best looking Minis anywhere in the world right now, and that's one heck of a feat.

Elsewhere in this issue, we've got another great selection of Minis built to satisfy their owners' varied tastes. Lee Norris' eight-port Clubman is a carbon copy of the one he owned in the late '80s,

and harks back to the days of wide arches, big spoilers and rear window louvres. It might not suit all tastes, but I'm a big fan. And rewinding even further back, there's the fascinating tale of Peter Jurgens' incredible Cooper S MiniSprint, modified at great expense by Wood and Pickett in the early '70s. Those who prefer standard cars will appreciate Kelvin and Judith Gardiner's beautifully restored Clubby Estate, and as for Endaf Owens' twin-cam spaceframe racer - well, that's just all-out bonkers!

On a personal note, it's been a busy month. As well of the 'joy' of jury service and a visit to the Brooklands Mini Day (see page 18), I was also treated to a birthday weekend trip to Macedonia. A fairly random destination you might think, but I still managed to find the local Mini club to share a few drinks with. Obsessed? Me? Never!



With Minivan owner
Bobi from Skopje.



This month's cover car combines different eras to great effect.

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Rally action from Wales



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Two custom Minis with '80s inspiration



Endaf Owens' KAD 16-valve spaceframe beast

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Kelvin Gardiner's Clubby Estate

Mini scene



April 2014 sees the UK's rolling VED exemption recommence for cars over 40 years old.



MORE MINIS TO BE TAX EXEMPT

Rolling 40-year tax exemption part of the Government's 2014 Budget

The recently-announced 2014 budget included some good news for UK owners of older Minis. From April 1, the classic car Vehicle Excise Duty exemption will start rolling for 40-year-old cars. This will benefit around 10,000 classic car owners per year who currently pay a tax disc, but will be exempt from 2015.

From April 1, cars manufactured before January

1974 will no longer need to pay VED. Likewise, from April 1 2015 this applies to vehicles manufactured before January 1975, and so on.

It was also announced that VED can now be paid for monthly via direct debit, rather than only having a choice of buying either six or 12 months' worth. Confirmation was given that tax discs will need to be cashed in when you sell your car,

leaving the new owner liable to tax the car themselves. The DVLA hope this will reduce administration costs.

Along with confirmation that the planned fuel duty rise in September will now be frozen, this year's Budget has taken small but positive steps in order to keep motoring costs relatively affordable for Mini owners.

ADAM RAYNER AT IMM

Audio guru to be Master of Ceremonies

■ The Southern Mini Owners Club has hired motoring journalist and professional motormouth, Adam Rayner, to be the Master of Ceremonies at the 2014 IMM at the Kent Showground. Adam is a specialist in HiFi and car audio, and writes for our sister mag *Fast Car* amongst several others.

A lifelong fan of Sir Alec, he admits terrible ignorance but no lack of enthusiasm. And by his own admission, seeing him climbing into a Mini is somewhat entertaining. "It's a bit like watching an octopus get into a bottle..." he says. "I'll be keen to please - it's my first go! I am looking for fun ideas, maybe a Mini-based Mr and Mrs contest. Or even A Mini Blind Date stage thing?" If you have any ideas, send them in and we'll put them to SMOC...



Adam Rayner will take to the mic at the IMM.

Moke



The History

By The Mini Moke Club

MOKE: THE HISTORY

New book launched to mark 50 years of the Mini Moke

■ The Mini Moke is celebrating its 50th anniversary this year, and to mark the milestone, the Mini Moke Club is proud to announce the publication of a new book. *Moke: The History* is said to give a definitive guide to its iconic past, filling the gaps from previous publications and dispelling many myths.

The book will be published in June 2014, with pre-orders commencing in May. The Moke Club will be attending both the

Mini Day at Himley Hall and The Basingstoke Festival of Transport, and will be on hand to discuss the book and receive advanced orders. "The research for this book has uncovered a considerable amount of new material and previously unpublished photographs, which will build on previous Moke Club publications to provide a complete Moke history," said book and club magazine editor, Roy Scott.

MINI F56

MINI launch parties held all over the country

■ Various MINI dealers all over the country recently held special preview parties to mark the launch of the third-generation MINI range (F56). The all-new One, Cooper and Cooper S models were shown to prospective buyers, with some dealers staging themed parties and others inviting special celebrity guests. Lesley Waters, TV chef from *Ready Steady Cook* and *This Morning*, gave a tasty cookery demonstration at Westerly MINI's launch evening in Somerset. She's been a fan of Minis for many years, and recalls squeezing ingredients into her Mini 1000 to

deliver to customers back in the 1980s, whilst trying not to spill dishes all over the seats! And the classic Mini was heavily involved in many of the launch parties, with plenty of owners invited to display their Mini alongside the new models in the showroom. Although the F56 MINI retains many of the styling cues from previous models, it's completely new from the ground up – hence the use of the slogan 'The New Original'. And whether you love or loathe the styling, it's certain to be a massive hit with buyers. Visit www.mini.co.uk for all the details.



Mini fan Trevor Johnson tries an F56.



Celebrity Chef Lesley Waters.



AUCTION ROUND-UP

Keeping an eye on the classic Minis going under the hammer



The Moke was a museum-piece in Florida.

AUSSIE MOKE

■ A 1971 Moke sold for an impressive \$49,500 (£29,780) on March 8 at RM Auctions' sale at Amelia Island in sunny Florida. Personally restored for Bob Snodgrass, the longtime head of legendary racing team Brumos Porsche, the eye-catching Moke has only 17,000 miles on the clock and has been displayed in a climate-controlled private museum for many years.

NEWS SHORTS



MINISTOX RACERS

Oval racing Minis recently had some prime time TV coverage, as BBC2's *Fast and Fearless: Britain's Banger Racers* aired on March 9. The first episode featured 13-year-old racer Alfie Jones as he battled for the Essex Championship. It was entertaining to see youngsters racing the scrapyards-rescued and ironed-up Minis on track and it generally presented the series in a positive light.

BMC'S 55 DISPLAY

British Mini Club is celebrating 55 years of the Mini with a special timeline display at its Mini Day on May 11 at Himley Hall. The aim is to feature a Mini from each year of production from a 1959 to 2014. The driver of the Mini gets free admission to the event, with passengers £8 each. Take a look at the updated list on the club's website to see which years are still available before downloading an application form. See www.britishminiclub.co.uk for more info.



IJ REUNION

The Italian Job is planning a Gala evening to celebrate its 25th anniversary run, taking place at the end of this year's run at the Crown Plaza in Marlow on Saturday November 1. The organisers would love to welcome back some old faces to join the current teams for a dinner and dance. E-mail gsg@italianjob.com for more details.

TRIPLE C MAG'S PROJECT CAR

Help needed to track down Mk1's history

■ Luke Allan and Jordan Pickup (yes that's his real surname!) are trying to track down their Mini's former owner in order to discover its history. The car was once the *Car and Car Conversions Magazine* team's racing Mini, supposedly based on a '59 Morris Mini Minor.

Originally red, and aptly named 'The Red Baron', it was built and raced by Fred Game in the 1970s before it was changed to its current Duckhams blue livery. It was fitted with a tuned 998cc engine, and performed well at Brands Hatch, Lydden Hill and Mallory Park whilst competing in the Wendy Walls and Tachie Championships. It was also featured regularly in CCC magazine articles. Luke and Jordan found the car languishing in



The ex-*Cars and Cars Conversions Magazine* race Mini is now blue.

a garage in Plymouth. They've since taken it on as a project and are keen to restore it back to its former glory. If anyone can help with any history about the car, please contact the guys via e-mail at lukeallan1993@hotmail.co.uk, or by calling them on 07512 321685.



MAD MARCH MINI FREEZE

Aberdeen Mini Club braves the conditions on its first 2014 outing



18 Minis took part in the annual Mad March Freeze.

■ The Aberdeen Mini Club's Mad March Mini Freeze certainly lived up to its title, with the Scottish weather providing four seasons in just one day!

The club was joined by fellow cars from the Inverness Mini Owners Group, with both clubs setting off in the morning and battling through snow showers to the meet point of Huntly. From here the Minis headed off via some cracking Scottish roads, which were deserted apart from a few sheep and pheasants, up into the Cairngorm mountains and on to the

warmth of the Lecht Ski centre.

As is traditional for this event, funds were raised for charity. This year's chosen cause was The Brain Tumour Charity; AMC Chairman Chris Jappy was diagnosed with a brain tumour in 2012, and wanted to give a little back to organisation that provided help and support. The £5 entry included a goody bag with refreshments. Members were also invited to bring home-baked goodies to help raise money. In the end over £300 was raised – an excellent result!



MOKES AT RETRO CLASSICS

Stealing the limelight in Porsche country

■ Stuttgart is home to the annual Retro Classics Show – one of the largest classic car shows in Germany. There were a large number of British classics present at the event, but for the Mini fraternity the highlight was the Mini Club Munich stand, which celebrated 50 years of the Mini Moke.

The club had English, Australian and Portuguese Mokes on display, along with a wide range of miniature Moke models. "It's an excellent show, with a wide range of vehicles and services on display, but this year Moke stole the limelight," said Moke Club member and attendee Daniel Schultheiss.



GEEKS 'N' FREAKS RUN

13 Minis enjoy picturesque Yorkshire trip

■ Yorkshire-based Geeks 'N' Freaks Mini Club is always happy to venture out in the dull chilly winter months. There was a good turn out of 13 Minis for a Sunday run, ready for a drive from York to the beautiful east coast village of Flambrough.

The route went via Fridaythorpe, where the cars stopped off at a bikers' cafe for a warm drink. They slotted in-between more than 30 motorbikes, but managed to avoid upsetting too many riders! The convoy travelled on to Flambrough Head where the Minis gathered on the sunny cliff edge.



IRISH MINIS COPPER COAST

Sunny Sunday drive for the IMOC

■ The Irish Mini Owners Club took its cars out for a sunny drive-out on Sunday March 16. Starting from Waterford city in the south east of Ireland, the Minis drove along a beautiful stretch of the Copper Coast, which is named after its historic metal mining industry.

From here it was on to The Magic Road at Mahon Falls – a famous local phenomena where if you stop in just the right place and let the handbrake off, the car will unbelievably roll uphill! The Minis ended up at Boatstrand harbour, which made for a picture-perfect finish.



IMOC finish its run at Boatstrand harbour

MINI COOPER REGISTER AGM

The MCR makes plans for the year ahead

■ The ever-successful Mini Cooper Register recently held its AGM in Warwick, where it was delighted to report a significant increase in membership numbers for the second year running.

Its main aims for the coming year are to attract more youngsters and new MINI owners, expand the regalia range, promote direct debit subscriptions and support its 24 regions' local events. Awards were also announced for outstanding

contributions to the club, including the Don Moore Trophy to Peter Moss for long-term services to the club as treasurer, the Big Valve Trophy to Cliff Porter, the Regional Award to Justin Ridyard for rejuvenating Kent-based runs, and the Editor's award to Garry Dickens for regularly raising the profile of the rare Mini Super models. A special mention was made of Lesley Young, who has now retired from editing the club magazine.

The MCR goes from strength to strength.





MINIMINE MARCH MADNESS RUN

Another winning Mini run and barbecue combo in Crewe.

■ Each year, Crewe's Missiles and MiniMine get together to host their March Madness run. This year's event began in Crewe, where the guys from MiniMine kindly gave everyone a free T-shirt to mark its 20th anniversary. The convoy then made its way along a cracking 50-mile route along the picturesque local roads, with a stop off from a drink along the way. Then it was on to MiniMine itself for a 'VAT free' open house and free barbecue!

A WEST COUNTRY MINI WEDDING

Mini club comes to the rescue

■ Bride and groom Katie and Mike Parsons needed to get to the church on time, so they enlisted their local Mini friends at West Country Minis to drive the bridal party to the wedding. They got married on February 22 at Tortworth Court at Wootton-Under-Edge. Martin, Ian, Mark and Susan from the club bedecked the Minis with white ribbons, which looked great with the historic Victorian mansion as a backdrop.



Mini congratulations to Katie and Mike Parsons on their marriage.



RIP CHARLIE

■ A Stalwart of the American Mini scene since the 1970s, Charlie Pollet sadly passed away in March. He was a popular member of Ohio Mini Owners Club, and was a driving force for the upcoming Can-Am Mini Challenge at the Mid-Ohio Raceway in June.

He was well known for preparing his famous knock-out chilli dishes, and threw tons of effort into Mini racing – in particular acting as crew chief for Joe Huffaker Jr. at the Sports Car Association of America championship races. Charlie also made the trip over to England for Mini 25 at Donington Park, where he was feted by Austin Rover as the 'visiting American gentleman' at the event. A memorial service was held for friends and family, and the local Mini owners turned out to pay their respects with a parade of colourful Minis to raise a smile on an otherwise sad occasion.



CLUB SHORTS



THE GEORDIE JOB

Tynemouth Mini Club has announced this year's Geordie Job will be held on July 27 at Seaton Delaval Hall near Newcastle-upon-Tyne. The Grade 1 listed Hall was built in the 1700s and is a popular National Trust attraction. More information is on www.tynemouthminiclub.co.uk

NORTH YORKS MINI ADVENTURE WEEKEND

A roller-coaster of a weekend has been planned by North Yorkshire Mini Owners from June 20-22. The three days will be packed full of organised drives over the moors on some of the best roads in England. There will be camping, a live band, a treasure hunt and rocker cover racing. Online booking and more information is on www.northyorkshireminis.co.uk



SURREY TUNNEL RUN

RAC at the ready for Mini cruise

■ There's nothing quite like being prepared for a cruise. Some Mini owners might pop a few odd tools onboard or trolley jack 'just in case', but Camisade Classic Mini Owners Club pushed this to the limit, and managed to find an entire fleet of RAC vans waiting at the meeting point!

CCMC arranged its mid-March run as a bit of fun between show seasons. The Minis met at The Wellington Statue in Aldershot, and then set off for the Hindhead tunnel via Farnham, attracting plenty of attention along the way. Thankfully there was no need to call out the rescue fleet during the drive, which ended with ice creams all round at Frencham Pond.



Thankfully the RAC wasn't required, but it made an amusing picture!



Clive King finished second in class.



Making a real splash in Wales.

TWO FROM TWO

Ray Cunningham takes two victories in the Aldon Automotive Mini and Imp Cup.

The second round of the Aldon Automotive Mini and Imp Cup took place at the mid-Wales stages on Sunday March 2, running as part of the West Wales Rally Spares RAC Rally Championship. Irishman Ray Cunningham was looking to record another win following an opening round victory at the Red Kite Stages.

With 75 registered contenders starting the rally, the Newtown-based event set a new record for the RAC Rally Championship, and fans packed the stages to watch the action despite poor weather. The classic Welsh forest stages were made slippery and extremely challenging by steady rain.

The higher than usual entry fee for this event had an effect on the Mini entries, with four crews electing not to take part. That left Ray, his brother Frank Cunningham and Clive King to do battle over 52 miles of forest roads in the area between

Llanidloes and Aberystwyth.

Ray Cunningham was indeed the star of show, as he and navigator Gary McElhinney enjoyed an excellent day in their Mini Cooper S. Their pace beat off a gaggle of Porsche 911s, Lotus Cortinas and Volvos as they finished the rally with three minutes in hand over Clive King and Russell Joseph, taking the Mini Cup victory in the process. "Absolutely brilliant," said the Galway driver. "The Pikes Peak stage was something else, particularly on the second run when we came down the side of the mountain: I loved it!"

However, things did not end so well for Frank Cunningham and Arron Forde after they slid off the road in the Hafren stage. For Clive King, just seeing the finish of the rally was good news after his retirement from the Red Kite Stages. He'd pulled together a last-minute replacement engine and, though a bit smokey to begin with, it was enough to get him round quick enough to take second spot in the Mini Cup. "It was lovely to get some miles in," said King. "We took the air filters off for the last stage and that made it run cleaner." Second place proved to be a double whammy for King and Ward, who also took a podium position in the Historic Rally Car Register's Mini Cup in the process, which used longer stage mileage.

With two wins from two events in the Aldon Automotive Mini and Imp Cup, Ray Cunningham will be looking to record a memorable hat-trick as round three of the series, the Tour of Hamsterley, takes place on April 26. Look out for the report in a forthcoming issue.



Frank Cunningham and Arron Forde didn't make the finish.

Words and photography Paul Lawrence

STIG AT BRANDS HATCH

Swedish rally legend to drive Swiftune historic racer.

Rally legend Stig Blomqvist is to drive a historic Mini racer in the SU Carburettors race at the Brands Hatch Mini Festival. The Swedish driver will be at the wheel of a Swiftune-powered historic Mini at the event, which will see him race against 31 other FIA Appendix K cars.

"I can't wait to see what Stig thinks of an FIA Historic Mini with one of our 2014 spec engines," said Swiftune boss

Nick Swift. "It will be interesting to get feedback from Stig, and whilst he may not have 600bhp under his right foot like the most powerful Group B rally cars he has competed in, an FIA Historic Mini weighing just 620kg with one of our latest spec engines certainly grabs your attention around Brands!"

The big event will take place on May 11, visit www.mini-festival.co.uk for all the details.



TRACK NEWS



NEW MIGHTY MINI REGS

Several changes have been made to the Mighty Minis Racing regulations for the forthcoming 2014 Mighty and Super Mighty Mini Championship. Alterations to the format include reversed grids for the second race at double-header events and success ballast for the top three finishers.

Mechanical changes for the Super Mighties include a control cylinder head, part number SMM 168, which cannot be modified in any way. No modifications are permitted to the exhaust manifold either. See www.mightyminis.co.uk for the new regulations in full.



MONDOSPORT RACER

Leigh Dale of Mondo Sport, Hastings, has informed Mini Magazine that the team's Miglia-style racer, as featured in the October 2012 issue, is to compete for the entire season of the British Car Trophy this year. The team is aiming to bring the title home to the UK following some impressive performances in 2013. The season kicks off at the Hockenheimring on 25 April, visiting the Nürburgring, Spa and Zolder before returning back to Hockenheim and the Nürburgring for the final rounds.

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---	------

(all prices are exchange)

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850cc, 998cc, 1098cc - (32mm/28mm)	£842
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(all prices are exchange)

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Stage 3 Road specification	£2171
Stage 4 Rally specification	£2218

Power gains of +20 BHP on standard engines

Performance Built Engines & Kits



At Mini Sport we have the ability to transform your Mini to the specification of your choice. The dynamic 1293cc, 1400cc and 1430cc engines were originally developed in our own Mini's way back in the 1960's. As you would expect, we have continued to develop and improve these engines making them just as popular for today's exciting breed of Minis.

1293cc from 90 bhp

Engine Kits	Stage 2	Stage 3
1293cc Half Engine Kit	£754	£870
1293cc Short Engine Kit	£831	£947
1293cc Full Kit (carb)	£1421	£1646
Built Engine	Stage 2	Stage 3
Carburettor engine, ready to fit	£1804	£2036
Injection engine, ready to fit	£1866	-

Full engine & gearbox units also available - Please call to discuss your requirements with our experienced staff

Recon Engines

For over 40 years Mini Sport have been producing a range of remanufactured engines built on a long established commitment to engineering excellence and customer satisfaction.



Engines	Engine	£86/box
998cc - A series, A+ & Cooper	£1488	£2371
1275cc - A series, A+	£1339	£2223
1275cc - Cooper Carb	£1382	£2265
1275cc - SPI and MPI	£1381	£2374
Surcharge from	£360	£675

*E&G - Engine and Gearbox

Crankshafts



Brand New
1275cc £279

Reground by Mini Sport
Full Range, exchange From £166
(Regrounds complete with bearings & thrust washers)
Main or Big End Bearing sets From £25
Thrust Washer Sets From £9

Engine Stabilisers



1275cc type 850/998/1098/1275cc & Injection £24.85

Roller Rockers



Mini Sport Alloy Roller Tip Rockers - Give the same power characteristics of fitting a performance camshaft without removing the engine. Also reduces valve wear by stopping the side loading on the valve stem created by standard rockers.

1.3 Ratio - standard	£189.63
1.5 Ratio - uprated fast road	£189.63
1.7 Ratio - competition	£189.63

Head Parts



Standard Valves each	from £6.77
Competition Valves each	from £22.42
Rimflo Valves each	from £25.31
Valve Guide Set Mini (set of 8)	£11.78
Valve Guide Set - Bronze Alloy	£27.60
Valve Spring Set 850/998/1100 singles	£14.26
Valve Spring Set 1275cc 200lb doubles	£23.92
Rocker Pedestal Spacer (2mm)	£2.80
Rocker Shaft Mini	£9.79
Rocker Arm - Cooper 'S'	£11.82
Rocker Arm - Sintered Type	£10.80
Nut - Cylinder Head - each	£1.00
Cylinder Head Stud - Short	£4.32
Cylinder Head Stud - Long	£2.70
ARP Head Stud Kit & Rocker Studs	from £164.87

Rocker Cover



Polished Alloy	£27.24
Polished Alloy - with cap	£29.39
Chrome Plated Steel - with cap	£33.80
Metro Style Polished Alloy with cap	£45.46
Alloy with Polished Fins - Blue or Red	£33.68
Rocker cover gasket	£1.32
Oil Filler Cap - Chrome	£4.86
Oil Filler Cap - Red original	£2.41
Oil Filler Cap - Black Original	£3.94
Rocker Cover T. Bars - Chrome (pair)	£8.77
Rocker Cover T. Bar Kit - Blue or Red	£11.41
T Bar Fitting Kit - Silver, Red or Blue	£3.73

Gaskets & Sets



Engine set - 850/998/1098cc	£14.69
Engine set - 1275cc	£9.89
Gearbox set - all Minis	£8.98
Head set - 850/998/1098cc	£14.89
Head set - 1275cc	£10.32
Head set - 1275 with Copper H/G	£12.16
Head set - 1275 with Turbo H/G	£31.09
Head set - 1275 with AF460 H/G	£50.07
Valve stem oil seals - set 4	£2.83
Copper head gasket - 998cc	£10.91
Copper head gasket - 1275cc - AF460	£44.33
Turbo head gasket - 1275cc	£23.06
Manifold gasket - Standard	£1.06
Manifold gasket - Large Bore	£2.58
Catalytic converter gasket	£1.37

Full range of individual gaskets available

Stage 1 Tuning Kit

Developed to achieve significant power increase, improved acceleration and top speed with better fuel consumption, whilst still maintaining engine reliability.



Carburettor type - Half kit no exhaust	£109
Injection type - Pipercross filter	£302
Injection type - K&N filter	£336

Parts & Mountings



Cam Follower (Set of 8)	£12.23
Pushrod 1275cc 1.3i each	£2.76
Chrome Dip Stick - Silver, Red or Blue top	£9.60
Engine Steady Bush Kit - Std Rubber	£1.44
Engine Steady Bush Kit - Comp Rubber	£2.69
Engine Steady Bush Kit - Solid Nylon	£13.32
Engine Mounting Standard	£3.78
Engine Mounting Easy Fit Standard	£6.92
Engine Mounting - Quick Release - Poly	£9.90
Engine Mounting - Solid Type - each	£18.00
Oil Filter Head - Spin On - A series	£13.31
Oil Filter - Spin On type	£3.54
Oil Filter - Spin On - 1996 on (PH4952)	£4.50
Oil Filter Element - Early pre Spin On	£4.80

Millers Oil
Classic Mini 20/50 (5Ltr) £28.80
Sport 20w-50 (5Ltr) £53.04

Castrol Classic Oils
Castrol Half Pint Pouring Jug £10.42
XL20w50 (4.5Ltr) £28.32
XL20w50 (1 Ltr) £9.34

Pistons



Prices include: set (4) pistons, rings and gudgeon pins. All sizes available.
998 Dish - circlip fit from £253.95
998 Flat Top - press fit from £317.96
1275 Slipper Std comp from £156.72
1275 Slipper High comp from £206.55
1380cc Powermax 73.5mm set £286.13

Timing

Simplex set	£21.74
Duplex set	£27.20
Lightened Duplex set	£50.40
Light Vernier Duplex set	£89.56
Kent Vernier Timing Std	£169.16
Kent Timing disc	£11.65
Single row timing chain	£4.07
Duplex timing chain	£6.94
Cam locating plate	£4.80
Timing chain tensioner pad	£10.30
Tensioner Pad mounting bracket	£7.50
Breather type A+ timing cover	£48.00

Oil Pumps



Slot drive 1275cc	£16.12
Slot drive 998cc	£17.11
Slot drive Turbo	£31.50
Spider drive 1275	£17.29
Peg drive 850/1000/1100cc	£14.35
Oil pressure release valve & spring	£3.48
Oil pressure switch - standard	£4.68

Cams & Kits

For four decades Mini Sport cams have been produced using tried and proven profiles available from mild road to full race profiles

Camshaft only	From £55.82
Camshaft Kits	From £78.45
Cam surcharge	£60.00

Also available full range of cams & kits from **KENTCAMS PIPER**

Mini Special Tools



Windscreen Locking Strip Fitting Tool	£9.42
Suspension Cone Tool METRIC or UNF	£30.97
Piston Ring Compression Tool 45-75mm	£15.43
Valve Spring Compressor Tool	£23.73
Flywheel Puller - Heavy Duty	£29.04
Socket - Flywheel Bolt & Ball Joint Nut	£43.31
Brake Shoe Adjusting Spanner	£10.95
Ball Joint Separator Tool Scissor Type	£29.02
Ball Joint Separator Tool Puller Type	£15.47



Feeler Gauge Set (imperial)	£15.18
Brake Hose Clamp Tool	£7.21
Engine Mounting Bolt fitting tool	£16.90
Clutch Clevis Pin fitting tool	£15.53

Guns Special Tools

Carbalancer - balances twin carbs	£20.72
Colourtune kit - test fuel/air mixture	£35.89
Eazibleed - one man bleed - brake/clutch	£28.08

Flywheels



Mini Sport Ultra Light 1 piece steel flywheels - available in 3 weights to suit

- Pre-engaged type	£144.17
- Inertia type	£136.14
Mini Sport Steel Replacement Flywheels	
- Pre-engaged type	£191.08
- Inertia type	£183.14
Ring Gear Inertia (thin)	£22.62
Ring Gear Inertia (thick)	£25.78
Ring Gear Pre-engaged	£28.60
Remanufactured flywheel Lightened/Balanced (old unit must be supplied)	£90.09

Clutch Plates



Mini clutch plate (diaphragm type)	£28.49
Competition clutch plate	£97.55
Vento clutch plate	£36.37
Sintered Metallic Full Race	£214.72
6 Paddle Cerametallic Clutch Plate	£157.95

Rolling Road Tuning



Computer Controlled Tuning - Book a session today and maximise the power and performance output of your engine. At the same time we will monitor oil temperature etc and adjust emissions accordingly.
Mini Club Shoot Out Days
Great fun for groups of like minded people. Full details on request with a minimum of 10 cars required.



Sales: 01282 778731



**Worldwide Express
Mail Order Specialists**

Mini Sport Ltd
Thompson Street
Padiham, Lancashire. UK
Tel: 01282 778731
Fax: 01282 772043

Open 6 Days
Mon-Fri 8:30-5:30
Sat 8:30-1:00
**Friendly Service &
Helpful Advice**

Longest established Mini Specialists in the World - Totally committed & providing everything Mini, all under one roof.

www.minisport.com

sales@minisport.com

Quilted Jacket

Hoodie '64 Winner

T-shirt '64 Winner

Hoodie Shield

T-shirt Shield

T-shirt Honour

£60

£28

£13

£28

£15

£13

Gearboxes

Completely reconditioned in our own workshops. The casing is chemically cleaned and then fully rebuilt with new bearings, shafts and baulk rings

Reconditioned 4 Speed - by Mini Sport
Rod - 850 to 1275 A-series £574.19
Rod - 998 to 1275 A+ £574.78
Remote 850 to 1275cc £574.25

Straight Cut 4 Speed - by Mini Sport
Straight cut close ratio fully built 4 synchro gearbox complete with differential.
Rod Change Gearbox £1221.42
Remote Change Gearbox £1218.58

(all prices are exchange)

S/C Gear Kits

Superior quality material, incorporating original special tuning gear ratios.

Straight Cut C/R 4 synchro Gear Kit £479.89
Straight Cut Drop Gear Kit £240.54

Gearbox Repair

Bearing Kits - by Mini Sport
Contains all bearings to re-condition a gearbox.
A series rod and remote £108.18
A+ rod change £99.74

Reconditioning Kits - by Mini Sport
Contains all parts required for reconditioning.
A series rod and remote £217.32
A+ rod change £206.40

Gearbox Parts

Baulk Ring Heavy Duty £7.56
Layshaft 4 Synchro A+ £26.40
Bearing - 3rd Motion Shaft - Twin Row £33.60
Bearing - 1st Motion Shaft £13.20
Bearing - Differential £11.95
Bearing - 1st Motion Gear - Roller £13.20
Gear Selector Seal Kit - Rod Change £6.73
Gearbox Sump Plug - Magnetic £8.40

Clutch Parts

Standard diaphragm (S) £27.10
Competition diaphragm - Orange £61.52
Competition diaphragm - Grey £61.52
Pressure Plate - Recon (exchange) £47.75
Pressure Plate - Lightened Steel £88.25
Flexible rubber hose - standard £6.18
Release bearing - Tall (pre verto) £8.05
Release bearing - Verto £6.00
Slave cylinder - pre verto £15.60
Slave cylinder - verto £31.03
Master cylinder - Late type, plastic £63.67
Master cylinder - Early type, metal £84.38
Clutch Oil Seal - Orange Rubber £4.20
Clutch Housing Breather - '89on £19.20
Verto Clutch Arm £18.28
Clutch Throwout Plunger - Verto £15.00
Clutch Arm - pre Verto £15.77
Clutch Throwout Plunger £11.36

Clutch Kits

Pre Verto Kit - Standard up to '82 £45.90
Cooper Carburettor - Verto Standard £93.12
Cooper Carburettor - Verto Heavy Duty £240.18
Cooper Injection SPI or MPI £103.50
Verto flywheel bolt £4.63
Verto flywheel keyplate £22.80

Oil Pipe & Mag Trap

Protects the engine from any metal particles which may be in the oil.

Magnetic Oil Trap Kit £19.20
Centre Oil Pick-up pipe £29.35
Essential for all fast road & competition Minis

Gearbox Steady Kits

by Mini Sport
Right or Left Side only £18.18

Quickshift

For improved feel and faster, slicker gear changes. Easy to install in approx 30 minutes.
Rod Change type £36.10
Remote Change type £34.54

4 Pinion Diff

The Mini Sport 4 Pinion Differential was designed & developed for the serious fast road and competition driver who requires confidence that the power of their engine is transferred to the wheels without stress related breakages. CNC manufactured in our own 'state of the art' machining centre.

Pot Joint type £167.87
Rubber Coupling type £167.87
Differential Parts
Diff Pin £14.40
Diff Pinion £9.70
Washer, Diff Pinion, A+ Type £2.56
Diff Output Shaft Fibre Thrust Washer £2.61
Diff Output Flange Cover Oil Seal £4.75
Final Drives - all ratios available from £152.26
LSD Type - all ratios available from £201.14

Drive Train

C.V. Joints & Boot Kits
Outer CV Joint - Drum type £28.80
Outer CV Joint - Disc type £30.60
Outer CV boot kit £2.34
Inner pot joint £33.60
Inner joint boot kit £6.00

Competition Drive Shafts

Steel pot joint type, pair £182.29
Hardy Spicer type, pair £204.58

Drive Flanges

7.5" S/GT (suit 10" wheels), each £19.85
7.5" S/GT - EN24 Hardened, each £28.19
7.5" S/GT - Alloy Lightweight, each £86.78
8.4" Disc type, each £28.04
8.4" Disc type - EN24 Hardened, each £39.16
8.4" Disc type - Alloy Lightweight, each £86.78
Drum type (suit 10"), each £30.00
Drive flange collar, disc type, each £4.10
Drive flange nut, drum type, each £3.23
Drive flange nut, disc type, each £5.40

Wheel Bearings

Front, drum brakes type £12.65
Front, taper roller disc brake type £13.80
Rear, taper roller type £14.39

Brake Parts

Calipers - each (RH/LH)
Cooper 'S' - O.E Specification £84.00
Mini '84on' (12" wheels) O.E Spec £62.40
Caliper piston, Cooper S, stainless steel £8.27
Caliper piston, '84 on, stainless steel £11.27
Caliper Seal Kit - Cooper S £5.28
Caliper Seal Kit - Mini '84 on £4.62

Master Cylinders
Master Cylinder S/GT Plastic reservoir £48.22
Master Cylinder S/GT Tin reservoir £87.00
Master Cylinder Yellow Tag '85on £76.37
Master Cylinder Green Tag '89on servo £113.92

Brake Hoses, front or rear from £6.94
Handbrake cable, front or rear, from £3.30
Handbrake Quadrants
Standard type, each £12.37
Alloy, pair Red, Blue, Black, Gold, Orange £28.94

Pads & Shoes
Pads - '84 on (12" wheels) - standard £12.30
Pads - '84 on (12" wheels) - Mintex £10.52
Pads - '84 on (12" wheels) - EBC Green £30.66
Pads - 7.5" Cooper S/GT - Mintex £12.61
Pads - 7.5" Cooper S/GT - EBC Green £37.19
Pads - 7.5" Cooper S/GT - EBC Red £47.73
Pads - 7.5" Cooper S/GT - EBC Yellow £46.36
Pads Mini Sport 4 pot caliper - Mintex £12.85
Pads Mini Sport 4 pot caliper type - EBC £43.85
Front Brake Shoes - standard £13.50
Front Brake Shoes - Mintex £15.04
Rear Brake Shoes - standard £11.40
Rear Brake Shoes - Mintex £14.58

HUGE RANGE AVAILABLE, PLEASE CALL

Aeroquip Hoses
Brake hose kit (set 4) £39.29
Metro 4 Pot caliper conversion £48.83
Coloured Hose kits - red, black or blue £46.40
Front Brake Hose, pair £23.66
Rear Brake Hose, pair £23.66
Clutch Hose £11.52
Clutch Hose verto type £14.22

Remote Servo Kit
Fits Mk3 single line non servo brake systems, to improve braking power & efficiency.
Mk1/2 Cooper 'S' Servo only £421.80

Swivel Hubs
Drum type - RH or LH, each £53.94
Disc type - RH or LH, each £53.11
Fully Built Disc type - RH or LH, each £94.50
Alloy Disc Type - kit £550.98
Alloy Rear Hub - '84on, pair £176.72
Standard Rear Hub, each £25.33

Sure Stop Kits

Kit includes: pair performance discs, set fast road EBC brake pads. Direct replacement.
Cooper 'S' 10" wheels - x-drilled discs £107.06
Mini '84 on, 12" wheels - x-drilled & grooved discs £72.83

Brake Drums
Standard - front or rear - pre '84, each £11.75
Spacer type - rear only - '84on, each £16.07

Brake Discs
Standard specification
Cooper S - 7.5" Discs, each £26.40
Mini '84 on - 8.4" Disc, each £14.10
8.4" vented - each £17.46
Cooper 997/998 - each £54.88

Performance Discs
Cooper S 10" wheels - X/drilled, pair £76.24
Mini '84 on - X/drilled & grooved, pair £46.80
8.4" vented - grooved, pair £74.95
7.9" vented - grooved, pair £81.56

Steering
Steering rack, RHD/LHD £59.23
Sportsrack rack, RHD/LHD £113.65
Quickrack, 2.2 turns, RH/LH £92.89
Steering rack boots (pair) £5.40
Cooper S steering arm, each £19.20
Track Rod End - Standard £7.88
Track Rod End - Group A £18.47

Subframes
Front £189 from £420.01
Rear dry suspension type from £188.60
Rear dry - Powder Coated £211.61
Rear hydrostatic from £221.58
Subframe fittings & bushes, full range in stock

Cooling
Radiators
Alloy 2 Core £140.93
4 Core updated £152.86
2 Core injection updated £151.59
2 Core updated £126.66
Cooper 'S' GT £72.82
Mini SPI £135.15
Mini MPI £76.80
Expansion Tank - MPI £58.94
Expansion Tank Cap - MPI £5.92
Cooper's top rad bracket £9.12
Thermostats, from £3.11
Thermo blanking sleeve £7.31
Radiator Caps (7-15lbs) £3.70
Hoses, from £3.00

Fans/Belts
11 Blade plastic fan £13.72
6 Blade steel fan, yellow £33.80
Fan belts from £2.77

Water Pumps
High Capacity £16.69
MPI water pump £18.00

Oil Coolers
13 row element only £73.90
Mini/Cooper S kit £98.10
Mini Clubman kit £105.13
Mini MPI kit £133.96
S/S cooler pipes, pair £32.03
Rubber pipes, pair £22.68
Oil cooler thermostat £33.16

4 Pot Calipers

Achieve the ultimate stopping power with these Mini Sport lightweight alloy 4 pot calipers. CNC machined 'in house' from high grade anticorrosive alloy billets.

Calipers - 7.9" vented £288.79
Calipers - 7.9" non vented £288.79
Calipers - 7.5" (10" wheels) £288.79
Calipers - 8.4" vented £319.51
Gold, Green, Gunmetal, Titanium, Silver, Black, Red, Blue or Purple

Alloy Brake Kits

Specialty designed and developed using precision matched parts producing the Ultimate Mini Brakes. Confident braking every time with consistent pedal feel and stopping power. **Kit includes:** Mini Sport 4 pot alloy calipers, performance discs, performance brake pads and fitting kit.
7.5" Discs (10" wheels) kit £365.68
7.9" Discs non vented kit £353.48
7.9" Discs vented kit £375.32
8.4" Discs vented kit £404.70

Disc Drive Assy

Fully built disc drive assemblies using new and genuine quality components.
Standard specification
Cooper S 10" wheels £567.02
12" to 10" wheel Brake Conversion kit £232.81
Upgraded with 4 pot alloy calipers
Vented with Grooved discs £775.33
Non-Vented with Grooved discs £752.45
Cooper S with Grooved discs £753.11
8.4" with vented & Grooved discs £804.18

Alloy Superfins

The Mini Sport Superfin superior light weight alloy brake drum has 25% extra fins for better cooling, a built in spacer for extra strength and rigidity, weighing 50% less than the original drum.

Drum Brakes

Fully assembled, consisting of back plate, wheel cylinder, handbrake lever including rubber boot, brake shoes and springs.
Standard Assembly Front, pair £116.13
Standard Assembly Rear, pair £113.17
Mintex Assembly Rear, pair £115.32
Rear Wheel Cylinder from £9.00
Front Wheel Cylinder from £10.80
Rear Brake Back Plate - RH or LH £26.40
Front backplate & adjuster - RH or LH £33.93
Rear Brake Adjuster Kit (per side) £7.26
Brake Return Spring Kit - Rear £6.04
Front Brake Shoe Return Spring - Single £2.40
Brake Lever Set (handbrake) £14.40

Fitting & Service Center

We offer a professional while-u-wait fitting service on almost all the parts we supply. Book your Mini in & we will take care of it for you, while you wait in the comfort of our fully stocked showroom.

sales@minisport.com

Monte Mug winner £9
Col Du Turini Mug £9
Legend Pen £2
Parker Pen £9
Bottle Opener Keyring £3
Coaster Set 4 £6
Golf Umbrella £25

Wheels
Cooper S
3.5J x 10
4.5J x 10
Reproduced by Mini
Sport - 3.5J & 4.5J x
10" to original
specifications. These wheels are
NOT cheap copies, but exact replicas of the original
design, perfect for any restoration project.

Old English White, each £62.47
Silver, each £62.47

Light Systems

Quadoptic Headlamps
Quadoptic H4
Halogen Conversion
£46 £38

Headlamps
H4 Headlamp Assemblies,
includes headlamp bowl plus
inner bezel, suit LHD or RHD
Pre '97 Mini from £43.71
MPI Headlamp Mini - with motor £58.16
Headlamp Leveling Motor - '97 on £46.64
Valeo/Cibie Halogen unit, each £36.65
Halogen Crystal Headlamp - standard £37.22
Halogen Crystal Headlamp - Angel Eye £46.15
Headlamp Bowl from £8.29
Rubber Seal - Headlamp Bowl £2.85
Inner Chrome Bezel, from £5.40
Chrome Headlamp Ring from £9.42

**Genuine Rover
Cooper Lamp Kit**
Kit includes
4 lamps, 4
brackets
£222

Full Kit: 2 Drive Lamps & 2 Fog Lamps £222.27
Full Kit: 4 Drive Lamps £220.67
Genuine Lamps, Fog or Drive each from £39.95
Lamp Brackets, outer or inner, each from £9.85
Wiring per lamp £11.92

Works Lamp Bar Kit

Kit: Stainless Lamp Bar, wiring
loom, 2 Drive and 2 Fog lamps
£165 £59

Spot Lamps
Stainless Steel
£38

Angel Eye Spot Lamps, red, blue or white £46.15
Rally Giant Spot Lamp Kit £39.12
Road Runner H3 Spot Lamp Kit £20.27

Slide Repeaters
Clear Type £2.46
Amber Type £3.30

Indicators

Mk1/2 - push fit amber plastic lamp unit £7.20
Mk1/2 - amber glass lamp unit, each £12.00
Mk1/2 - push fit clear plastic lamp unit £6.78
Mk1/2 - clear glass lamp unit, each £11.96
Mk1/2 - metal bulb holder £6.72
Mk1/2 - chrome outer locking ring £2.76
Mk1/2 - rubber boot rear of lamp £3.35
Mk3/4 - amber lamp unit (screw type) £7.19
Mk3/4 - amber lens, each £3.89
Mk3/4 - clear lamp unit (screw type) £7.27
Mk3/4/5 - clear lens, each £2.68
Mk5 - clear lamp '97-01 £11.12

Rear Lights & Lenses

Mk1 Rear Lamp RH or LH, each £37.98
Mk1 Rear Indicator Lens RH or LH, each £8.16
Mk1 Rear Stop Lens RH or LH, each £6.54
Mk1 Lens screw kit, per side £1.70
Mk2/3 Rear Lamp RH or LH, each £47.94
Mk2/3 Rear Lens RH or LH, each £16.75
Mk2/3 Rubber Seal RH or LH, each £7.24
Mk4 Rear Lamp RH or LH, each £42.84
Mk4 Rear Indicator Lens RH or LH, each £6.82
Mk4 Rear Reverse Lens RH or LH, each £9.00
Mk4 Rubber Seal RH or LH, each £6.30

Clear Lenses
Supplied as pairs
complete with
orange and red
bulbs, upper lenses only
£15

Wheel Arches

Special Chrome Sports Pk Group 2 Race 3 Race
Special Arches, black £19.20
Chrome Covers inc Side Strips £71.81
Monte Carlo style £63.42
Sports Pack - Genuine inc all fittings £342.16
Sports Pack - Non Genuine inc all fittings £50.16
Group 2 Race Glassfibre arches £54.85
Group 2 Race Glassfibre arches £55.77
Group 5 Race £61.54

Mud Flaps

Genuine Rear - pair £29.38
Mini Logo £9.60
Cooper Logo £30.60

Body Panels

Full range of Heritage,
Aftermarket & Restoration panels
available at the best prices, please call.

Replacement Panels

	Non Gen	Genuine
A panel Mk3 - RH/LH	£10.93	£10.99
A post hinge panel - RH/LH	£10.44	na
Rear valance all models	£11.52	£49.00
Rear valance closing plate	£6.48	£34.07
Front floor well - RH/LH	£18.36	£51.64
Rear floor well - RH/LH	£25.02	£59.53
Sill Outer 4.5" Mk3 on - RH/LH	£14.02	£37.52
Sill Outer 9" Mk3 on - RH/LH	£15.44	na
Sill Inner repair - RH/LH	£8.82	na
Door Step, shaped - RH/LH	£8.82	£75.00
Boot floor rear repair	£18.40	na
Scuttle complete	£50.22	£124.99
Door Skin Mk3 on - RH/LH	£27.36	£80.00
Bonnet Mk2 on	£117.45	£165.00
Front wing - early	£51.30	£94.99
Front wing - late	£51.30	£94.99
Front panel to '76	£61.02	£175.00
Front panel '76 on	£56.88	£175.00
Screen corner repair	£9.54	na

Fibre Panels

Full range of carbon
fibre & glass fibre
panels available, please
call for details

Screens & Seals

Windcreens

Clear, front	£80.00
Clear Heated, front	£255.85
Tinted, front	£56.32
Tinted Heated, front	£254.96
Top Tinted, front	£56.40
Top Tinted Heated, front	£276.28

CAN BE SHIPPED WORLDWIDE

Rubber Seals and Strips

Screen seal front from £9.11
Screen seal rear £12.14
Chrome locking strip £3.78
Quarter light seals
opening type £8.04
fixed type £10.97

Roll cages

Fixed Cage - RHD only * £151.30
Roll Cage - RHD only * £151.30
Front £192.12
Rear £204.20
Roll cage inc. Diagonal £264.46
Roll cage detachable diagonal £336.86
Multi point world in cage £625.25
Multi point bolt in cage £930.89
Roll cage - pad £113.33
Roll cage - padding, 80cm £114.80

Sump Guards

BAC dual £96.00
Monte Carlo £86.98
Steel £68.56
Extension £51.60

Moto-Lita

Handcrafted wood or leather steering perfection

Boss Kits to suit Mk1, to '76 or '76 on
- Black with cap or horn control £54.32
- Polished with cap or horn control £83.83
Steering Wheels - flat or dish spokes
13" Woodrim - Polished Spoke £150.11
12" Leather - Polished or Black Spoke £150.49
13" Leather - Polished or Black Spoke £146.15

Other Steering Wheels - wheel only KIT
12", 13" Black Vinyl 3 spoke £39.13 £52.25
12", 13" Black Leather 3 spoke £56.04 £67.10
13.5" Woodrim 3 spoke £72.04 £88.16
13" Black Vinyl, red stitching £49.53 £59.15
Boss Fitting Kit £16.12

Dashboards

Classic style only £141
Available only in Burr Walnut or Charcoal finish
3+3 RHD - also available in LHD only £141

Style - 2 or 3 clock instrument facia

Finish - Burr Walnut, Charcoal or Alloy
Options - Chrome ring inserts & extra gauge holes

Burr or Charcoal Interior Accessories

Door Pulls, pair from £50.04
Window Winders, pair £50.04
Door Openers, pair from £53.41
Door Cappings, set 4 £126.00
Handbrake Handle £21.00
Gearknob - silver Mini Wings Logo £20.38

Custom Consoles

Coloured Vinyl, Burr Walnut, Carbon
Fibre look or Alloy. Radio slot
Optional. Available in all colours.
Vinyl - no options from £70
Vinyl - radio slot from £79
Vinyl - air vents from £113
With - vents/radio fr £112

Handles

10 Piece Polished
Alloy Handle set
Full Set only
£34.80

Seatbelts

Automatic Belts in Black, Red, Blue,
Beige or Grey
Front - Black £32.39
Front - Coloured £55.80
Rear - Black £32.39
Rear - Coloured £44.80

Interior Trim

Full range
available
Newton Commercial interiors & trims available
for all models of Mini. Please call for details.

Seats

Cobra seats - available with Mini fixings
Classic Vinyl - all colours from £135.90
Classic Vinyl & Piping - all colours from £157.78
Clubman - black, blue, red or grey £189.54
Monaco - black, blue or red £200.80
Forza FIA Approved - black, blue or red £248.53
GTB Redliner with h/rest - black cloth £437.57
GTS Redliner with h/rest - black cloth £443.46

Grilles

Cooper int release £44.10
Cooper ext release £44.10
Cooper Lamp Holes £98.56
Mk 5 wavy int £82.43
Mk 5 wavy ext £82.43
Mk3 chrome £73.90
Mk1 Austin wavy £88.46
Mk1 Austin Cooper £85.15
Mk1 Morris Cooper £74.88
Mk1 Musche surr. £91.96
Mustache ends, ea £10.78
Mk3 surrounds, ea £9.32
Mk3 Top surround £16.64

Grille Buttons

Chrome or Black set £10

Bumpers

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Chrome £36.24
Stainless £42.14
Black or Grey £35.65
Clubman Front £158.57
Overriders & Corner Bars
Mk1 kit £133.52
Mk1 kit & bumpers £214.37
Mk2 overider kit £58.48

Mirrors

Stainless door, each £23.94
Black early, each £19.85
Black late, pair £38.46
Bullet chrome, each £13.86
Bullet late chrome, ea £26.82
Downtown style, each £21.07
Cooper Chrome, pair £51.92
Classic clip on, each £27.91
Cooper White, pair £47.63
Interior - Stainless £24.26

Brightwork

S/S Headlamp peaks £10.80
S/S Headlamp stoneguards £11.40
Mk3 chrome on plate lamp £20.69
Stainless seam mouldings, set £23.52
Rear Hinges - chrome £10.73
Plain Door Handle Scoops £7.19
Alloy lip stick - blue/red/silver £9.68
Aston style fuel cap £19.76
Union Jack Badge £6.76
Cooper Boat Badge '97 on £34.29
GB Boat Badge £7.68
Cooper S Mk3 Boat Badge £70.41
Mk3 Boat Handle £24.80

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Union Jack Roof £45.00
Bonnet Stripes - R or W £9.28
Cooper Lantel £5.99
Pin Stripes car set from £9.16

Carpet Sets

Deluxe Carpets
Black, Red or Brown £44.15
Newton Com, from £158.61

Standard Carpets

Black, Red or Grey £29.02
Sound reduction kit £44.14

Carpet Mat Sets

Luxury deep pile tailored 4
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backing to fit all Mini saloons
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Water Temp electric from £58.51
Oil Pressure electric from £78.01
Water Temp capability £54.96

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6x10 Silver, Anthracite or Gold £60 Falken £365
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5x12 Silver Polished rim £60 Falken £403
5x12 Black, red stripe £64 Falken £413
5.5x12 Silver Polished rim £65 Falken £422
5.5x12 Black, red stripe £64 Falken £430
5.5x12 Black, pol. rim £64 Falken £410
6x13 Silver £73 Yokohama £545
7x13 Silver £77 Yokohama £516
7x13 Deep Dish £86 Yokohama £545
7x13 Split Replica £86 Yokohama £545
7x13 Black, red stripe £86 Yokohama £545

Revolution

6x10 Black 4 Spoke £62.05 Falken £429
5x12 Black 4 Spoke £62.46 Falken £419

Starmag

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6x12 Black Hi-Lite £59.03 Falken £419
7x13 Black Hi-Lite £72.05 Yokohama £502

Mamba

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6x10 Black Hi-Lite £55.37 Falken £377
6x12 Black Hi-Lite £62.75 Falken £419
7x13 Black Hi-Lite £76.60 Yokohama £502

Tyres

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165/60/12 - Falken ZE912 £49.80
145/70/12 - Federal £50.45
165/70/10 - Yoko A032 £60.60
165/70/10 - Yoko A008 £53.54
165/60/12 - Yoko A539 £62.00
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Words and Photography **Jeff Ruggles**

BROOKLANDS MINI DAY

Fear of rain and a change of date didn't stop Mini fans from attending this popular outdoor event.

From the extremes of 21-degree heat one year to snow and ice the next, you never quite know what you're going to get when the Brooklands Museum stages its annual Mini Day every March. This year saw rain on the forecast and a move from the usual Sunday slot to a Saturday, but any worries were quickly alleviated. Before long the surviving section of the iconic banked track was chock full of Minis, with club displays hiding under Concorde wings and alongside the historic sheds of this excellent venue.

And no wonder. Brooklands is the first major outdoor show after

a long winter break, and is a red letter day for many Mini fans to get their cars on the road ahead of a new event season. This year the Elf and Hornet Register was given pride of place with an impressive 17-car display in front of the Clubhouse, while the Mini Cooper Register gathered a super collection that included Steve Burkinshaw's Radford Cooper S and Tanya Field's lovely early 1275 GT. Elsewhere there was a good proportion of early Mk1s, which really befitted a location with such classic heritage.

With plenty of folk still trying to finish their projects in readiness for the summer, the trade area is always a welcome

attraction. This year saw a useful mix of big-name traders like Minispeed and MiniMine rubbing shoulders with autojumble stands. New old stock genuine water pumps for a just fiver? Yes please!

Of course, one of the most anticipated highlights of this event is the chance to pit your Mini against the famous Test Hill – a 107-metre run up a gradient as steep as one-in-four towards its peak. An expectant crowd gathered to see how the Minis coped with the task, which can be real challenge to those fitted with smaller power units, especially if you miss a gear.

If you could tear yourself away

from the Minis, the entry price included access to the museum's many other attractions. Built around the remains of the world's first purpose-built motor racing venue, there's plenty of buildings, hangers and even aircraft to keep visitors occupied. Then there's the large café, which is far plusher than the usual Mini show fare.

Best of all, there was no repeat of last year's snowy conditions. The promised afternoon rain showers never materialised, and the sun managed to poke through the clouds for the majority of the day. All in all, it was another top Mini Day, and a great starting point for the Mini's big 55th birthday celebrations. **mini**



Neil Bayliss' well-travelled Mini Marcos



Despite the change of day, Minis flocked through the Brooklands Museum gates.





Across the line

Essex Mini Club member Dan Maskell often spends his spare hours working on other people's Minis, but now he's also found time to complete this very smart retro-styled saloon. Working to a budget, Dan's done all the work himself, including a complete repaint. We particularly like the banded 12-inch steel rims.



Smart 10-inch rims on this Sportpack.



Ed Ridley's KAD 16-valve flyer.



1275 GT with an early Clubman Estate.



Another impressive display from the Elf and Hornet Register.



Mk1 and MkII Scamps parked together.



Up against the steep Test Hill.



Cool surf-inspired Woody Estate.

Grey matters

Resplendent in rare Yukon Grey, this 1997 Mini Cooper Sport has been Duncan Lee's pride and joy for the past three years. During that time he's added plenty of personal touches, but it's not finished yet. "It had a restoration last year, but it still needs more. The next job is to fit a new roof lining," says the man from Stevenage



Julian's Harber's newly-completed GT on GKN Silverstone rims. We like!



Minis as far as the eye can see!



Lovely line-up of Mk1s on the historic banked circuit



Phil Bowring en route to the Test Hill.



Steve Burkinshaw's Radford Cooper S.





SHOW REPORT



Beautiful '70s Mini Pick-up.



Father and son team

"I said to myself last year I'd finish it for today, and here it is," says Andy Pierce from Sidcup of his restored City. The car used to belong to a neighbour, and actually influenced Andy's son Jack to purchase a Japanese-import SPI Cooper as his first car. Upon seeing Jack's new purchase, said neighbour offered Andy the City for just £150. "I didn't want Jack to have a Mini as I thought it would be aggro - now I've spent 18 months and four grand building this!" he jokes.



Wood and Pickett's Minivan, formerly owned by Gavin Parish.



Bold orange saloon on 13-inch Mambas.



This Mini has a blow-through supercharger arrangement with fuel injection!



Cool Works replica based on a Mk3.



Celebrating the Moke's 50th anniversary.



Winning combo

Nathan Holwill and Emma Munfield brought their Minis along from nearby Guildford. Emma's '73 Clubman is remarkably original, while Nathan's saloon is an altogether more custom affair rolling on Force Racing split rims. "I bought the wheels on Wednesday. I think they really make it," he says.





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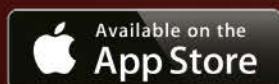
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The complete Mini event

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Mini Jumble
Club Stands
Show & Shine
Win A Mini
Minis For Sale



Himley Hall 11th May

MINI 55 Time Line

A celebration of a Mini from each year of production from 1959 to 2014. Get your application to be part of this fantastic Mini Time line display.....



Join the British Mini Club today!

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Mini Day 2014

Himley Hall Preview

**MINI DAY 2014
ENTRANCE PRICES**

£8.00 per person
£6.00 per person for BMC members
(with current membership card)
Children under 12 free if
accompanied by an adult.

British Mini Day returns to Himley Hall on May 11, celebrating 55 years of the Mini at one of the very best venues on the show calendar.



WELCOME TO MINI DAY!

British Mini Club celebrates the start of the summer show season at Himley Hall and Park on May 11, where we are proud to celebrate the Mini's 55th Birthday. There are few better places we can think of for enjoying a day out with your Mini - this is truly an event you won't want to miss!

This is the complete Mini enthusiasts' event; set in what we think is the most desirable venue on the calendar. The main show is located between the stunning back drop of the Hall and the great lake, however, the stars will be, as always, the cars! As it's the 55th year of the Mini we will have a special timeline displaying models from 1959 to the present day. The 1959 Mini Resister has also chosen Himley as the venue for one of its national display days, and is sure to bring many interesting examples.

We start off another year of our Premier Class Concours competition with 11 different classes catering for every model of Mini. Running along side this we have our Show 'n' Shine display, with sections for both classic and modern MINI. Remember you must pre-book in advance to take part. (Call BMC on 01384 897779 or e-mail david.hollis@britishminiclub.co.uk. Alternatively you can download forms from the club website).

If it's parts and accessories you're after, then look no further than our impressive trade area where you will find all the specialist Mini traders along with a huge autojumble area, selling just about everything for your Mini. In addition clubs from all around the country will be putting on special displays for the 'Mini Cheers for your 55th birthday' theme, marking a very special anniversary.

Of course, no BMC event is complete without our traditional Win a Mini for just £1. This year we have another fab classic Mini up for grabs, which will be available to view on our website just before the show.

So come along and enjoy a perfect day out with other Mini owners, and let's continue celebrating the wonderful Mini in style.
David Hollis,
British Mini Club

Rain or shine, Himley Hall is always a great event. Don't miss it!



HOW TO GET TO MINI DAY

Himley Hall is four miles from Dudley on the B4176 and six miles from Wolverhampton just off the A449. Sat nav users should use the postcode DY3 4DF, the British Mini Day will be signposted on nearby roads.



BMC MEMBERSHIP

The BMC will have its membership centre situated in the heart of the show area. Becoming a member of the BMC is one of the best ways of enjoying your Mini even more. After all, when you own a car that is as iconic as the Mini, it's well worth discovering the benefits and advantages of joining a club community. You can join online at www.britishminiclub.co.uk, or for instant membership call 01384 897779.

MINI 55 TIMELINE

It's 55 years since the incredible Mini appeared and totally changed the world of motoring forever. The British Mini Club has set itself a massive challenge for Himley Hall. The aim is to bring Minis together from each year of production around the Himley's great lake; that's 55 Minis in total from the first 1959 classic to the latest 2014 MINI! The driver of the Mini gets free entry into the event. Check out our website for remaining available slots.

TRADE STANDS

Himley Hall attracts most of the top traders in the Mini scene, keen to offer buyers the best possible deals. From styling and interior trim to major mechanical parts, you can expect to find whatever you need amongst the trade stands. There will be dozens of traders, including: Mini Sport, Footman James Insurance, AutoGlym, Midland Wheels and many more.

MINI JUMBLE

In addition to the trade area you'll also find the Mini Jumble - the best place to find those rare original Mini parts. You'll be hard pushed to find as many stands at any other event, so come along and start your search for those elusive rare parts.

MINIS FOR SALE

If you're looking to buy or sell a Mini you will find no better place than Himley. Past years have attracted large numbers of top quality Minis for sale. To sell your Mini at Himley please contact the BMC.

PREMIER CONCOURS

The British Mini Club's Premier Concours offers arguably the most sought-after silverware of the season. Winners from Himley Hall and MiniFest at Uttoxeter will go through to the final at MiniFair 2, held at Stoneleigh Park in October. There are 11 different classes catering for every model of Mini. All concours entrants must pay in advance at £10 per Mini. This includes your concours entry fee along with the show entrance for the drive with passengers £8 each. The best Mini/MINI of the Day wins £250. To enter, call the BMC on 01384 897779 or e-mail david.hollis@britishminiclub.co.uk. Alternatively download forms from the BMC website.

SHOW 'N' SHINE

In addition to the Premier Concours Class, our popular Show 'n' Shine competition will also take place at Himley. This is to encourage owners who have not had the experience of a full-blown concours, but are keen to dip their toe in the water. Your car does not have to be perfect to enter Show 'n' Shine, so don't just park your Mini in the car park - come along and give it a try. Who knows, you may walk away with a trophy!

There are just two classes: Classic Mini and New MINI. Each owner involved will be given one voting slip that they can use to vote for what they think is the best Mini/MINI in their class. Owners cannot vote for their own Mini, making it a completely fair system. To enter, call the BMC on 01384 897779 or e-mail david.hollis@britishminiclub.co.uk. Alternatively download forms from the BMC website.



A wide variety of Minis and MINIs will be present at the show.



CLUB STANDS

Clubs always make a top effort at Himley Hall. Mind you there's a certain amount of inter-club rivalry going on, with the prize for the Best Club Stand always hotly contested. Dress your Minis - and your club members - to be in the running. The theme this year is the 'Minis Cheers for your 55th birthday'. The winning club will win £250, with trophies for first, second and third places. Many clubs are expected to take part, so book in advance.

THE PERFECT LOCATION

The backdrop to the British Mini Day is the magnificent Himley Hall, a Palladian mansion built in the 18th Century. The stately home is set in 180 acres of grounds landscaped by Capability Brown, complete with ornamental lakes, waterfalls and woodland - and Minis will be displayed in the area between the house and one of the lakes.

WIN A MINI

Another great chance to win a classic Mini for a £1! As usual the BMC will have another great classic Mini to be won - details will appear on the BMC website just before the show. It will be ready to drive away with an MOT, Tax and £250 towards your insurance from Footman James. It will also feature a new set of alloy wheels and tyres supplied by Midland Wheel Supplies. Tickets will be on sale from 10.00am at the BMC Membership Centre.



WIN A MINI

A Mini from each year of production will be on display around the venue's lake.



www.minispeed.co.uk



Engine Kits

Performance Built Engines

1293/1330cc Budget Fast Road Kit

1275 block prepared and painted, reground crank with journals polished and lead-copper bearing set provided, +20" to +60" pistons fitted to rods, Kent or Piper camshaft with new followers, Duplex timing gears & chain, H/C oil pump and conversion gasket set. £695



1380cc Fast Road Kit

1275 block prepared and painted, reground nitro-carburised crankshaft with polished journals, balanced with flywheel & pulley, and supplied with lead-copper bearings, Powermax 73.5mm pistons fitted to balanced rods, lightened verto or Mini flywheel with either AP Racing or Turbo clutch kit. Kent or Piper Camshaft with new followers, Duplex timing gears & chain, H/C oil pump, competition head gasket & conversion set. £885

Stage 3

1293-1380cc fully built engine with: New up-rated AP Racing or Turbo clutch kit, Reground nitro-carburised crankshaft, Lightened & balanced assembly, Steel centre main strap, Choice of camshaft, Duplex timing gears & chain, Stage3 cylinder head, High quality cast pistons, H/C steel backed oil pump, Up-rated reconditioned gearbox with central oil pickup pipe & competition diff pin. Choice of colour.

Options available with or without gearbox:

1293-1330cc & gearbox £2162 without gearbox £1825

1380cc with gearbox £2244 without gearbox £1907 Upgrade to Omega pistons - For any other spec for any of these engines just ask

Concept

1293-1380 cc fully Built engine with: AP Racing/Turbo clutch kit, ARP con-rod bolts & head studs, Nitro-carburised crankshaft lightened & balanced assembly, Steel centre main strap, Powermax or Omega pistons, Choice of camshaft, Duplex timing gears & chain, Concept cylinder head, 1.5 ratio roller rockers, H/C steel backed oil pump, Up-rated recon gearbox with central oil pickup pipe & 4-pin diff. Choice of colour. Concept 36 with gearbox from £3030 without gearbox from £2539 Concept 37 with gearbox from £3107 without gearbox from £2616 Ultralight steel flywheel & backplate upgrade £249

Stage 4

Spec as per Stage3 but with a Stage4 cylinder head with larger exhaust valves and further port work to increase flow and power output & 1.5 Roller rockers. Options available with or without gearbox.

1293-1330cc & gearbox £2407 without gearbox £2070

1380cc with gearbox £2489 without gearbox £2152

7 Port cast alloy Cylinder Head Fully Assembled and ported ready to bolt on £1835. Massive Power Gains.



Turbo

Prep block with Concept Turbo cylinder head, New up-rated AP racing clutch, Ultra-light billet flywheel & back plate ARP rod bolts & head studs Steel centre main strap, Nitro-carburised & wedged crank, Fully balanced assembly, Rods lightened & balanced end to end & polished in stressed areas, Forged 18cc dish pistons, Minispeed turbo camshaft, Duplex timing gears & chain, 1.5 ratio roller rockers, Steel back oil pump. £2999

Optional ceramic pistons also available & Choice of colour



Concept cylinder heads

These heads have been designed for maximum power output, whilst retaining good mid-range torque. The heads are fitted with Plasma-nitrided 214N stainless race quality valves with waisted stems, & minispeed colisbro guides. We recommend the use of our specially modified inlet manifolds which will release the full potential of the head.



A full range of Concept Race cylinder heads are also available.

From £587

Concept36	36mm inlet x 31mm exhaust valves	£812
Concept37	37mm inlet x 31mm exhaust valves	£914
Concept Turbo	36mm inlet valves x 31mm exhaust valves	£812

Std. & Modified Upgraded cylinder heads

	Valve size (mm)	998	1275	Turbo	
Standard		£230	£230	£240	All heads are supplied unleaded, unless requested otherwise.
Stage 3	36x29	£440	£480	£511	
Stage 4	36x31	£489	£525	£592	

Rockers



1.5 ratio roller tip	£184
1.5 ratio FULL rr rockers	£395

Crankshafts



Reground crank	£99
Nitro-carburised crank	£148
Wedged & x-drilled crank	£296
Knife-edged, wedged & Ni-tempered crank	£296
Knife-edged, wedged & Ni-tempered & x-drilled crank	£398
New 1275 crank	£285
Forged EN40B crank	£1372

Camdrives



Vernier belt drive	£173
Piper steel vernier duplex kit	£89
Vernier Minispeed duplex kit	£79
Hi-grade light. duplex kit	£55
Steel vernier duplex kit	£77
Standard duplex kit	£24

Minispeed Caliper & Brake Kit



7.9" Vented Kit	£ 405
8.4" Vented Kit	£ 385
Kit includes: 4 Pot Alloy Calipers, V Drilled & Grooved Discs, EBC Brk Pads & Fitting Kit	

Engine & Kit Upgrades

X-drilled billet camshaft	£133	Lightweight vernier duplex.	£61
Ultralight billet flywheel & backplate	£249	Bladed & wedged crankshaft	£199
Omega pistons	£182	84mm Longstroke upgrade	£480
Forged pistons	£194		

8 port & 16v heads supplied & engines built to your requirements.

Minispeed Machining & Engineering Services

All machining work is done in house at our premises in Byfleet.

Bore block 20/40/60	£82	Machine spring platforms	£36
Bore block 73.5/74	£97	Lighten conrods set	£82
Reface block/head - from	£31	Stress relieve & polish conrods	fr £51
Supply, fit and ream cam bearings	£56	Machine small end for floating	£123
Supply and fit centre mainstrap	£31	gudgeon pinShot peen conrods	£123
Machine valve pockets	£77	Big end re-sizing	£102
Bespoke valve pocket machining	£153	Crankshaft wedging	£71
Drill and tap block for 5/16 bolts	£46	Crankshaft blading	£71
Chemically clean block, oil/cr plugs	£51	Crank cross-drilling, mains only	£51
Balance rotating assembly	£82	Fit pistons to rods, set of 4	£41
Supply and fit lead free valve seats	£71	Cylinder head & block, dry	£255
cut valve seats x 8	£41	decking service + hoses & take-offs	

Minispeed Supercharger Kit



Kit Prices

From £1379

- * The Best Mini Supercharger Kit by Far
- * Lower charge temperature due to a more efficient design
- * Fits LHD & RHD Vehicles
- * Easy Install
- * Huge Torque and Power Gains
- * Better Driveability
- * Uses one head gasket not two
- * Two year Warranty (*exc.belt & track racing use)

Prices are correct at time of going to print and may be subject to change, some exclusions may apply.



- ✓ More Efficient
- ✓ Less Heat
- ✓ More Power

Minispeed Intake Large Intake Hole

Rival Intake Small Intake Hole

- ✗ Less Efficient
- ✗ More Heat
- ✗ Less Power



Heritage body panels

MK3 Door	£425
MK1 Door	£549
Windscreen Repair Panel / Scuttle Panel	£125
MK3 Bonnet	£165
Rear Panel Lower Half MK3	£200
MK3 Body Side	£315
MK1 A Pnl Inner/Outer	£62/£32.50
Mini Wing	£95
Rear Wheel Arch Inner	£81
MK1 and MK 3on Door Skin	£80
MK3 Boot Lid.	£185
MK1 Genuine Bootlid - new!	£300
Rear Valance.	£49
MK3 Dr Step & A-Post Repair	£75
Clubman Wing	£105
Clubman Front Panel	£218
MK3 Quarter Panel	£105
Genuine fr subframes	from £405
Genuine rr subframes	from £380
Outer van estate	
pickup sills	£30 each
Scuttle closing panel.	£12 each
Rear Valance Clos panel	£34 each
Rear Heelboard Complete	£67
MK3 Door Skin	£80
Genuine Sill	£37.50
MK3 A Panel	£19.99

Clutches

£77	Bonded Rally/Race Clutch Plate
£123	Minispeed Paddle Clutch Plate
£163	AP Racing Paddle Race Plate
From £34.50	Pre Verto Grey/ Orange Double Grey AP Racing Cover

Double grey cover	£62
Grey/Orange clutch cover	£37
Standard/Blue clutch cover	£25
Turbo Verto clutch kit	£138
AP Racing Paddle race plate	£163
Bonded rally plate	£77
Turbo clutch plate genuine AP	£23.50
Verto clutch kit 1275	£114
Injection clutch kit	£114
Paddle clutch plate	£123
Alloy backplate	£109

Flywheels

Supalite Alloy Back plate 730g	£119
Supalite Flywheel 2.4Kg	£199
Lightened (exchange)	£41
Billet ultralight steel & Backplate	£219
As above, pre-engaged	£219

Mk4 Body Shell 1976 - 97, doors, bonnet & boot lid.

£6340	Mk4 Body Shell
£105	Clubman Wing
£165	MK3 Bonnet
£185	MK3 Bootlid
£175	Front Panel not clubman
£405	Gen.Fr Subframe
£183	Inner Wing 1976-89
£125	Scuttle Panel

Camshafts

	KENT CAMS	X-drilled Billet
256 Mild Road	£165	£201
266 Fast Road	£165	£201
274 Fast Road inj	£165	£201
276 Road Rally	£165	£201
286 Sports rally	£165	£201
296 Race	£165	£201
286 Scatter	£198	£234
296 Scatter	£198	£234
310 Full Race	£165	£201
315 Full race	£165	£201

PIPER CAMS

	Re-grind	Billet	X-drilled Billet
BP255 Mild road	£94	£190	£227
BP270 Fast road	£94	£190	£227
BP285 Rally	£94	£190	£227
BP300 Rally/Race	£94	£190	£227
BP320 Full race	£94	£190	£227

Minispeed Camshafts

MS 266, MS 276, MS 286, MS SWS	£60
Turbo £61 MPI fast road	£82
Rally camshaft	£82

Rebuilt Gearboxes

1. Fully rebuilt & warranted gearbox fitted with new bearings, baulk rings, re-built diff, central oil pick up pipe & competition diff pin.	£435
2. As per (1) with straight cut gears	£795
3. As per (2) with 4-pin diff	£949
4. 4Speed straight cut box, straight cut drop gears (any ratio) & 4-pin diff.	£1189
5. 4Speed straight cut box, straight cut drop gears plate type LSD or Quaife, output shafts, new gear selectors & semi-helical final drive ratio of your choice.	£1999

Upated Brake kits

£307	8.4" Upated Brake Kits.
£687	Stage 1 - Drilled and Grooved discs and EBC Green stuff pads
£506	Stage 2 - Standard vented discs and Metro 4 Pot calipers
	Stage 3 - As above with vented & grooved discs and G pads
	Stage 4 - 4 Pot aluminium calipers, drilled and grooved vented discs and Green stuff pads
	KAD 8.4" 4-pot alloy vented brake conversion kit - includes alloy calipers, x-drilled, grooved & vented discs, Greenstuff pads & all fittings
	KAD rear brake disc conversion kit
	7.5" Upated Brake Kits.
	Stage 1 - Grooved discs & Green stuff pads
	Stage 2 - 4 Pot aluminium calipers, vented discs & G pads
	Stage 3 - 4 Pot aluminium calipers, x-drilled v discs & pads
	CooperS front drum to disc brake conversion kit
	CooperS 12" to 10" disc conversion kit

Brake Discs

£77	Cooper 'S'
	Cooper 'S' Hi-Grade
	Cooper 'S' Grooved pair
	8.4" grooved solid discs (pr)
	EBC (pair)
	8.4" solid discs
	Vented & x-drilled discs

Calipers & Drums, etc

£475	KAD 8.4 kit
£33	Calipers: (each)
£112 pr	Cooper S
	12" std
	4 pot vented 12"
	4 pot 10" alloy
	4 pot 12" alloy
	4 pot 10" alloy vented
	4 pot 12" alloy vented
	KAD 10" 4-pot alloy calipers
	KAD 12" 4-pot alloy calipers

Brake Pads

From £15.50	EBC PADS:
	Kevlar Black Stuff Road Pads:
	Cooper
	Cooper S
	1275GT/late Minis
	Vented.
	Green Stuff Fast Road/Rally
	Cooper
	Cooper S
	1275GT/late Minis
	Vented.
	Red Stuff pads:
	Cooper S
	1275GT/late Minis
	Vented
	Standard Pads 8.4"
	Standard Rear Brake Shoes
	Mintex Rear Shoes

Upated suspension kits

£12.50	Solid Tower mounts set of 4
£58	Adj. Ride Height car set
£146	Kayaba gas adj. car & adj. ride height set

Stage 1 - Adjustable shocks (Gaz), solid tower and tear drop mounts. To upgrade all kits to include KONI shocks please increase prices by £25; to upgrade to AVO shocks, increase kit prices by £60	£153
Stage 2 - As stage 1 plus ride height adjusters and Superflex tie-bar and bottom arm bushes.	£235
Stage 3 - As stage 2 plus negative camber kit	£347
Stage 4 - As stage 3 plus coil springs & rear subframe bush kit	£603
Stage 5 - As stage 4 plus rear anti-roll bar	£714
Negative Camber Kit: complete with superflex bushes, adjustable rear camber track brackets, 1.5deg bottom arms & adj. tie-bars.	£119
Above kit without superflex bushes	£94
Kayaba gas adjustable car set with adjustable ride height set	£146



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The perfect present.

Price match promise, Minispeed promises to match or beat any supplier selling the same product.

Events



Book your Mini activities with our comprehensive Mini show and events guide!

■ April 12

Pride of Longbridge

Annual celebration of vehicles built at Longbridge or with connections to the Birmingham-based plant. It's free to enter, and takes place at Cofton Park, close to the Longbridge site.

www.austinelongbridgefederation.co.uk

■ April 13

April's Mini Run

Beginning at the Goodwood Circuit at 11.30am with a parade lap, followed by a country run, raffle and quiz. Proceeds will go to Macmillan Cancer Support.

hadders24@hotmail.co.uk

■ April 13

Lincoln BIG Mini Day

Taking place at Brayford Wharf Lincoln. Cars are allowed to park from 8am for a 10am start and will stay until the 4pm finish. Arrive early as space is limited.

www.trentvalleymoc.co.uk

■ April 13

Malvern Spring Mini Show

Indoor Mini show at the Three Counties Showground, Malvern, Worcs, taking place for the 15th time.

www.classicshows.org

■ April 19-21

Silly Mini Weekend

Taking place over the Easter weekend, this annual Devon-based event raises money for Children's Hospice South West and features visits to Crealy Adventure Park, Powderham Castle and Dawlish Warren. Expect plenty of fun and family friendly activities, including a charity auction and raffle. Overnight accommodation is available at Hazelwood Holiday Park.

www.sillyminis.com

■ April 20

Minis vs Beetles

Annual grudge drag racing event taking place at York Raceway. Who will take honours in the battle between Minis and Beetles?

www.yorkraceway.org.uk

■ April 21

East Coast Run

Easter Monday run beginning in Bury St Edmunds and heading to the coastal town of Southwold in Suffolk. Proceeds from the event and a charity auction will go to EACH (East Anglian Children's Hospices).

www.eastcoastminiclub.co.uk

■ April 21

Surrey Hills Mini Run

Surrey Hills Mini Group's popular annual Mini run around Surrey Hill, starting at 10am at the Royal Oak public house on Aldershot Road in Pirbright. Entry is £5 per car.

www.shmg.co.uk

■ April 21

Carole Nash Mini 55 Birthday Bash

Mini extravaganza held at Gawsorth Hall in Cheshire. Free access to visitors who pre-register. Attractions include car displays, trade stands, access to house and grounds and various fun competitions.

mini55@carolenash.com

■ April 26-27

Moles Moonraker Run

Beginning on Saturday afternoon with a run from the Hope Nature Centre near Trowbridge to Marlborough, followed by fish and chips, then games at the Bustard Club. Sunday includes breakfast at The Greyhound in Bromham and Mini run to the Atwell Wilson Motor Museum in Calne. All profits go to the Hope Nature Centre.

molesminiclub@hotmail.co.uk

■ April 27

H2H Run

Mini run from Huntingdon to Hunstanton on the Norfolk coast, organised by HAMOC. Entry is £5 per Mini. All profits go to Sue Ryder Cancer Care at Thorpe Hall.

www.hamoc.co.uk

■ April 27

Spring into Minis

New show for 2014 taking place at Ferndown Leisure Centre, Dorset, with club stands, trade stands, fancy dress, prizes, competitions and various other attractions.

www.springintominis.co.uk

■ April 27

Suffolk Run

Bury Mini Club's ever-popular run from Bury St Edmunds in Suffolk to Aldeburgh on the coast. This is the 10th annual run of its kind, and will cost £15 with proceeds going to charity. See the website for entry forms.

www.buryminiclub.co.uk

■ April 29

Japan Mini Day

The first of the J-MSA's two annual events, taking place at the Tsukuba Circuit, Japan. Expect plenty of attractions including racing and trade stands.

www.j-msa.com

■ May 3

Back to Downton

Taking place for the fifth time, this event includes an excellent array of rare Minis, plus the chance to meet ex-Downton staff and various Mini personalities. It takes place at The Brian Whitehead Sports Ground in Downton, Wiltshire, and begins at 10am.

www.dewsc.org.uk

■ May 3

Minis on the Prom

Saturday run from Newport followed by a Sunday show on the Promenade in Aberystwyth, with show and shine, traders and club. The return trip takes place on the Monday.

www.newportminiowners.co.uk

■ May 4

Mk1 Performance Action Day

An all-new Mini-only trackday taking place at

Blaydon Park Motorsport Centre. Includes an open pit track time all day, plus display cars in the paddock, a 'show and shine' and a host of big-name special guests. Camping is also offered on the Saturday and Sunday night. Track spaces are now sold out, but spectators are still welcome to attend.

www.mk1-forum.net

■ May 5

East Midlands Mini Show

Mini event taking place at Thoresby Park, Ollerton, Notts. Expect the usual attractions.

www.classicshows.org

■ May 10

Malin to Mizen

An epic one-day jaunt from the northern tip of Ireland to the most southern - a distance of 450 miles! Proceeds go to charity.

www.irishminis.ie

■ May 11

Brands Hatch Mini Festival

Expect plenty of thrilling Mini race action at this popular annual motorsport festival, including Mini Se7ens, Miglias, Mighty Minis and historics. Additional attractions include Mini-only parade laps, club stands, a large trade area and more.

www.mini-festival.co.uk

■ May 11

British Mini Day

The British Mini Club's first outdoor show of the season, held at Himley Hall near Dudley. Expect all the usual BMC attractions, including concours, show 'n' shine, traders, club stands and the ever-popular Mini raffle.

www.britishminiclub.co.uk

■ May 16-18

Minis on the Bay

Fun-packed camping weekend organised by Morecambe Bay Mini Club. Activities include Mini runs, treasure hunts, quizzes, competitions and children's activities, plus a raffle and charity auction in aid of Help for Heroes. Takes place at

Gibraltar Farm in Silverdale near Lancaster.
01524 855561
audrey.hine@yahoo.com

■ May 18 **London to Brighton Run**

The daddy of Mini runs returns to its usual May weekend slot, beginning at Crystal Palace Park and heading to Brighton's Madeira Drive. Camping is available at Crystal Palace on the Saturday night, with traders, Show 'n' Shine, autotest, club stands and more at Brighton.
www.london-to-brighton.co.uk

■ May 25 **Thistle Run**

The Scottish answer to the London to Brighton Run, the Mini Clan's annual run will begin at the National Mining Museum in Newtongrange and conclude at Eyemouth Harbour. To mark the 100th anniversary of the First World War, the theme will be Military or period, so dress your car, yourself or both! This year's charities are RLNI Eyemouth and Erskine Veterans. Registration will open early March.
www.miniclub.com

■ May 26 **Knebworth Mini & VW Show**

Joint Mini and VW bash taking place at Knebworth Park, close to Stevenage, Herts.
www.classicshows.org

■ June 8 **National Mini Cooper Day**

The Mini Cooper Register's flagship event, bringing together rare Mini Coopers and Minis of every age and derivative at the Beaulieu National Motor Museum in the New Forest. Attractions include traders, autojumble, concours, Mini celebs and much more.
www.minicooper.org

■ June 13-14 **Mini Meet North**

Activity packed weekend taking place at Canadian Tire Motorsport Park in Ontario. Includes parade laps, runs and a rolling road.
minimeetnorth@gmail.com

■ June 15 **Gainsborough Mini Day**

The Trent Valley MOC hosts its brand new free to attend event, taking place in the Market Place, Gainsborough. Places are offered on a first come first served basis, and everyone needs to be in position by 10am.
www.trentvalleymoc.co.uk

■ June 20-22 **Mini Adventure**

Driving event around Pickering in North Yorks. Organised runs and treasure hunt, plus live entertainment at the campsite.
www.northyorkshireminis.co.uk

■ June 22 **Mega Mini Meet**

Lytham Hall in Lancashire is the quintessentially English backdrop for this Mini day out, with competitions, club stands, trade stands and entertainment.
www.facebook.com/megamini.meet

■ June 26-29 **Balkanska Minijada**

Mini Club Serbia's annual flagship event gets an extra day and a different, 'rally-style' emphasis this year, beginning in Belgrade and heading to the Dinaric Alps.
www.miniclubserbia.rs

■ June 29 **Colchester Mini Show**

Classic Minis and MINIS are welcome to this Essex-based event, featuring a concours, loudest exhaust contest, sound off, Mini push and more.
www.colchesterminiclub.co.uk

■ July 2-6 **Mini Meet East Meets West**

Gathering based in Milwaukee, USA. Attractions include great US Minis, an autocross, funkana, workshops, runs and a scavenger hunt.
www.minimeet2014.com

■ July 6 **Retro Fundraising**

Somerset-based fun run and entertainment in retro fancy dress, in aid of disabled children's charities. All pre-1995 cars are welcome.
www.retrofundraising.co.uk

■ July 18-20 **Skeg Mini Fest**

Fundraising weekend featuring Minis and music, taking place at the Welcome Inn in Skegness, Lincolnshire. Camping is available from Friday to Monday. Proceeds go to Macmillan Cancer Support.
www.skegminifest.co.uk

■ July 19-20 **Manx Mini Meet**

Fun navigational driving weekend taking place on the Isle of Man, including a closed road section at Jurby Airfield and rides for charity with local Mini rally car drivers.
www.manxminiregister.com

■ July 20 **Breakfast and Big Toys**

Event for cars and bikes raising money for Cystic Fibrosis and Cancer Research, held at Autobahn Tuning in Northallerton. Search for 'Breakfast and Big Toys' on Facebook.

■ July 20 **Minis on the 'Rec**

Brighton Mini Club's popular annual event, taking at Adur Recreation Ground, Shoreham by Sea. Includes traders, raffle, car displays, show and shine and 'Weirdest Object in a Boot competition'. Proceeds go to the Chesnut Tree House Hospice.
www.brightonminiclub.co.uk

■ July 25-27 **Cambridge Mini Chill**

Relaxed camping weekend based at Marley Eternit Social Club in Meldreth, Herts. Activities include barbecues and local bands. Entry is £5 per person, with proceeds going to charity.
knowles.madhouse@virgin.net

■ July 27 **Cotswold Classic Mini Tour**

A tour around the beautiful Cotswolds lanes is organised by the Mini Fixers in aid of local charities. The route is new every year, and will start at Fairford before finishing at The Trout Inn in Lechlade on Thames. Camping is available, and you can book online.
www.minifixers.co.uk

■ August 1-3 **IMM 2014/Mini 55**

The International Mini Meeting takes place at the Kent Event Centre in 2014, and is hosted by the Southern Mini Owners Club. The event will celebrate 55 years of the Mini, too. Don't miss

out, it's sure to be a cracker! Keep on eye on our news pages for regular event updates.
www.imm2014.co.uk

■ August 10 **Mini in the Park**

Mini in the Park returns to Santa Pod Raceway in Northamptonshire. Combining drag racing with static attractions, the event will include a Saturday night party and camping, traders, club stands, special live action displays, concours, the Fireforce Jet Car and much more. It's one of our favourite shows on the calendar.
www.minishow.co.uk

■ August 23-24 **NMOC East Anglian Job**

The Norfolk Mini Owners Club's annual camping weekend, featuring Mini runs, barbecues, a quiz night and more. The £25 entry fee per car includes camping, run plaque, notes, quiz entry for one person and a burger! A £15 run ticket is also available for entry to both runs, plus the run plaque and notes.
www.eastanglianjob.co.uk

■ August 25 **Blenheim Festival of Transport**

General show with Minis welcomed, taking place at Blenheim Palace, Woodstock, Oxon.
www.classicshows.org

■ August 25 **East Midlands Mini Show**

Mini event taking place at Thoresby Park, Ollerton, Nottinghamshire.
www.classicshows.org

■ August 31 **British MiniFest**

The British Mini Club's final outdoor event of the year, taking place at Uttoxeter Racecourse. Highlights include club stands with prizes for the best efforts, traders, concours and the chance to win a Mini for £1.
www.britishminiclub.co.uk

■ September 2-10 **The Italian Job Tour**

Drive your Mini to Italy and visit the locations from the iconic Italian Job film, with like-minded enthusiasts. Cost is £600 per person, based on two people sharing.
www.italianjobtours.co.uk

■ September 7 **Minis by the Sea**

Great free event organised by the West Sussex Mini Owners Club, taking place at Stenye Gardens close to Worthing seafront. Various attractions include a charity raffle and auction in aid of local hospices.
www.wsmoc.co.uk

■ September 7 **Mouth 2 Mouth**

Jurassic Coast Minis hosts this annual run along the Dorset coast, this year from Weymouth to Exmouth in aid of the RNLI.
www.facebook.com/jurassiccoast.minis

■ September 14 **National Mini Show**

Long-running annual event taking place at the picturesque Stanford Hall near Lutterworth in Leicestershire. Includes a busy trade area, autojumble, club displays, concours and more.
01543 257956
www.miniownersclub.co.uk

■ September 21 **King's Lynn to Great Yarmouth**

A cruise across Norfolk to the seafront at Great Yarmouth in aid of charity, hosted by King's Lynn Mini Owners Club.
www.klmoc.co.uk

■ September 21 **Polderoute 7**

Traditional one-day navigational rally in Belgium with two skill classes, Touristic or Sport. Organised by Belgian Minis on Tour.
www.belgianminisontour.be

■ September 29 **Mini Action Day**

Annual Mini track action at Castle Combe in Wiltshire. Includes track time, charity rides, traders, autojumble, club stands and more.
www.castlecombecircuit.co.uk

■ October 12 **Malvern Autumn Mini Show**

The 16th Malvern Autumn Mini Show, taking place at the Three Counties Showground near Malvern, Worcestershire. Expect traders, clubs and more.
www.classicshows.org

■ October 19 **MiniFair 2**

The second of the British Mini Club's big indoor events. Features clubs, traders, autojumble and the Premier Concours Finals, plus the chance to win a Mini!
www.britishminiclub.co.uk

■ October 23 - November 1 **Italian Job**

The Italian Job celebrates its 25th anniversary with another pilgrimage to Italy, open to vehicles and their derivatives from the famous 1969 film, following route books and raising money for children's charity Variety. Budget on around £1000-1100 each based on two sharing.
www.italianjob.com

■ MAY 21-25 2015 **IMM 2015**

The International Mini Meeting moves to the north east of Lithuania for 2015, held on the Greater Island of Lake Zarasas.
www.imm2015lithuania.com

REGULAR MINI EVENTS

Ace Café Mod 'n' Mini Night
Visit the iconic Ace Café on London's North Circular on the first Thursday of every month.
www.ace-cafe-london.com

West Midlands Mini Nights
Taking place on the second Friday of every month at the Sketchley Bar in Weir Lane, Lower Wick, Worcester.
www.westmidlandminishow.co.uk

Trent Valley Mini Nights
The Caenby Corner meets on the first Friday of each month from May to September have now been moved to The Red Lion, Redbourne, DN21 4QR.
www.trentvalleymoc.co.uk

H Cafe Mini Meets
Taking place on the second Thursday of each month from March until early autumn at the H Cafe, Oxford Road, Dorchester-on-Thames.
www.h-cafe.co.uk

STAR LETTER MOULTON'S MOKE

I read with considerable interest the feature in the March issue on the Mini Moke that formerly belonged to the late Dr Alex Moulton. For many years I worked on this vehicle as I was employed at a former BL/Austin Rover/Rover garage in Bradford-on-Avon and Alex Moulton used us for help and advice on many projects. My brother and I both attended the Bonham's sale in December and purchased the Metro 1.3 S referred to in your articles.

Prior to the sale at Bonham's, I was asked by the trustees handling Alex's estate to compile details of the cars that were to be sold, which I then e-mailed to them for the sale catalogue. I would very much like to contact the present owner of the Moke as I can provide further information on the modifications Alex carried out on the vehicle and also send some images of it at The Hall.

I am still in contact with several of Alex's former factory employees and can possibly find out more details of the uses the Moke had and the modifications that were made. I think, for example, that the adjustable set-up on it was not installed until approximately 2003-04 or possibly later than that after it was taken off the road. I have driven it around Bradford-on-Avon myself on many occasions and it was very nippy, although first gear was a bit crunchy and it was extremely draughty!

Guy Vincent

SEND US A LETTER

Email us at minimag@futurenet.com
or send the team a letter:
Letters, Mini Magazine,
30 Monmouth St, Bath, BA1 2BW.
Or visit our website and forum at
www.minimag.co.uk
Letters/posts may be edited for
length and legal reasons.



Guy sent us these pics of the experimental Moke before it was auctioned in December.



The Mini featured in the new Transformers movie trailer.

Rusty rear window frame on Adriaan's MPI.



Window frame rust

Here's a quick spring tip: check rear window surroundings for rust. This is a 2000 MPI with rear opening windows. You can see the window frame has rusted quite badly under the seal.

Adriaan Groenendijk

Definitely an area worth checking!



On show for the F56 MINI launch.

F56 launch

Here's a pic of my 1980 Mini Clubman in my local MINI showroom, where it occupied a space along with a pristine Mini Neon for the launch of the new MINI hatchback. We were treated wonderfully by the MINI staff, and the boss said some very nice things about our two classics!

Jeff Hills

The Clubby looks fantastic in the showroom, thanks for the pic.



MiniMag

Facefeed

Our lunchtime question continues to generate plenty of discussion. Here's a selection...

Does the cost of petrol affect your Mini modifications or driving style?

■ No I still drive it like I've stolen it!
Daniel Hensley

■ No. My daily runner drinks far more than my Mini! **Ady Randle**

■ Not really. My main car is bigger and much thirstier. And my Mini only comes out on nice days. **Bhavash Padhiar**

Have you ever pulled off an impressive handbrake turn? On a private road of course...

■ I was lucky enough to live on a farm growing up and I had a Clubman Estate that only had a working handbrake.
Saud Ben-Saud

■ No, but I do have a bad habit of driving off with the handbrake still on!
Christina Robinson

■ Not a handbrake turn, more like the back shoes came apart and locked up the back wheels. It did a complete 360 with black and brown lines! **Stuart Holt**

Have you ever been in a motorbike-engined Mini?

■ Yes I have a 1972 Hayabusa-powered Clubman, which I built myself. It's the fastest thing I've ever driven! **Paul Davis**

■ I've been in one which seemed as if it had a moped engine, does that count?
Nigel Carter

■ Yes, loved it but it was really loud in the cabin. **Sam Toews**

Do you worry about the increasing rarity of Minis and certain parts?

■ Mk1 parts are hard to find now and the quality of a lot them is poor. **Carl George**

■ Mini owners are luckier than most! The industry supporting us is mind blowing. What other cars over 30 years old can be your daily driver? **Patrick Willett**

■ That's why stockpiling original parts when they come up is a good idea. I've got spares for my Mini 25 stored in the garage. I could build another 25 with the parts I have. **Joseph Steel**

■ My Mini wasn't original at all when I bought it so I'm OK with the aftermarket parts. **Wannes Van Houdt**

To get involved, visit www.facebook.com/future.minimagazine

Transformers

Hi there, I thought I'd let you know that there's a Mini in the trailer for the new Transformers 'Age of Extinction' film. It's at 1:13 in the trailer, although it doesn't transform and doesn't look key in the movie, but I thought it was kind of interesting to spot. It's especially cool seeing that it's an American movie!

Kapil Bhatt

Good spot Kapil, and the new film looks worth a watch too.

Wedding cake

Hi Mini Magazine, when my friend recently got married, the cake had a replica of his Mini on top as he has a real love for Minis. What do you think?

Russ Franklin

Looks tasty. We actively encourage readers to send in cake to the office...



Cool Mini wedding cake.



Back issue

I hope you can help me, my grandad was on your front cover back in November 1998 and due to fire I have lost my copy. I was wondering if you still have a copy available for sale?

Kerry

Sadly not, no. We only keep a limited stock of back issues but hopefully you'll be able to find a spare copy at the shows or online.



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Mini Magazine 234



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Cars must comply to MSA safety regulations

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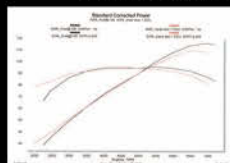
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FIRST MINI

Name: Scott Baker

Car: Mk3 Mini

Location: Dudley

■ This is my 1972 Austin Mini on its original shell, bought for me by my parents when I was 16. I have been restoring it for the last year and a half to be a race-look daily driver.

My passion for cars and all thing mechanical started when I was very young, being around my dad who builds motorbikes and my uncle who builds show-winning classic Fords. So I always wanted a classic Mini for my first car.

The previous owner had the Mini for over 20 years but sadly died at the ripe old age of 92. We drove it for a few months to assess its condition before taking it off the road for a full rebuild. During this process I have learnt a whole host of new skills and what makes a Mini tick. The interior has Cobra Monaco seats in black, and the wood-rim steering wheel was handmade by a friend of my granddad. One day I will respray the car and make it a true one-off custom like Dougie McColl's XE Mini, but for now I am just going to enjoy it and make people smile when I drive past.



Scott's cool Mk3 still boasts its original bodyshell.

FULL REBUILD

Name: Francesco Lombardi

Car: 1991 Mini Cooper

Location: Tuscany

■ I'm a 23 year-old Mini fan from Marina di Massa, Tuscany. In 2010 I bought a Rover Mini Cooper, and last year I rebuilt the gearbox, engine and all the interior, before removing the little rust that was on the shell and respraying it. Upgrades include a Stage 3 head, 1.5 rockers, K&N air filter and a Metro turbo clutch, plus new Hi Los, rubber cones, Spax dampers and more. I use my Mini every day for work and for Mini meetings, races or gymkhanas at the weekend. Last year I drove 50,000km in it!



Francesco's Mini was fully-rebuilt last year.



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Wild styling and a serious amount of bass-pounding ICE!

ICE KING

Name: Benjamin Myllyluoma
Car: Suzuki 16-valve ICE Mini
Location: Finland

■ My Mini has been five and a half years in the making, and it now has a Suzuki Swift GTi 1.3-litre 16-valve engine and a sound system for sound pressure level competitions. It won the overall 2013 Finnish SPL championship, and has won five previous championships in every class I could enter. I drove over 7000km last year to compete in it!

The exterior has been rebuilt three times now, and features custom airbrushing by Johnny Sjöblom and self-made bodykit from steel. I made most of the interior myself, and it includes three Ground Zero amps, two 18-inch Ground Zero Plutonium subs, 12 mid bass drivers and 12 tweeters. There are nine batteries and a serious amount of sound deadening too!



LOCAL CELEB

Name: Paul Hernandez
Car: 1991 Mini Cooper
Location: London

This is my Mini Cooper, Emily, that I've owned for six years. She previously belonged to my uncle, then my mum, so she's been in my family since new. They hardly drove her, but now I use her every day. She's a bit of a local celebrity and always attracts a lot of attention. I'm a mechanic by trade and I've done a lot of work on her, most of the parts coming from Mini Spares and Mini Sport. With help from my dad, I've fitted Spax dampers, front 8.4-inch vented discs and four-pot alloy callipers, plus rear Superfin drums, 13-inch Starmag wheels and a new exhaust. She's also had a full respray and sticker-bombed mirrors and roof. I'm a regular at London to Brighton with my family, so I might see you all there!



Rolling on wide Starmags.



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SUMMER TOY

Name: Stewart Pearce
Car: 1995 Mini Sprite
Location: South Wales

■ Here's my 1995 Rover Mini Sprite that I bought as a project eight years ago. It's since had a complete front end, doorskins, rear valance, gas dampers and a set of 12-inch Revolutions. It also has a Sportex exhaust system and manifold, which sounds great! It only has 21,000 miles on the clock, which is genuine, and it drives really well. Back in 2009 it had a full respray by Oldschoolenginer and now it only gets used in the summer months. I always keep it garaged too, so it still looks pristine!

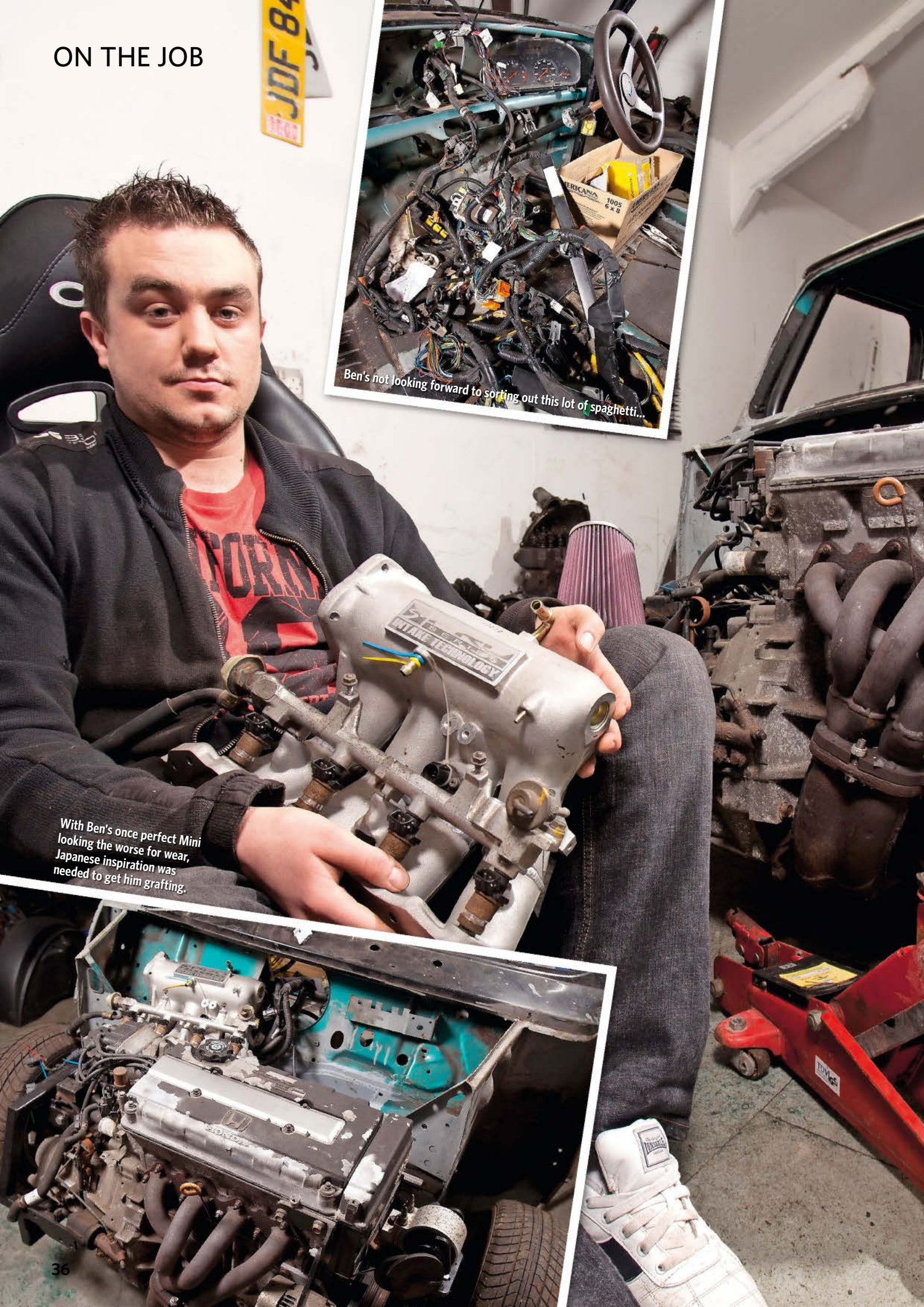


Stewart's Mini Sprite is in mint condition.

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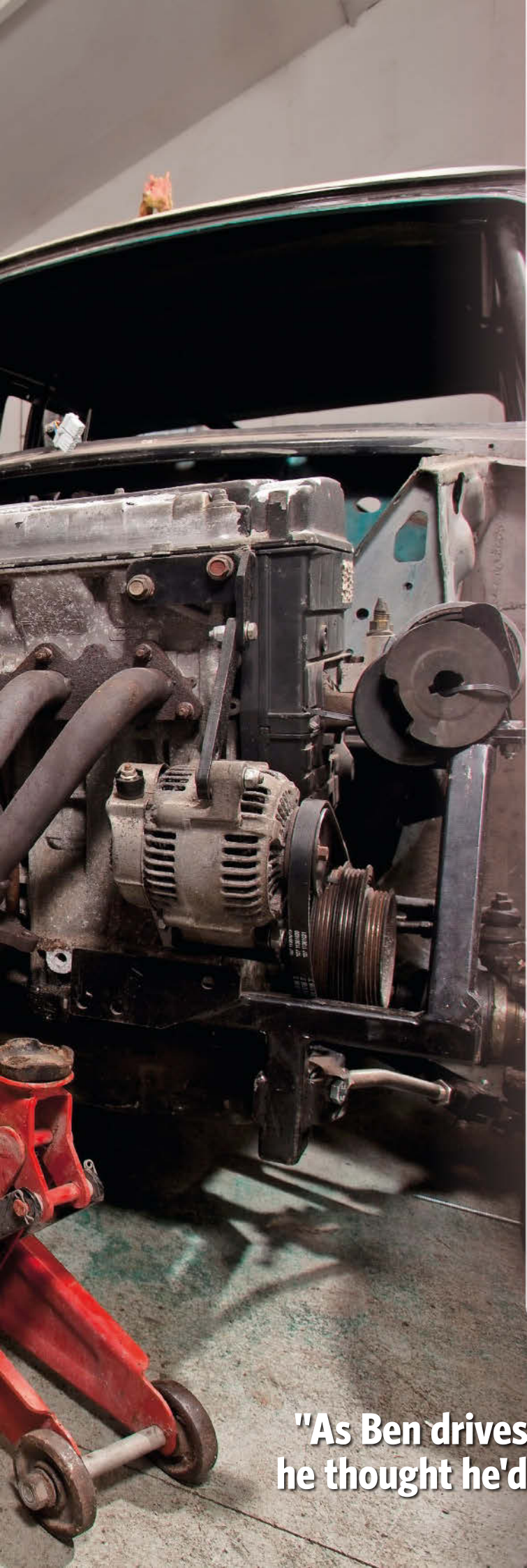
ON THE JOB



JDF 84

Ben's not looking forward to sorting out this lot of spaghetti...

With Ben's once perfect Mini looking the worse for wear, Japanese inspiration was needed to get him grafting.



ON THE JOB

Back in power

Ben Isaac's Mini Sprite was a bit tired, but a Honda VTEC conversion will soon fix that...

Words **Jon Betts** Photography **Alisdair Cusick**

When it comes to Minis, abuse and neglect has only one outcome, and that's lots and lots of work. Whether it's a lack of maintenance or just leaving a car sat outside in all weathers, neglect will come back to haunt you – as Ben Isaacs found out to his cost. Years of ill-treatment with little or no remedial work along the way has turned his once rust-free Mini in great mechanical condition into a full-on restoration project. "I've just run it into the ground and didn't really look after it very well," he admits. "Eventually the front teardrops on the subframe got ripped off and the front end used to lift right up under hard acceleration!"

However, it seems that Ben has now learnt his lesson. Having decided to spend some much-needed time and money on the car, he's well on his way to having a Mini to be proud of once again. All the rust repairs have been done, and even an engine conversion has nearly been completed. As Ben drives a Honda as his everyday vehicle, he thought he would try and combine the two. Another car purchase and a new subframe later, and he's almost there!

When it comes to carrying out hybrid engine swaps, the preferred option is to follow in Ben's footsteps. Choose a conversion that's been done before – even better if there is a ready-made subframe for the job – and when it comes to buying said engine, get your hands on the whole donor car. That way you can at least check that it all works, and if you are clever like Ben, you can sell off the bits you don't need and hopefully make most of the purchase price back. The result is an engine free of charge, or if you're really lucky, you might even be able to make a bit of a profit! ➔

PROJECT PROFILE

THE OWNER

NAME: Ben Isaacs

AGE: 25

OCCUPATION: Accountant

LOCATION: Wrexham

THE CAR:

CAR: 1994 Rover Mini Sprite 1275,

to feature a Honda 1.8 16v B18C4 VTEC conversion

START CONDITION: Bought in 2006 as a perfectly restored road-going Sprite

CONDITION NOW: Shell stripped and engine installed.

TIME TAKEN SO FAR: Been in the garage since January 2008, but only started the VTEC conversion in January 2012

ESTIMATED TIME OF COMPLETION: January 2015



"As Ben drives a Honda every day he thought he'd combine the two..."





Bar some TIG welding this job is a self-build.

Is this your first Mini project?

No, I've owned Minis since I was 15. I managed to get this one that was taxed and tested for just a hundred quid! It was pretty much perfect when I got it, but I've just run it into the ground and I didn't really look after it very well.

When did you decide to rebuild this one?

I started the rebuild way back in 2008, but only really decided to do the Honda conversion around a couple of years ago. I drive a Honda every day and really like the engine - the concept of combining that power with the handling of the Mini really appealed.

Did you just buy a donor engine, then?

No, I bought a complete running car so that I could test the engine and gearbox first. Then I stripped out everything I needed - engine, gearbox, wiring loom and fuel tank - and sold everything else off. I effectively got the car for nothing; it was a lot of work but well worth it and the best way of doing it in my opinion.

Have you done all the work yourself so far?

Apart from some TIG welding, yes. I want to do it all, and as I'm not into the concours stuff it shouldn't be too difficult. I learnt to weld on this Mini when I first started the rebuild, so some of it isn't the best and there are some bits I will probably end up doing again. We are in the process of setting up a spray booth at our new workshop, so once the conversion work has been done I'll be giving that a go too.

How did you end up moving the project from home into a workshop?

Well my dad kicked me out of his garage where I was doing the work, so I ended up coming here! I was only really doing a bit here and there - my heart wasn't really in it at the time, but now I'm here the enthusiasm has come back. I can't wait to get it finished.

Have you had any experience of engine conversions in Minis before?

No, but there seems to be a fair few people on the forums doing the same conversion with the same subframe and the same engine, so if I do come unstuck I should be able to find the answer somewhere.



A standard rebuild morphed into a Honda-power swap two years ago.

Are there any areas of the conversion that have, or are going to, worry you?

Electrics! I'm not really looking forward to doing those. I did remove the entire loom from the donor car and all parts without cutting any wires or removing any bits, so hopefully it won't be too difficult. Matt, one of the other lads in the workshop, is a dab-hand with wiring, so he should be able to help if I get really stuck!

What modifications will you be making to the front end to accommodate the larger Honda engine?

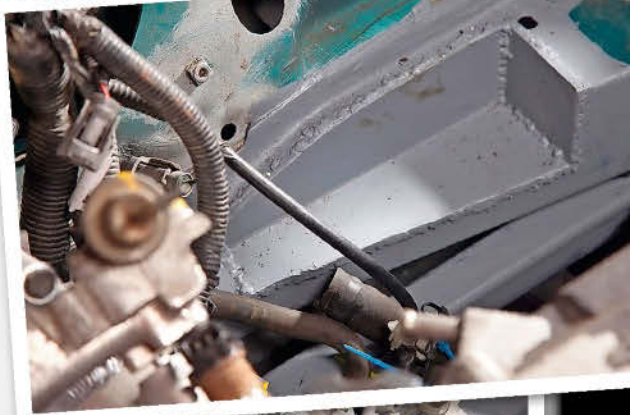
It is possible to use a roundnose but it's a lot of work, and as I quite like the Clubman front, I'm going to go down that route. I have a complete fibreglass front end at home so I'll be using that. I don't want to make things too complicated as I'm also doing up a house at the same time. I can always go back and change things in the future, but for now I just want to be able to use the car as quickly as possible.

How have you mounted the engine in the Mini?

I bought a new subframe from Allspeed Engineering, along with the driveshafts and alternator mounts. It was designed for the Honda B16A2 engine, but I am cramming a larger B18C4 engine from a Civic VTi Aerodeck in it! It's gone in OK - the floor mounts were a bit fiddly to line up, but I got there in the end.

Will the engine remain standard?

For the foreseeable future, although it would be nice to fit some throttle bodies at some point. The only real



Standard Civic injection is staying... for now.

change is a 2.5-inch bore stainless steel exhaust that will be custom made for the Mini.

So before the engine work began, what repairs did you have to do to the shell?

It needed two new complete floor pans, outer sills on both sides and half a boot floor, plus repairs to the inner wing and vent areas. I've also modified the sills as I was sick of struggling to jack it up. There is some beefy box section in there now. I'm not sure how well they will perform, but it's got to be better than before!

Where are you at with the rebuild now then?

Well the next aim is to get the engine running. The fuelling is almost there now; I've modified a standard MPI fuel tank, which will hopefully be up to the job. Once that's all sorted and I know everything works as it should, I can then strip it all down again, finish the bodywork and get the paint sorted.

Who would you like to thank?

I would like to give special thanks to my dad Justin Isaacs for his patience with me using his garage and tools over the years, and my girlfriend Laura Hughes for her constant support.

COLOUR: White body, carbon-fibre weave arches
ENGINE: 1800cc 16v B18C4 engine from a 1998 Honda Civic Aerodeck VTi

GEARBOX: S9B Gearbox from the Civic VTi

SUSPENSION: Standard rubber springs front and rear, Hi-Lo's all round

BRAKES: Metro four-pot callipers, 8.4-inch discs (front), standard drums (rear), all-steel braided lines

INTERIOR: Not much! Fixed Cobra racing seats, Honda gauge cluster, rear seat and bins removed for the minimalist look

WHEELS: Unsure as yet, probably MB Racing split rims with the width yet to be determined



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Words **Stephen Colbran** Photography **Will Rei**

Sprinted from new, Dr DePersio's 1967 Cooper S was given a no-expense-spared Wood & Pickett rebuild in 1970 for export to California. Nearly 44 years, two transatlantic crossings and one robbery later, Peter Jurgens has finally finished the car.

DOCTOR'S C



ORDERS

A feature car without history is a motoring journalist's greatest challenge – a daunting task of piecing together a story from a car's appearance and spec sheet. Thankfully this is not one of those cars – far from! So read on for a tale of pioneering '70s customisation, vehicle recovery at gunpoint and a dream come true for a British car specialist in California.

But first we need to head back to London in 1967, in the midst of the most influential era for the Mini. No car of today can claim to be as universally appealing as the Mini in '60s Britain; it was many families' first car, a motorsport hero and even a fashion accessory for the rich and famous. The Beatles, Steve McQueen, Enzo Ferrari, Mike Nesmith of the Monkees, Lord Snowdon and many more besides all had Minis lavishly coachbuilt to custom perfection. Visit a dealership today and you can spend a fortune 'spec'ing-up' a very personal car, but back in the '60s you'd have to visit a coachbuilding firm to really stand out from the crowd. Radford and Wood & Pickett were at the forefront of such conversions for the Mini, and the latter

THE RESTORATION

The pic below shows how the MiniSprint was first shipped to California in 1972, with smaller arch extensions, wing mirrors and Mercedes silver paint. By 2010 it had been in storage for over 30 years, so British Sports Cars of San Luis Obispo had a fair amount of work still to do on the restoration.



was the specialist of choice for a certain Dr DePersio from California.

CUSTOM SPRINT

Registered as a MiniSprint from new, the doctor found the custom Cooper S for sale in a second-hand showroom in 1969. By 1967, Neville Trickett's body-sectioned and roof-chopped 'MiniSprint' conversions had largely been taken on by Morris distributor Stewart & Arden, so this 1967 S is most likely a S&A MiniSprint, especially with those signature Citroën Ami 6 headlamps up front. The made-to-order cars were expensive and rare – Mini expert Jon Pressnell suggests that only around two dozen were built for S&A by various bodywork specialists around London. The work was far from simple, with around two inches removed from the roof pillars, the beltline and also the lower section of the shell. This in turn created all sorts of fitment issues in search of a lower, more aerodynamic profile. The glass had to be trimmed down, the fuel tanks and radiator modified, the front grille reprofiled and, well, the list goes on.

Peter Jurgens of US-based British Sports Cars is the current owner of this rare beast, and his son Justin was on hand to tell the

story: "The car was purchased by our client in England in 1969 and sent to Wood & Pickett in late 1970," he begins. "When the car was finished in 1972, it was shipped to Marina Del Rey, California. We've got a stack of paperwork that documents the whole history of the car and the original logbook that shows it was registered as a Sprint from new."

The paperwork offers a fascinating insight to '70s transatlantic communications, with the doctor's electric-typewritten letters to and from AW Wood, aka Bill Wood of W&P. The letters date back to December 1970 as the car was delivered to W&P's workshop in Park Royal, London. Judging from the early correspondence, the car had presumably visited W&P before, for custom trimming



Original Wood & Pickett plates on the door steps.

"Only around two dozen MiniSprints were built for Stewart and Arden..."



Twin fuel tanks were modified to suit the bodyshell's lower profile. The rear lights are Altissimo units fitted by W&P in 1975, as on Innocenti Minis of the time.

"And the cost of this work? £3281.53, or roughly 18 month's wages in 1972..."



The rear chrome bumper bars were made locally in California, after a set sourced in the UK were rejected by W&P.



The rear seat back has been removed, with a fold-down hatch into the boot.

after the body mods. This would tie-in with other MiniSprints of the era in any case.

There are further discussions over the final specification and costs, instructions to convert the car to left-hand drive, fit electric windows, a fold-down rear seat with access to the boot, a 'Margrave' dashboard and a whole host of extras. There are also discussions on installing a 110bhp Downton-tuned engine and a shipping quote of £168, which later increased to £175. The request for a five-speed 'box was turned down due to compatibility and the final W&P invoices are extremely detailed. These cover everything from new battery terminals and valve caps to the Recaro 'N' leather seats, four yards of headlining cloth and 100 square feet of black leather for the plush retrim. And the cost of all this work? £3291.53, or roughly 18 months' wages for your average UK resident in 1972!

There were some unexpected costs too, to quote Bill Wood's letter from January →



Citroën Ami 6 headlamps sit in squared-off front wings. Almost everything on this Cooper S was modified in the Sprint process.

1972: “The car is now ready for shipment except one problem. The vibrations caused to the bodywork on the extensive road test (500 miles) have cracked the paint around the door hinges, caused by the faulty design of these hinges when the car was originally converted to MiniSprint specification.”

The problem was rectified before export, but there was an additional charge of £60 to repair the paint and fix the hinges. The MiniSprint was resprayed in a Mercedes silver paint at the time, and would have been one of the most exclusive Minis money could buy with its light weight magnesium Minilites and custom interior. Not surprisingly, the doctor was apparently delighted with his purchase once delivered to California some time later. But the story doesn't end there...

STOLEN, RECOVERED

Of all the valuable cars to steal, the obvious choice would be something inconspicuous; a

“It would have been one of the most exclusive Minis money could buy...”

car that's easy to sell on without unwanted attention. A Mini Cooper S then, which in itself was pretty rare in America thanks to safety and smog regulations ending all sales in 1967, was not the most sensible choice. However, stealing a one-off coachbuilt MiniSprint was just asking for trouble.

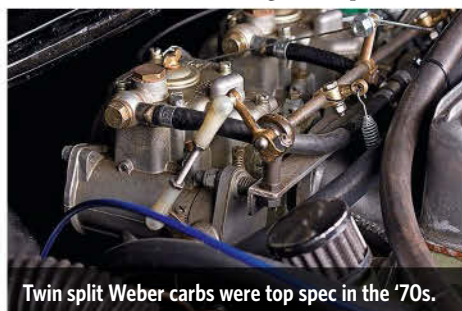
“When the car was stolen from Marina del Rey in September 1972, our client posted a wanted ad with a \$2000 reward,” continues Justin. “The story goes that he found the car in LA and it was rescued at gunpoint. Funnily enough, the first day we had it on the road, a customer stopped by and said he'd seen a car just like it in an LA tow yard in 1973. It had to be the same car!”

Sadly the Mini had been damaged during

the theft, and two years later it was decided to ship it back across the pond, which is a fair journey from the west coast!

Instructions to W&P were to repair the damage, modify the bodywork to suit US number plates, install a Becker radio and speakers, plus some extra sound deadening to muffle those twin split Webers. A third name joins the paperwork conversation in 1975 – EF Collins, W&P's managing director and formerly of Radford.

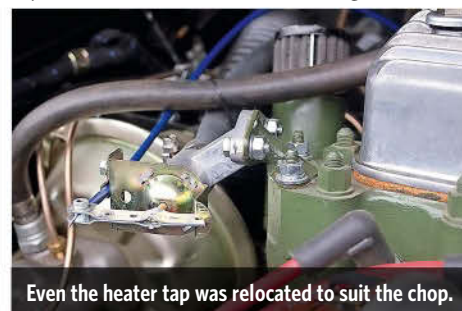
As it happens, we managed to speak to Eddie Collins recently, and asked if he remembered the car from its last UK visit in 1975. “The name Dr DePersio I remember very well – the letters and correspondence,” says Eddie. “I don't recall the car in great detail,



Twin split Weber carbs were top spec in the '70s.



Metal-blade cooling fan for the shortened radiator.



Even the heater tap was relocated to suit the chop.

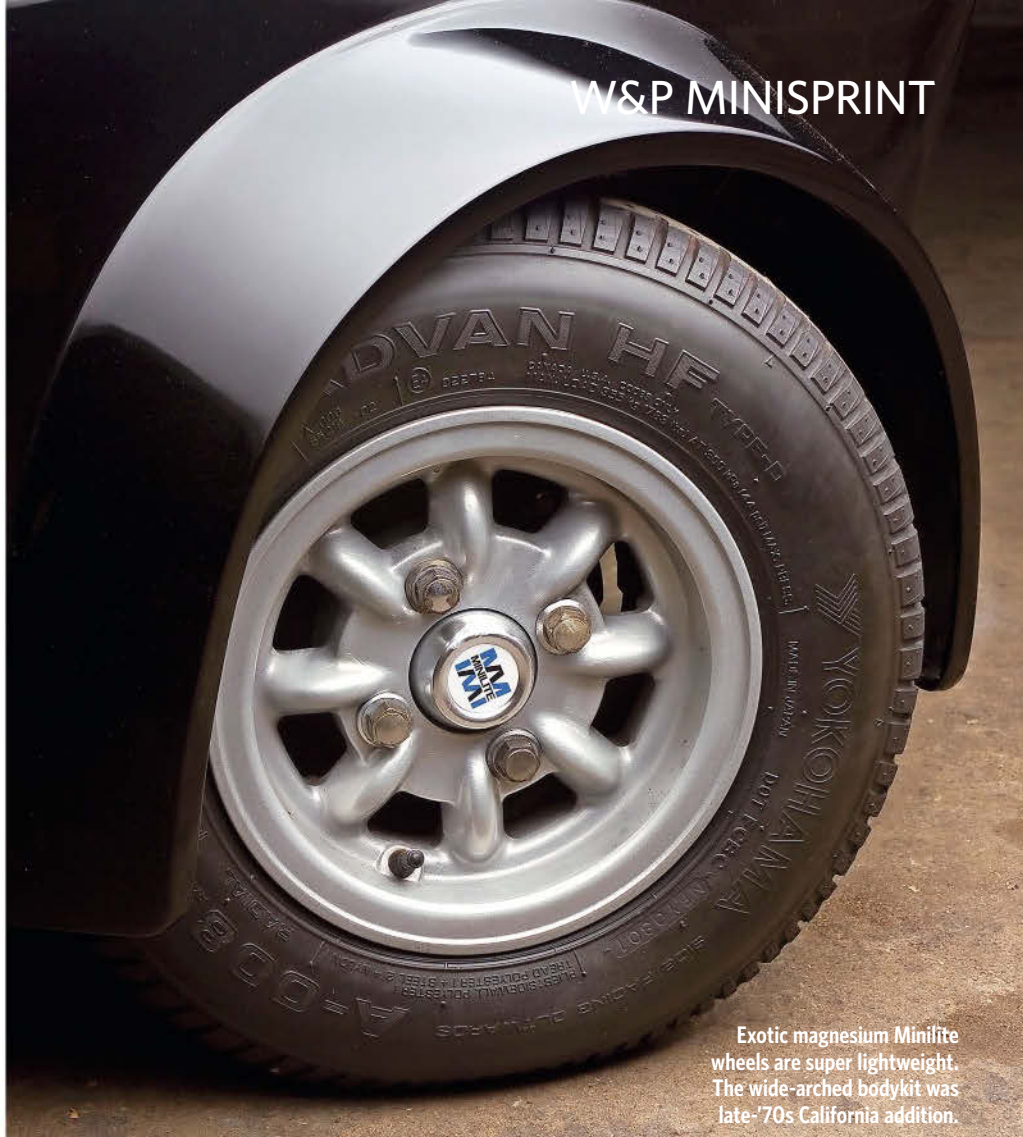
but looking at the pictures, the interior and headlamps – that was definitely one of ours. From being involved with a small trimming company, we were suddenly part of this fashion scene, meeting famous people of the time, but who didn't mean a huge amount to us. I didn't realise quite how astonishing it all was until later..."

BACK FOR GOOD

Returned to its former glory by W&P, the MiniSprint was back on a ship for the third time in three years. "It was then used for several years before going into storage in the late '70s," adds Peter, the current owner. "Originally the car was fitted with a Downton engine but a new Longman 1380 was installed in 1977 – the same engine the car uses today." And there to confirm it in the pristine selection of paperwork is a hand-written letter from Richard Longman himself, dated April 15 1977.

The MiniSprint then went off the radar for over 30 years, or at least as far as we know. It was laid up in storage soon after gaining the wider arches, in the next stage of body mods that were apparently never completed.

And this is when the two parts of the story begin to tie up. Peter originally lived in Manchester, but was persuaded to emigrate to California in 1980 to set-up a Britax sunroof shop. "It had always been a dream to own a MiniSprint," he says, "as I used to race cars →



Exotic magnesium Minilite wheels are super lightweight. The wide-arched bodykit was late-'70s California addition.

"It had always been a dream to own a MiniSprint and I always wanted a W&P car..."



Peter's son, Justin, from British Sports Cars in San Luis Obispo, California.


W&P MINISPRINT

in the UK and was very familiar with Sprints. I also always wanted a W&P car and had even built my own replica with the signature front lights, but could never afford the real thing." One thing led to another, and Peter's business evolved into a British car specialist garage, just as BL pulled the plug on its official dealer network in the US. There was a huge market for British soft-top classics in California, so Peter's company, British Sports Cars, went from strength to strength.

It also put him in touch with many local classic car owners, one of whom mentioned a MiniSprint that his boss had stored away in a warehouse. "We went down to buy another Cooper in Nevada," says Peter's son, Justin, "and in the paperwork we spotted a wanted ad from 1973 for the Sprint. It listed our client as the owner and contact for the stolen car."

Peter had heard about the car for some 20 years, but until this point he'd doubted that it even existed. Once he knew it was still around, he had to persuade the doctor to sell his pride and joy, which would clearly be a tough task. Still, the car would be in capable hands at British Sports Cars, and four years ago, Peter finally managed to realise his dream and buy the MiniSprint.

"The car had been sitting in Los Angeles in storage since the late '70s," continues Peter. "The body was in fantastic condition with no rust, but it needed a restoration." The MiniSprint would be kept in Peter's personal collection of classics, so the restoration had to make way for customer cars, and it inevitably took some time. But the bodywork was eventually repaired and sprayed in a new coat of shiny black to compliment the chromework. This was handled by Ken's Body Shop, nearby in San Luis Obispo. There were a few difficulties with all the aging W&P electrical extras, but the car was finally finished and back on the road for August 2013.

Plans are now to use and enjoy the car regularly, and to visit a huge annual car show later this year in San Francisco, where it will really create a stir. A classic Mini of any description looks positively miniscule in the US, so this one is set to really stand out from the crowds. Peter admits that he prefers building and driving his cars, but we think it'll be fantastic to show this one off to as many car fans as possible – that has to be a much better existence for this rare Mini than gathering dust in a warehouse. 

"He regularly mentioned a MiniSprint that his boss had stored in a warehouse..."

TECH SPEC

BODY 1967 Morris Cooper S, 'sprinted' from new by around six inches for London Morris distributor Stewart & Arden, fully deseamed, converted to left-hand drive, Hollandia sunroof, squared-off front wings, Citroën Ami 6 headlamps, bonnet bulge, locally-made bodykit and rear chrome bumper bars, rectangular driving lamps, opening front quarter lights, electric windows, Innocenti Mini rear lamps with reversing lights, seven-slat modified front grille, push-button door handles, boot modified to suit US-type license plate.

ENGINE Cooper S 1275 engine rebuilt by Richard Longman in 1977, bored to 1380cc, 544 camshaft, GT14 head, twin split Weber carbs, uprated rockers, electronic ignition, metal-blade fan, oil cooler. Estimated maximum power: 110bhp.

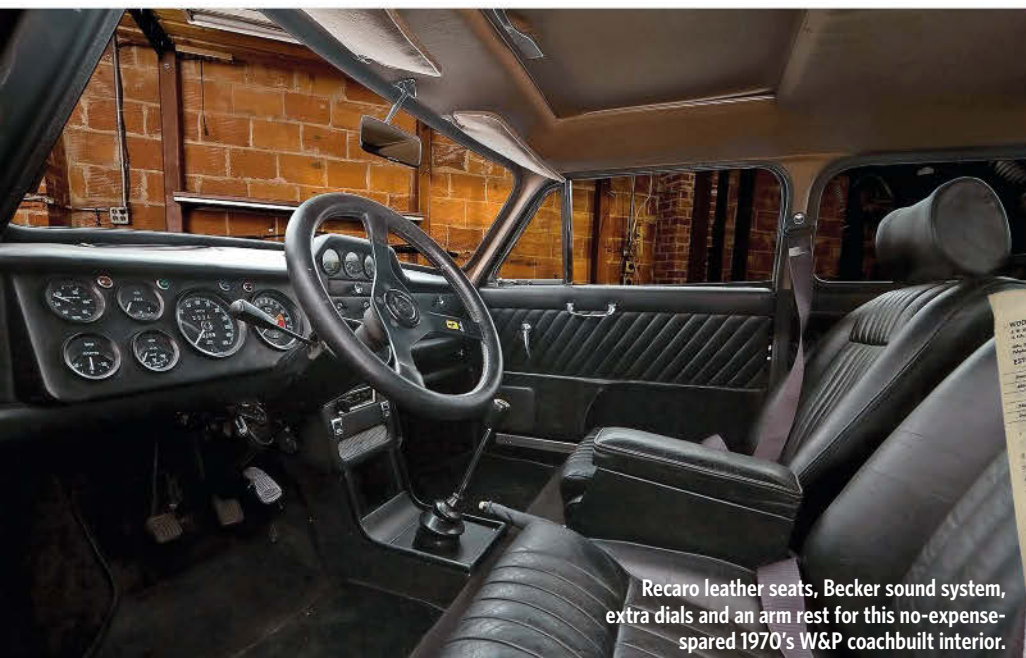
TRANSMISSION Four-speed synchro remote gearbox, Hardy Spicer couplings, 3.76:1 final drive ratio.

SUSPENSION Converted to dry suspension, Hi-Los all round, uprated dampers.

BRAKES Standard-spec Cooper S, with 7.5-inch discs up front and remote brake servo.

WHEELS AND TYRES 10-inch Magnesium Minilites with Yokohama A008 tyres.

INTERIOR Coachbuilt by Wood & Pickett, full black leather retrim, Recaro front seats, arm rest, centre console, Margrave dashboard fascia panel, Becker Mexico radio cassette and four speakers, Paddy Hopkirk alloy throttle pedal extension, additional Smiths gauges, fold-down rear seat with hatch into the boot, Momo Ferrari steering wheel, custom door panels, front seat belts, custom headlining trim, Wilton deluxe carpet, extra sound deadening throughout.



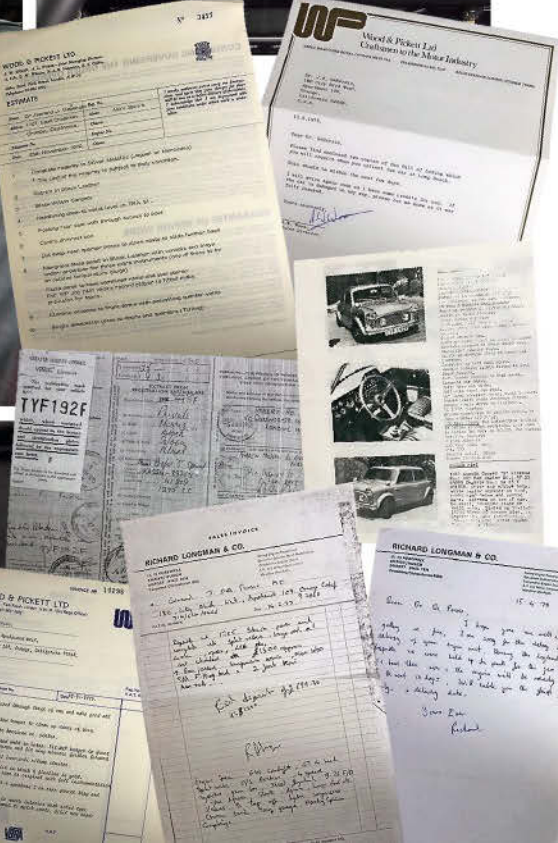
Recaro leather seats, Becker sound system, extra dials and an arm rest for this no-expense-spared 1970's W&P coachbuilt interior.



Momo wheel replaces the original 1970s Nardi.



Interior map light and the W&P dash.





SU carburettors Anlgo-French battle

Now backed by the SU carbs company the Anglo-French is expected to be just as exciting as the past races. Although we have less French racers coming across this year it is more than made up by entries from Holland, Austria and Swedish entry for World Rally ace Stig Blomquist racing a Mini for the first time. With 32 FIA Mini's battling over two 25 minute races in the weekend expect close racing!



Sanwa Trophy "Mini" endurance

Again with support from Japanese Mini giants Sanwa Trading this 40 minute pit stop race promises to be another cracker.... Last year the 1st and 2nd place cars were split by 0.2 of a second over the line after the 40minutes! Pit stops with driver changes will always mix things up!



The best Historic Mini racing in the world!!



WHEN TWO WORLDS COLLIDE

An unfortunate accident provided just the impetus Paul Raynes needed to create his ultimate Mini. But this is no period '60s racer, it's a 1998 MPi Cooper with a 150bhp supercharged punch...

Now we're not ones to advocate crashing your car – apart from the obvious risk of serious injury, it's also pretty darn inconvenient. As well as wounding your pride, you've got to faff about claiming on your insurance, bat away insulting settlement offers and battle through reams of red tape should you want to get the car back. Not only that, but you face the very real prospect of having to use public transport while your pride and joy is out of action, and nobody likes the bus.

Fortunately, every cloud can have a silver lining – just ask Paul Raynes. His Mini was badly damaged in a swerve to avoid an errant fox in 2011, and to add insult to injury, it wasn't just any old car. Nope, this was his first ever Mini – a supercharged and rather pretty MPi, no less. You could forgive him for getting rather depressed by it all, but not Paul. He simply put it down to experience and set about making the car even better than before.

GOING THE DISTANCE

Regular readers might remember Paul's car in its previous guise, which saw it worthy of a *Mini Magazine* feature in May 2008. Back then it wore gold 13-inch Minilite replicas and Sportpack arches, but still had a few MkI styling touches. "I bought it as a standard Sportpack Cooper in 2004," says Paul. It'd done about 12,000 miles, and was my first Mini. My wife Becky and I now own three classic Minis between us, and she has a R53 Cooper S too."

Those classics include Becky's Surf Blue Cooper with John Cooper Works conversion, and Paul's Cooper 500, ➔



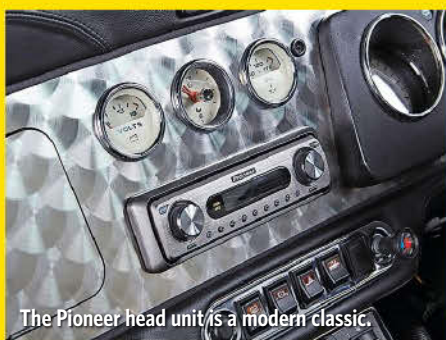


Words Jeff Ruggles Photography Joby Sessions

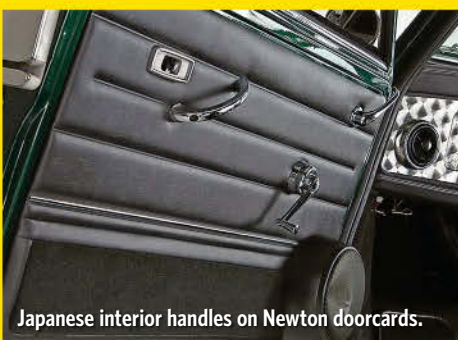
RETRO MPI



The dash has been modified with a turned alloy fascia and a crackle-finish binnacle surround.



The Pioneer head unit is a modern classic.



Japanese interior handles on Newton doorcards.

which has similarly undergone the Cooper Garages treatment and has covered an impressive 153,000 miles. Add to this a Paul Smith LE, another Sportpack and two further twin-point cars in the past, and it becomes pretty clear that Paul is big fan of the MPI models. Nevertheless, the green car has always been his favourite, and has evolved ever since purchase.

"The first thing I bought was the numberplate, and then I bought some new Rover leather seats for it," he reports. The changes continued over the next couple of years, but there was one that took centre stage – the quest for power. Now you can't just go slapping on carbs and popping in a lumpy cam with an MPI, as the stock ECU will spit its dummy out. Tuning kits are available, but 85bhp is about the limit if the Rover management is retained. That wasn't enough for Paul, so he decided to go down a different route – enter Stuart Gurr at Vmaxscart and his supercharged witchcraft.

"I looked at a John Cooper Works conversion, but for a little bit more, you got a lot more with Vmax," says Paul. "£2000 bought you 90bhp, and £3000 bought you 120 when it was originally done." Sustained development ever since means it's now putting out the thick end of 150bhp. That's a big boost over the standard 63bhp, which is remarkable given that the engine and gearbox internals are still largely standard.

The power boost comes from an Eaton M45 supercharger as used on the R53 MINI Cooper S, an Emerald ECU with an Innovate wideband lambda sensor and some clever mapping. Then there's a Vmaxscart Roadplus head, MED 1.5 ratio roller rockers, 56mm throttle body and a custom LCB exhaust manifold, plus a decompression plate to better suit the added boost. Such plates are much-maligned amongst boost aficionados, but Paul's been partial to the odd 2500-mile Italian Job jaunt without any issues.

The car remained in its chunky 13-inch wheel guise until Paul's unfortunate mishap, but some work was on the cards anyway. "It was getting to the point where it had a little bit of rust coming through so it was going to need some work doing," says Paul. "The plan was always to put it on 10-inch wheels, but before I was governed by the fact it had Sportpack arches on it, and 10s wouldn't have looked right really. Having to rebuild it was like having a blank canvas."

To provide that canvas, Paul chose Jeff Surrey at The Mini Centre in Stoke to repair the bodywork. "We fitted a complete new front end, an outer sill, reskinned the doors and welded all the holes up at the back for the arches," says Jeff. "And instead of putting in the conversion plates for the rear lights, we actually got rear corners from an original MkI and cut them in. With conversion panels you tend to lose that little 'lump' above the light,

and they don't sit right. So there is a bit of genuine MkI in there!" All the panels used were Heritage items, save for a conversion panel from MiniMail that Jeff used to transform the double-skinned bootlid into a MkI-style item. "I was too tight to buy a proper MkI bootlid," adds Paul.

Once repaired, the shell was taken to chosen paint sprayer 'Wiggy' in Earls Barton for a fresh coat of the car's factory shade of British Racing Green to be applied. "It was always going to stay green, but I thought about going for a dark Connaught Green like the '60s Cooper Car Co racers," says Paul. "In the end I stayed factory, as it's a little bit different with the gold pearl in it." The roof is painted in Old English White, and combined with matching bonnet and door roundels, giving a retro look with a modern twist – a theme that encapsulates the whole car.



Genuine '60s cage? No, but it sure is a very convincing replica!



BUILT TO LAST

When it came to reassembly, no bolt or screw was left untouched. "We stripped the subframes down and had them all shot-blasted and powder-coated," says Jeff. "All the nuts and bolts for the subframe and things like that are all Smiffy's bits. It looks better – if you put a normal steel bolt in, a few weeks later it's rusty." Similarly, all the adjustable suspension arms and tie-rods have been powder-coated too. "If you leave them they'll corrode in no time, and it looks like I'm not doing my job properly." Paul played his part in the process too; "I took the loom out and spent days cleaning it," he reports. "Essentially it's been a nut and bolt rebuild from a bare shell."

The suspension also includes adjustable trumpets and Gaz adjustable dampers, and has all been set-up Dave Yardy of Track, ➔



Interior mirror came from Mini Maruyama in Japan.



Smart pedal covers and billet throttle pedal assembly from DSN Classics' RetroSport range.



How good do these look? Paul has lusted after these Mini Delta retro bucket seats for many years.

"Essentially, it's been a nut and bolt rebuild from a bare shell."



Road and Race. Previously the brakes were standard Rover Cooper fare, but now Paul's gone for 7.5-inch disc assemblies with Mini Sport four-pot callipers. This allowed him to fit the rather tasty Rose Petal alloys, which were shod in sticky Yokohama A032R rubber.

Meanwhile, the engine returned to Vmaxscart for Stuart to check it over, before being repainted and detailed. Getting the cramped MPi engine bay to look even halfway decent is a challenge, but Paul has done a fantastic job. There's plenty of Smiffy's Bits stainless parts under the bonnet, and a smattering from the DSN Classics' RetroSport range, too. The bold green silicone hoses were, remarkably, found on eBay and shipped from China, and so was the radiator. "This

was £100 for a proper aluminium radiator, and it's very good," says Paul. "I used to run a thicker stainless steel radiator which Stuart had made, but now he recommends these."

HIDDEN COMFORTS

So there you have it – all the basics in place for the ultimate MPi. But as you will have undoubtedly noticed, it no longer looks anything like a late twin-point car. In fact, unless you really know what you're looking at, you could easily be forgiven for thinking it was a pukka Mk1 car lifted off a race track in the mid-sixties rather than one built in 1998.

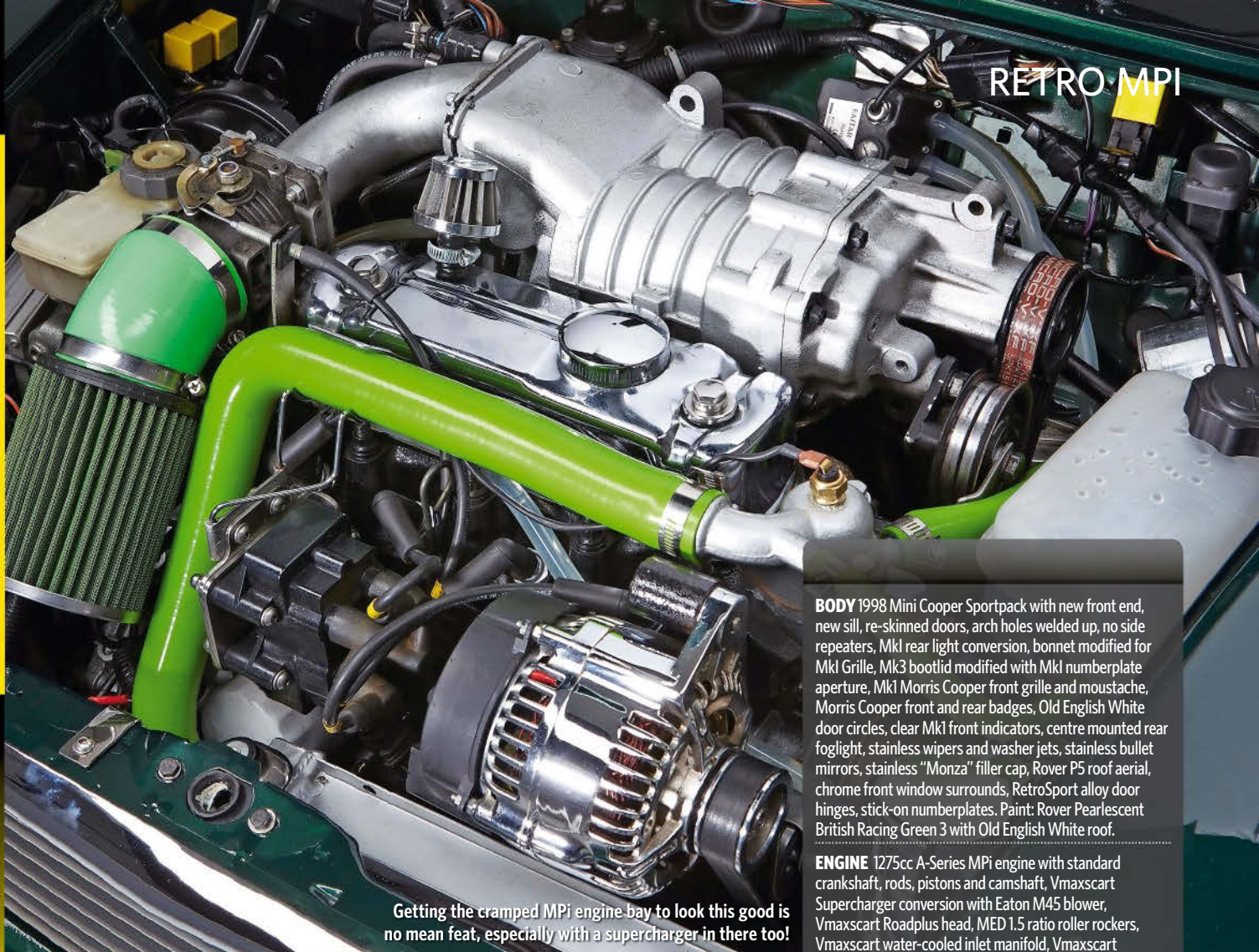
"I suppose the challenge was building something quite classic looking, but still making it unique," says Paul. "A lot of it was

getting stuff that perhaps other people didn't have, and one of the big things was the seats. I'd seen them online probably six or seven years ago, and I'd been trying to buy them direct through Mini Delta. In the end I found an American bloke in Japan to export them for me. Including customs fees and shipping fees, and a handling fee, they were just over £1000 landed. They're quite retro, but they've got that modern twist because they're fibreglass. Mind you, they were a pig to fit for someone who's six-foot tall, bearing in mind they're designed for people of five-foot-two.

"The back seat is the same fitted to the very last MPi 12-inch wheel Coopers," continues Paul. "It looks a bit like brocade material, so again its using the modern seats but with that retro twist to it." Likewise the dash is an MPi version, but with a bespoke turned aluminium fascia produced by JB Fabrication – our very own Jon Betts. The binnacle surround has been painted in crackle black for

"The challenge was to build something quite classic looking, but still unique..."





Getting the cramped MPI engine bay to look this good is no mean feat, especially with a supercharger in there too!

Only the learned few would tell that this is actually a late-'90s Mini rather than a Mk1.



More RetroSport goodies under the bonnet.

even more retro, while the dash rails are both trimmed in leather. And instead of clinging on to the standard airbag steering wheel, Paul has swapped it for a Momo item. "Most people who take the airbag steering wheel off fit a Moto-Lita, but this one has a special boss," he explains, with a hint of secrecy.

But that's not all, as neat details appear just about everywhere. The chrome rear-view mirror is from Mini Maruyama in Japan, while the billet pedals and door hinges are again from DSN. Then there's the three-point rollcage, which is a cool John Aley item. Well, at least that's what Paul wants you to think. It's actually from Huddersfield Spares, modified to take a John Aley clamp and painted in silver with a matt lacquer by Paul's pals Tim and Chris Whight. "I don't know how effective it would be in a crash, but it looks cool," says Paul. Complementing the 'cage is a black suede headlining, but it was no five-minute job. "Because the material only stretches in

BODY 1998 Mini Cooper Sportpack with new front end, new sill, re-skinned doors, arch holes welded up, no side repeaters, Mk1 rear light conversion, bonnet modified for Mk1 Grille, Mk3 bootlid modified with Mk1 numberplate aperture, Mk1 Morris Cooper front grille and moustache, Morris Cooper front and rear badges, Old English White door circles, clear Mk1 front indicators, centre mounted rear foglight, stainless wipers and washer jets, stainless bullet mirrors, stainless "Monza" filler cap, Rover P5 roof aerial, chrome front window surrounds, RetroSport alloy door hinges, stick-on numberplates. Paint: Rover Pearlescent British Racing Green 3 with Old English White roof.

ENGINE 1275cc A-Series MPI engine with standard crankshaft, rods, pistons and camshaft, Vmaxcart Supercharger conversion with Eaton M45 blower, Vmaxcart Roadplus head, MED 1.5 ratio roller rockers, Vmaxcart water-cooled inlet manifold, Vmaxcart decompression plate, Vmaxcart 2 core radiator, Vmaxcart / Magnecor HT leads, 56mm Rover throttle body, Emerald fully-mappable ECU with Innovate wideband lambda sensor, Green cone airfilter, green silicone coolant hoses, aluminium radiator with 42mm core, chrome alternator, chrome rocker cover with breather, Smiffy's Bits stainless fusebox trim and coil pack bracket, Retrosport bonnet hinges, Vmaxcart custom made LCB exhaust manifold, Manifold FIA Appendix K spec reverse cone megaphone two-inch exhaust system.

TRANSMISSION Four-speed helical MPI gearbox with cross pin differential, uprated Vmaxcart clutch, KAD quickshift, 2.71 final drive.

SUSPENSION Dry set-up with GAZ adjustable dampers, Mini Spares adjustable front tie-rods and bottom arms, longer front track rod ends, adjustable trumpets, Mini Spares rear adjustable camber brackets, all set-up by Dave Yardy.

BRAKES 7.5-inch disc assemblies with Mini Sport alloy brake calipers (front), Minifin rear brake drums (rear), silicon brake fluid.

WHEELS AND TYRES 4.75x10 John Brown Wheels Rose Petals, 165/70x10 Yokohama A032R Tyres.

INTERIOR One-off machine turned aluminium dashboard with crackle black instrument surround, LED sequential shift-light, leather top and bottom dash rails, concealed 12v socket in ashtray, Momo leather steering wheel with Morris 'M' badge, Mini Delta steering wheel boss / no airbag conversion and Brown and Geeson spacer, Retrosport alloy pedals and billet accelerator pedal, Mini Delta door furniture, Mini Delta bucket front seats, JB fab seat brackets, late Mini Cooper Classic 'brocade' style rear seat, black suede headlining, KAD gearknob, Leather gear and handbrake gaiters, matt silver three-point rear cage with John Aley repro clamp, Newton Commercial front doorcards with carpeted bottom / factory MPI rear doorcards, Pioneer P77MP head unit with DAB adaptor, Infinity front speakers, Mk1 Cooper S style carpeted boot board, stainless petrol tank strap.

RETRO MPI



4.75x10 Rose Petals from John Brown Wheels.



Jeff and Paul with the final creation.



Back in its previous guise with 13-inch wheels.

one direction, it was possibly the most difficult thing in the world to fit," he adds.

Despite all the changes however, many of the late-model comforts remain. "It's still got a lot of the MPi parts like the one-piece carpet and side impact doors, plus seat belts in the back so my daughter Mili can go in the car," says Paul. There's a decent head unit in there too; a coveted Pioneer DEH-P77MP with a DAB module, which fits the ethos perfectly thanks to its classic looks.

PERFECT BALANCE

As well as the retro-but-modern colour scheme, there's several other external touches to foster the illusion of old age. Some of them are a touch naughty, like the lack of side repeaters and the black and white stick-on


numberplates, while other changes include a Mk1 grille and badging, a chrome roof aerial from a Rover P5 and a centrally-mounted rear foglight once again made by JB Fabrication. There's more to come, too. "I've actually got the imitation external door hinges on order from Japan, so I'll put them on and see what I think," says Paul.

Our favourite external mod of all, however, has to be the exhaust. It's an Appendix K Manifold system as used on the pre-'66 historic racers, with a chunky tailpipe exiting under that central foglight. "It's just a little bit different – I haven't seen another on a road car," Paul comments. "It was an extravagance at £300 for a mild steel exhaust, but I just liked the look of it. It does actually give more power, so it's effective too."



Don't go thinking Paul had endless cash though. "It's been about finding a balance between building a quality car, but not just buying the most expensive parts," he says. The result of this careful consideration is a car laden with unique touches, yet one that retains the usable character of the late twin-point cars. "It's still got all the MPi sound deadening, so it's reasonably quiet, and it's still got the 2.7 diff, which works well with the 10-inch wheels. It'll sit comfortably on the motorway."

Admittedly it's now a bit too nice to be pressed into everyday service, but Paul can call on his other MPi for that. "My 500 I can take to Tesco, but this is more for high days and sunny days," he admits. "I actually fancy doing a trackday at Goodwood in it."

If so, we suspect many might have a hard time telling Paul's car apart from the period racing Minis that inspired it – even in terms of pace. But unlike a highly-strung racer, Paul can simply hop into his resurrected Mini and drive back home up the motorway without his ears bleeding. As silver linings go, that's going to take some beating. 

THANKS TO:

Becky and Mili, Bungle (Jeff) for all his hard work, Stuart Gurr for an amazing engine, Wiggy for the paintwork, Tim and Chris Whight for painting the 'cage and dash, Dave Yardy for making it handle so well, John Betts for the one-off bits, everyone in Errrrrrr Mini Club GB for the laughs and banter...

"I fancy doing a trackday at Goodwood in it..."



Old English White door roundels complete the retro racer look.



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MEAN M



MACHINE

Should the World's Fastest Mini Race make a welcome return, Endaf Owens would surely be a firm favourite with this insane KAD 16-valve Mini spaceframe...



Low and mean, trimmed from the sills down, Endaf Owens' GRP-bodied spaceframe is no ordinary Mini. With 10-inch wide slicks up front, a race-spec KAD twin-cam and a fabricated chassis that's almost too good looking to race, it couldn't be further from a 1959 MkI if it tried. But here's a car that raises an interesting question, one that if we're totally honest, we don't know the answer to ourselves – what exactly makes a Mini, a Mini?

Regardless of how far removed this racer is from a regular Mini, there's an A-Series up front in a modified front subframe, much of the suspension and brakes would look at home on a hotted-up road car, and dimensionally, it still looks spot on. Sprinkle in the retro Duckhams Oils-style livery and the KAD origins, and despite its extreme nature, we'll happily claim this as one of our own, especially once it leaves all manner thoroughbred racers in the dust.

TO THE XTREME

Endaf's car started life in the mid-'90s when the T45-type tube chassis was fabricated by Nick Cole at KAD for Sri Lankan racer, Rohith de Silva. KAD originally ventured into spaceframes in Autumn 1993, when its 16-valve twin-cam head was still a relatively new development. Keen to prove that the KAD product was superior to Jack Knight Developments' offering and therefore gain favour in Japan, a silhouette Mini racer was put together to take on the JKD's Maguire Mini. Bill Sollis took the KAD car to overall victory in the Winter GT series, and plans were made for a new T45-type spaceframe car in 1994, very much like the one you see here. The '94 chassis went on to win that year's Fastest Mini in the World Race, providing a real boost for the credibility of KAD's 16-valve engines, which remains strong to this day.

Rohith's car was built in 1995/1996 and proved to be equally successful in his home country of Sri Lanka. With a huge collection of silverware, he had the car shipped to the

ARCHIVE PICS

Colin from KAD kindly sent us these two scans from his archive. One is of the car when first built in 1995/96, and then when it was with Rohith de Silva in Sri Lanka. And, below, the progress pics from Endaf as he rebuilt the car in 2013 during a mad rush to finish it before the Brands Hatch Mini Festival.



The first race event at Brands Hatch was an eye-opener in terms of the car's power and handling.



UK for the 2004 and 2005 Fastest Mini in the World Races. Although it didn't finish either, it was apparently blisteringly quick. Rohith went on to compete occasionally with the Xtreme Mighty Minis with greater success, but then the car went to live with 2011 Mini Miglia champion, metal fabricator and all-round nice chap Endaf Owens, at Owens Fabrication in South Wales.

"I'd bought the car two or three years ago and just had it sitting around," begins Endaf. "It was one of the last to be built by KAD and Rohith had it from new."

Endaf's workshop was full to the brim with customer's cars, from road Minis to twin-engined grasstrack monsters, so it took

a summer break to get his mind back to the spaceframe. There were just five weeks until the 2013 Brands Hatch Mini Festival, but that didn't deter him from entering the car in the Mini all-comers race, even if it was little more than a rolling shell at the time. On top of that, he'd also been building a historic Cooper S to race at the three-day event, and that too was far from finished. Clearly he relishes a challenge!

"I was thinking that I always wanted a spaceframe," Endaf continues. "I was going to build one from scratch but I already had this one to use as a base. We wanted to do a 16-valve engine for it, a BMW bike head conversion. So I put a pic up on Facebook





The 176bhp full-race KAD twin cam looks perfectly at home, but a huge bonnet scoop is needed!

www.OwensFabrication.com
mini spares

MATT WOODS
PHOTOGRAPHY

PIPERCROSS



Front-mounted rad and electric coolant pump.



Nitron made these custom three-way coil-overs.

"I wanted something different, so I went to AT Power and Emerald..."

and then Arnold from KAD sent me a message to say 'why don't you use one of ours?' A long story short, they wanted a Miglia shell building up and so we did a deal on a new engine."

The engine would be bored out and fitted with an 86mm steel crank to give 1459cc, then a 16-valve twin-cam cylinder head attached up top. Rather than going down the old school twin Weber carb route, Endaf opted for full electronic engine management with neat shaft-less throttle bodies.

"I wanted to try something different," he explains, "so I went to AT Power and had an experimental set made up. KAD's usual thing is an Omex 600 ECU and Jenveys, but I've gone for Emerald management instead."

COUNTDOWN

So with the engine build in progress, the spaceframe chassis and its GRP shell were lifted down from the rafters to see how much work was required. The outlook wasn't good: "The chassis was quite old and had started rusting away," says Endaf. "In the end I needed to replace almost half of the tubes, but I decided to keep it more or less how it was originally to keep the history there."

This approach saw the use of modern tubing for the main 'cage hoops, but with flat box-section tubing retained for the floor sections. Endaf comments that the design isn't his cup of tea, but the idea was to keep it

in-keeping with the style of the original build and not just to create a completely new chassis. To that end, the original GRP body was also retained, partly due to the cost of replacing such a bespoke item, and partly due to the unrealistically tight schedule.

"The body is pretty heavy, but we were stuck for time to get everything else done," adds Endaf. "It's cut from the sills down – the doors and windows are standard height but the sills have gone. Brands Hatch gave a deadline and we had to do it then, but I was having to work on it all night."

There would be no time for a rest with such a monumental workload ahead – the wheels, suspension, tyres, brakes, electrics, exhaust and under-floor paneling were all still to be sourced, re-engineering and fitted. You'd assume that having such an easy-access chassis would greatly decrease the build time, but as there was so much missing from the car, Endaf may have well started from scratch. He's also known for his attention to detail, so the racer wouldn't be thrown together just to get it running, and that approach takes time.

Once the frame was completely finished with the fresh metal tubes, it was sent off for a layer of glistening metallic blue powder-coat. The aluminium floor panels could then be fixed in place, which not only looks neat, but serves a genuine aerodynamic purpose.

"The floor panel is lifted in the middle for under-floor aero," says Endaf, "it's not



“The engine was quickly mapped, and that was it, he’d run out of time...”



Custom dampers use short 500lb springs up front.



The exhaust system exits from the rear wing.

actually flat, to channel the air down the centre and out the diffuser at the back. We’ve learnt quite a lot from this car, so the next ones we build will have even better aero.”

FINAL PUSH

The car was gradually taking shape, and enthusiasm for the project was spreading fast via Facebook. It’s crazy how things have changed in that respect – Endaf can post up a quick phone camera snap from deep in the Welsh countryside and tens of thousands can track his progress and post up encouragement from around the world.

So the Facebook community looked on in awe as a big brake kit was sourced for the front, with help from fellow Welsh Mini modifier, Jim Lyons. Custom disc bells were machined to suit the big brake conversion, which narrowly squeezes inside the 13-inch wheels. The four-pot calipers also required their own mounts to suit the Mini hubs.



Endaf was hard-pushed to finish his racer in time.

“The exhaust I then had made up locally,” continues Endaf, as he points to the header pipes branching off through the bulkhead and out to the passenger side silencer. “I got a dummy head from KAD so we could mock up the exhaust manifold. Back-to-back with the top-notch KAD manifold it performed exactly the same, so they did well there!”

“Then I went down to Corbeau for a seat,” he adds. “They had a couple of new touring car seats in and they looked amazing, so I thought I’d have one of them made up with the Welsh colours and my logo on. Next, I had a couple of Stack dashes leftover from the Miglias, so one of those went in, and a custom switch panel too.”

The Stack dash hooks up to the ECU and Jim Lyons wired it all up to an additional on-board camera, so all manner of data logging parameters can be overlaid onto digital video, including a GPS track map, RPM and lap timing.

“Nitron made me a set of one-off dampers,” Endaf explains as we check out the sexy remote-reservoir coil-overs. “The spring rates I wasn’t sure about as it had been so long, so I spoke to Peter Baldwin as he used to race a Maguire Mini years ago, and he said 500lb on the front and 300lb on the rear. From what we put on and guessed it seemed to work straight away.”

But for the final set-up, time was really getting tight as the race weekend dawned ever closer. The engine build was turned around quickly by KAD, and Endaf made the long drive over to Kent to collect it, bleary-eyed but still enthusiastic. Suspension-wise, the rear track width was a concern early on,

KAD SPACEFRAME

TECH SPEC

BODY KAD T45 spaceframe chassis, originally built in 1995/1996, kevlar bodyshell, chassis fully stripped and re-worked to current MSA spec, flat floor, external door hinges, removable bonnet and bootlid, wide arches, racing mirrors, polycarbonate windows, rear diffuser. Duckhams-style Owens Fabrications graphics with Subaru Blue Ridge paint. Weight: 500kg.

ENGINE 1459cc Works-spec KAD 16-valve engine, 86mm steel crank, steel rods, AT power throttle bodies, Emerald management system, front-mounted radiator and oil cooler, electric water pump, Owens Fabrication oil catch tanks. Maximum power: 176bhp.

TRANSMISSION Four-speed straight-cut dog box, 3.9:1 final drive ratio, Tran-X limited-slip diff.

BRAKES Owens Fabrication big brake conversion, Wilwood four-pot callipers, braided lines, bias valve, alloy Minifins rear.

SUSPENSION Bespoke Nitron three-way coil-over dampers all round, KAD alloy rear radius arms, rear anti-rollbar, Mini front hubs, modified front subframe, adjustable tie-rods.

WHEELS AND TYRES 9x13-inch Revolution alloys front, 8x13-inch magnesium Minilite wheels rear, as from Peter Baldwin's Maguire spaceframe. Avon slicks.

INTERIOR Multi-point rollcage, custom-made Corbeau Revenge bucket seat, five-point harness, Stack race dash display, custom switch panel, Lifeline plumbed-in fire extinguisher system, KAD gear lever, removable steering wheel, carbon-fibre dash panel.



Endaf would like to thank Mini Spares and Caffi Rhiannon, his family, Jac the main mechanic and the entire team for their help at the Brands Hatch Mini Festival.

being five inches narrower than the front, so a pair of large spacers were machined up as a precaution. In haste, the only option was to then set the suspension up like a Mini Miglia, just to get things in the right ballpark.

The engine was fired up and quickly mapped over at SH Engineering courtesy of Dave Wells, and that was it – Endaf had run out of time for his two Mini racers.

RACING PEDIGREE

"After going on SH's rolling road," says Endaf, "the first time we drove it out of the garage was one o'clock on the Friday morning before the practice session at Brands Hatch. We left at two o'clock and to go to Brands at eight."

Everything was so last minute, Endaf and his team of friends and family didn't even know if the spaceframe Mini would even make it round the circuit. "We did 35-40 laps testing with the historic," recalls Endaf, "then we managed about four or five laps with the KAD and went to sleep – we were knackered."

Qualifying followed on Saturday, and with a brief set-up in between working on the historic, Endaf navigated round a greasy Indy Circuit, hanging on for dear life. Miraculously, he put the car on pole ahead of all manner of exotic machinery – Mini spaceframes and specials galore.

"It was a bit slippery on the rear," Endaf says. "I thought maybe the tyres were just struggling to warm up, but come the first lap of the race I spun out, and then again on the second lap. I thought, I can't even drive this; it's a real handful!"

It turned out that the fuel tank breather was a bit short and was spraying fuel all over a rear tyre on left-hand turns. "So we modified that and it was flying in the next race," he continues. "Well it was still a handful, but by the end we'd gained three seconds a lap, and it was still improving."

Yes, and improving to the point of winning the race in spectacular fashion. Endaf also pulled off a fastest lap of 52.6

seconds – that's only four seconds from the BTCC lap record! It was a top reward for the weeks of hard graft, and not to mention a fair wedge of cash too.

So what's next? "There's a welsh GT meeting that me and Jim might go to at Castle Combe. I'm supposed to go to Zolder with it too – there's a guy who wants to race it over there so I'm thinking of hiring it to him. After the race at Brands, we fitted a new header tank and tidied a few bits up, then took it to an open race at Pembrey. We beat everything at that one – Caterhams, Ginettas, silhouette racers - the lot."

There's also talk of building a stiffer chassis when time allows, CAD modelled with help from an engineering student at Swansea University. Endaf might transfer the running gear from this racer over to the new one perhaps. With the new chassis design, he could fit all manner of engines up front, bike motors or powerful Volvo turbos. Maybe we'd struggle to still name that a Mini, but we'd love to see what it could do!



GRP shell removed, the bare bones of the spaceframe racer are fully revealed.

CLUBMAN ESTATE

Dream Trip

Inspired by his wife's wish to own her ideal set of wheels, Kelvin Gardiner has masterminded this Clubman Estate's transformation from a tired barn find into a potential show winner.

Words **Jeff Ruggles** Photography **Matt Woods**



Cooper

CLUBMAN ESTATE



Which car would take pride of place in your garage, money no object? A Ferrari? A Lambo? Or, given your choice of reading material, how about a MkI Cooper S? But for Judith Gardiner, her dream machine was nothing other than a humble Clubman Estate. And thanks to husband Kelvin, she now holds the keys to what is quite possibly the best example we've ever seen.

So why a Clubman Estate? "My wife is a picture-framer by trade," Kelvin explains. "About six months before we bought it she helped carry these big frames to a customer's car, which turned out to be a Clubman Estate. She came home that night and said 'I don't care how much money we have – all the money in the world, I've seen the car I want. It's a Mini but it's got little back doors. I knew there was a white Estate going round locally at the time, so I then showed a her picture on the internet, and she said it was exactly what she wanted.'"

FATAL ATTRACTION

Fortunately, Kelvin had all the right credentials to manage a top-notch restoration like this. The Bury St Edmunds-

based enthusiast has owned a green Italian Job for around 10 years, and he's recently added a rare white Sidewalk to the fleet too. However, his relationship with Minis stretches as far back as his teens. "I've had lots in my time," he says. "It all started when we used to live on a farm, and I had two that I used to roar up and down the tracks when I was 13 or 14. Since learning to drive I've owned a Pick-up, a couple of saloons and an automatic – odd ones as they came along. In practical terms I should probably get rid of the Italian Job now, but I can't. I advertised it once, and as soon as I started getting enquiries, I told them it was sold!"

Kelvin was far keener to strike a deal for a Clubman Estate however, and soon found a suitable example. "We got it December 2009," he says. "I knew the car from new as a little kid. It was owned by a chap called Tom, who was a friend of my parents. It belonged to his uncle, and when he passed away Tom inherited it. He used it up to about the mid-'90s when it got stood in the barn, due to failing its MoT I would guess. I told my dad that I was looking for an Estate, and he said that Tom might still have his. My dad rang him and found out that he'd sell it. Was I interested? My wife heard me say the words 'Clubman Estate' from the kitchen and said 'yes we'll have it'. That was it!"

Unsurprisingly, around 15 years of storage had taken its toll on the car. "It was in a fairly sorry state, but we put a new battery on and it soon fired up," says Kelvin. "The original 1100 engine had been replaced by a 1275. I think an ex-girlfriend bought it from the seller, and the engine blew up while she had it so he just replaced it with what he could find. He then



THE REBUILD

Having been stored since the mid-1990s, the Estate needed plenty of work. The basic structure was there, but almost every external panel and mechanical component has been replaced. Stuart did the bodywork and paint, while Kelvin refurbished all the running gear and wiring loom.



bought it back and stood it up – probably for sentimental reasons. We did a deal for just under a thousand pounds. I think we paid plenty enough, but my wife fell in love with it, so that was fatal!”

FRIENDS REUNITED

When it came to getting the bodywork back up to scratch, Kelvin entrusted the job to local specialist Stuart Scarfe of SA Scarfe Cars Ltd. The business has a long family history, and has been associated with restoring and repainting Minis for many years. “I hadn’t seen Stuart since we were little children,” says Kelvin. “But my dad knew that he did Minis up, so when I bought the Italian Job he told me to go see him. He fitted new door skins, a wing and a pair of sills, plus another couple of little bits, so that’s how I got to know him again.

Sadly, the Estate would be a much more involved job. “The original intention was to make it roadworthy and respectable, but after it was shot-blasted we saw the real sins,” Kelvin continues. “It was sound enough to make a start with, but like most Minis it wanted a lot of panel work. The floor only needed one footwell and the rear quarters just needed a section at the bottom, but otherwise, it’s all been done. New rear doors, wings, bonnet, the A-panels and A-posts, the inner and outer sills, all the valances and the heelboard.

Stuart also replaced the scuttle in the end; it wasn’t really that bad, but any panel that we had doubts about or showed any signs of rust was cut out and replaced.”

Don’t go thinking Kelvin was sat idle while Stuart toiled away though. “I refurbished all the suspension and brakes, cleaning and painting absolutely everything - the wiper motor, the seat frames - all of it,” he says. “I spent many an hour in the garage ‘til god knows what time, in the freezing cold of winter, spaying stuff. The garage didn’t have electricity so I was in there with extension leads, lights hanging up from the ceiling and a little fan heater. I made it like my own little bake oven.

“One day, Stuart wanted the wiring loom rather quickly, as it was the first thing to go back in. I wanted to re-tape, check it all and clean it, and the only way was to sit outside with brake cleaner and thinners to get all the tar and muck off. It was snowing, so I was out there in two coats with a hot water bottle underneath, getting hypothermia while the snow was settling on me...”

STANDARD CLASS

Anything that wasn’t refurbished was replaced, with the emphasis throughout on keeping the car standard. “I know they’re lethal, but we wanted to keep it on drum brakes,” says Kelvin. “It had new master cylinders, wheel cylinders, backplates, shoes,

“Any panel that we had doubts about or showed any sign of rust was replaced...”



CLUBMAN ESTATE

cost was the same as buying a reconditioned 1100 from Mini Sport. That was just as well, as I discovered the head on the old engine was cracked.”

Apart from the unleaded head, the new engine is all standard. “It still has the original alternator and the original starter, which I had checked out. Every so often the starter doesn’t engage 100 per cent correctly, but I don’t mind that because it’s a Mini,” says Kelvin. Fuelling-wise the carburettor could be reused, but the fuel tank, sender, fixing screws, fuel pipes and the standard-type exhaust are all new items. “I kept the original radiator as I thought it was good. However, we noticed there was a hairline crack in the solder, so that also had to be replaced.”

WHEELY SPECIAL

In fact, the wheels are the only noticeable modification. “When we bought it, it had a set of alloys on it, but the wife didn’t like them and it’s her car technically,” says Kelvin. “So I gave her a choice of wheels that were close to the right era. She didn’t want the normal Minilites as everyone has those, so she picked these Mini Special wheels. I bought new nuts from Mini Spares, and some Revolution centre caps as they were the right diameter. I didn’t want that written on them though, so my wife had some vinyl discs made up where she works and we covered them up.”

Staying outside, the only other tweak is some Halogen headlamps. Otherwise, it was case of finding the correct period fittings. “The side lights are new old stock that I paid a fortune for, as are the bumpers” says Kelvin. “The back ones were found on eBay, and I have a feeling I paid about £100 for them. I met the seller at an autojumble to pick them up, and they were still wrapped in the wax paper with the BL stickers on. When I



The seats were retrimmed to mimic the original brushed nylon items by local firm GB Upholstery.



The interior has been completely refurbished.

pipes, hoses, drums – even the spring sets. The only original part is the compensator valve, which we took apart to make sure it was all OK, and a T-piece at the front. It’s got new bushes, dampers, ball joints and wheel bearings too, plus a newer set of rubber cones as the old ones had collapsed.”

The non-standard 1275 motor also made way. “Firstly we wanted to put it back to original, and secondly we didn’t want a 1275 with drum brakes,” Kelvin explains. “I bought a used Gold Seal 1100 from eBay, but in the spirit of doing everything, I wanted the oil seals replaced and the head gasket done. I found someone to do it, but when we put it in the car it started leaking oil. We took the engine back out and saw that the timing cover had mismatched bolts and pulled threads. Then when we took the head off, we found that the head and the block hadn’t even been cleaned. I thought about having it properly rebuilt, but the



The original doorcards could be clean and reused.



Clubmans of this era got a neat three-spoke wheel.

Beautifully restored, and practical to boot!



CLUBMAN ESTATE

A new petrol tank graces the spotlessly clean underside

The car is almost completely original except for the period Mini Special alloys.



A reconditioned 1098cc motor from Mini Sport was chosen after some disasters with a used Gold Seal unit.

BODY 1977 Mini Clubman Estate, shot-blasted and fully rebuilt with new floorpan, heelboard, rear quarter repairs, new rear doors, wings, front panel, bonnet, scuttle, A-panels and A-posts, inner and outer sills and rear valances, new windscreen, replacement side glass, NOS bumpers, NOS indicator lenses, Halogen headlamps, new brightwork, aluminium numberplate, new vinyl stripes. Paint: BL Sandglow.

ENGINE Mini Sport reconditioned 1098cc A-Series painted green, unleaded head, original alternator, starter motor and carburettor, refurbished fixings, new period graphics.

TRANSMISSION Standard four-speed gearbox with 3.44:1 final drive.

SUSPENSION Standard refurbished dry suspension.

BRAKES Drum brakes all round, fully refurbished.

WHEELS AND TYRES 5x10 Exacton Mini Special wheels with 165/70x10 Yokohama A008 tyres.

INTERIOR Refurbished to original spec with retrimmed 'brushed nylon' seats and matching cushions, original door cards and boot trim, Newton Commercial carpets and headlining, replacement dash rail, Kenwood head unit, Pioneer speakers.

THANKS TO:

Kelvin would like to thank: "Stuart Scarfe, Geoff at GB Upholstery, my father Terry for the shot-blasting, and my wife Judith for all the tears and tantrums."





The Estate grabs plenty of attention when out on the road. Who needs a supercar anyway?



The standard of finish is exceptionally high - a real credit to Kelvin and Stuart's hard work.

"Every morning I'd dress like I was going to work, but I was finishing the car off instead..."



Kelvin gets behind the wheel after a four-year resto.

stood there he offered me a brand new set of front bumper underriders too. I expected him to want another £100, but he said £20. I snapped them up like nobody's business!"

When it came to the interior trim, Kelvin was able to mix a new Newton Commercial carpet and headlining with a combination of original and secondhand parts. "It's had a different dash rail as someone had drilled loads of holes in it, but all the boot and door trim panels are original and surprisingly cleaned up a treat," he says. Elsewhere, the stock 'brushed nylon' seats could not be reused without major surgery, so they were retrimmed to mimic the originals by Geoff at GB Upholstery in nearby Welnetham.

PAINSTAKING FINISH

Having begun work in September 2010, the car was finally completed in July last year. Getting the build over the line required a real push, as Kelvin explains. "I took the


week off work and my wife didn't know. Every morning I'd dress like I was going to work and she'd wave me off, but instead I was going to Stuart's to finish it off.

"When I brought it home I put it in the garage, and told her that I thought the freezer in there was leaking. She was so busy concentrating on the freezer that she didn't see the Mini, believe it or not! So I made a comment that the bike had slipped down the wall, and I hoped it didn't hit that car. She looked round, and there was a split second of disbelief before she burst into tears!" Fortunately though, they were tears of joy. "She loves it to bits, and is so proud of what Stuart and I have achieved with it," Kelvin adds. "There were points during the build where she hated it, but she's ecstatic with her Estate now."

There was, however, one last sting in the tail – or leg, to be more accurate. "When I finished the car and I joked that it had nearly

killed me," says Kelvin. "Then three or four weeks later I was rushed to hospital with a blood clot. At the time, the idea of another project was out of the question, but now that the pain and the memories of it have subsided I've been trying to talk Stuart into selling me a Minivan he's got. It's the same colour as the Estate, and I actually worked on it when I was an apprentice in the motor trade. He doesn't want to sell it as he's got one from the '60s, '70s and the '80s, so if I want it I've got to find him a replacement."

For now though, Kelvin and Judith can stand back and admire a job well done. "I know it's a Mini and not a Ferrari, but it doesn't matter," he says. "When you drive it down the street, people just stop and stare."

Looking at the finished result, we don't doubt it. The Clubman Estate has fast become one of the most desirable derivatives after years in the cold, and this particular one really is a dream come true. 



"You never forget your first Mini." These were the words of Rover's 1989 advertising campaign, as the British carmaker tugged on the heartstrings to encourage people to choose its 30-year-old design over new wave rivals from Renault, Volkswagen and Ford. It's a situation that carried extra weight for Lee Norris, as just a year later he was indeed finding it very hard to forget his first Mini – a Mini that now sat before him as a burnt-out wreck.

"I had a mechanic friend working on the car for me," explains Lee. "The battery had gone flat and he went to jump start it." Unfortunately some petrol soaked rags had been left in the boot. As the jump leads were attached, a spark ignited the petrol fumes. Lee's friend couldn't put out the fire, and the car was written-off. "The biggest kick was that my mum had only insured me for third party damage," says Lee. "I didn't have a lot of money, so had to start again."

TURNING BACK THE CLOCK

That start was somewhat delayed; so much so that it was 2011 before Lee began. He decided that if he was going to relive his youth by buying another Mini, it was going to have to be a carbon copy of the car he lost 21 years earlier. The original was certainly distinctive, having been designed and customised by the

previous owner as a tuned-up drag racer to tear up Santa Pod. It's hard to imagine a Clubman looking anymore late '70s/early '80s custom than this one did; quarter bumpers, boxy side skirts, rear window louvre – the works. The exterior was emblazoned in a white, red and gold Budweiser-themed livery, with blue fur lining the interior.

The basis for this reincarnation was another Clubman, but it was a completely different kettle of fish compared to the original. "The car was in a cherry-type red when it came, and was mid-restoration," Lee recalls. "It was undriveable and wasn't tested, so needed a full renovation." While the Clubman's purchase may have brought back happy memories of Mini ownership for Lee, he was cruelly reminded of the Mini's unenviable reputation for rusting. "Stripping the car revealed just how much deterioration there was," he says. "So many panels needed replacing to get the shell into a suitable state."

Once the body was restored, mimicking the original car's distinctive bodykit was never going to be as simple as buying one off the shelf. Lee wanted the car to look like an exact replica of his former pride and joy, and he wasn't prepared to compromise. "That's why the bodykit doesn't exactly flow down to the front skirt," says Lee. "There are other parts and kits out there that may have looked better in some people's eyes, but it mirrors what I had."



TWO FOR THE ROAD

Lee Norris promised himself that he'd rebuild his pride and joy when it went up in smoke, but when recreating his dream Mini, he got a little more than he bargained for.

Words **Matthew Parkinson** Photography **Chris Wallbank**



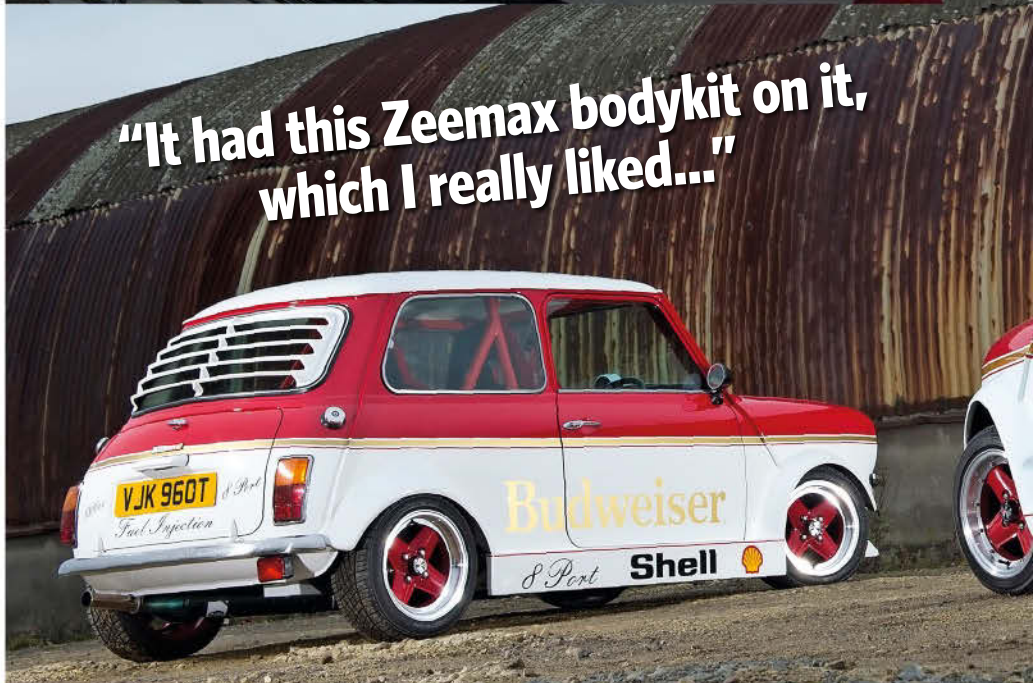
BUDWEISER DUO

FRYING TONIGHT!

Recipe for Crispy-fried Mini. Take one prized Clubby, give to a mate for some work, season with a couple of petrol-soaked rags. Ignite rags with the sparks from a jump lead and stand back while your pride and joy rapidly flambés. Then down your sorrows with a nice bottle of Bud... Re-create 20 years later.



The 1380cc motor boasts an Arden eight-port head and fuel injection, and is good for 125bhp.



"It had this Zeemax bodykit on it, which I really liked..."

TWO'S COMPANY

While Lee worked with various bodybuilders and mechanics to reinvent the car of his youth, he decided that his Clubman could do with a stablemate. This, he explains, was another buy borne out of sentiment. "My dad had his own business, and his work vehicles were Minivans and Clubmans," he says. "Through doing this Clubman, I felt a van could look really good in the same theme, if not better."

A suitable project, in the shape of a 1981 van was found and readied for transformation, but this time there were no memories or old photos to dictate the design. So instead of restricting the changes as tightly as the Clubman, this could be free-spirited. In almost direct contrast to the sharp angles of the Clubby, the van's rounded front warranted a smoother styling kit. "I'd seen a Minivan on the internet, and it had this Zeemax bodykit on it, which I really liked," Lee says. The freedom to do whatever he liked without

sentimentality also allowed him to add other parts that piqued his interest.

"When I was looking on the Zeemax website, I saw there was a fibreglass bonnet with the hump on it," Lee adds, "I thought that could be a nice extra touch." However, the bulged bonnet had problems. "Unfortunately, it didn't fit. We had to have it cut down and reshaped at the front, and nobody wanted to do it," he explains. "Everybody thought the original bonnet would look better, but I'm pleased with the finished product."

The flexibility of the van's shape allowed for a few creative touches elsewhere too. It gained a set of LED rear lights, a neon Budweiser sign and a fridge to keep drinks cool at shows. The replacement dash and centre console are a far cry from the basic originals, and the load bay has been carpeted for an extra touch of luxury. You wouldn't want to chuck tools in the back anymore, but as a show vehicle, it's ideal.

DELEGATING DEDICATION

Meanwhile, work on the Clubman was wasn't exactly plain sailing. "When you look at the dashboard you'd think that was probably the easier one to have done," says Lee. "But I had problems, because nobody wanted to shape the dash around the top in aluminium."

This was indicative of the issues Lee faced. Too busy running his own business to do the work himself, he was often turned down by people who insisted that what he was asking for was a job too far. Coming from a business owner's point of view, Lee understands their reasoning. "The problem with coming up with something that's out of the ordinary is that if it doesn't go right, the customer may not want to pay," he says. "Some customers are probably like that, but I'm of the view that if you want something doing, then the supplier should be able to do it as long as you know it's at your own cost."

Although keen to create an exact replica, Lee was prepared to make a few concessions here and there. These involved jobs he'd have liked to have done with his original car, but couldn't. "In those days I didn't see anything wrong, but as time goes on you notice things that could've been done differently," he says. The sharp, exposed edges left by the cut-down front bumpers weren't pedestrian friendly, so Lee's had the ends capped. Inside, changes include a distinct absence of blue fur in favour of bucket seats, with Dynamat added to keep things quiet. The same seats have gone in the van, while both vehicles have four-spoke Revolution wheels with red centres. The Clubman's also been dropped with Hi-Los, to the extent that the side skirts and front spoiler are now perilously close to the ground—but then Lee did say he was making no concessions with the appearance!



Clubman kit is harsh-lined but true to '80s roots, while the van's based on the round-nose's curves.

BODY 1979 Mini Clubman, fully rebuilt and resprayed, Budweiser and Shell decals, rear window louvre, Group 5 arches, bespoke side skirts, front spoiler, Mini Sport bullet mirrors, Modified front grille to house quad headlamps, rechromed and capped quarter bumpers at front to suit square number plate.

ENGINE 1380cc, MED 81.28mm wedged crank - counter bored on the big ends, A-plus big end journals, Vandervell lead copper crank bearings, balanced 5.75-inch H section race con rods, Mini Spares 73.5mm 'Mega' pistons, uprated camshaft with lightened competition Isky type followers, Mini Spares aluminium Arden eight-port cylinder head, competition 35.4mm inlet valves / 30mm exhaust valves, double valve springs, spring retainers and collets, three-angle valve seats, bronze valve guides, 1.5:1 ratio roller rocker assembly with steel posts, competition head stud kit, copper head gasket, Duplex timing chain, programmable injection kit with DTA ECU and bespoke loom, crank sensor and mounting kit, 36-1 crankshaft pulley, separate throttle bodies and ram pipes with built-in linkage, alloy radiator, electric fan, Viper red hoses, twin fuel tanks, eight-port exhaust manifold, 2-inch Manifold exhaust system. Power output: 125bhp at the flywheel, 102lb.ft torque, estimated 0-60mph time: six seconds.

TRANSMISSION Fully reconditioned four-speed A-plus gearbox with all new bearings, helical drop gears, twin pin differential, central oil pick-up pipe, AP Rally clutch plate and grey diaphragm.

SUSPENSION Refurbished and solid mounted front subframe, Koni dampers, replacement rubber springs (competition type at rear), Hi Los, heavy-duty adjustable tie-rods and bottom arms, new rear subframe, rear negative camber brackets, four-wheel aligned.

BRAKES Aluminium four-pot callipers, Greenstuff pads (front), Minifin drums (rear), Aeroquip hoses all round.

WHEELS 7x13 Revolution four spokes, powder-coated red, 175/50x13 Yokohama A359 tyres.

INTERIOR Bucket seats, red belts, rollcage, new carpets front and rear, bespoke aluminium dash, three spoke lack leather steering wheel, leather gear knob, Motor Meter racing chrome 52mm racing gauges, JVC CD/USB player, Hertz speakers front and rear, new headlining, refurbished door cards and furniture, insulated with Dynamat sound-proofing.



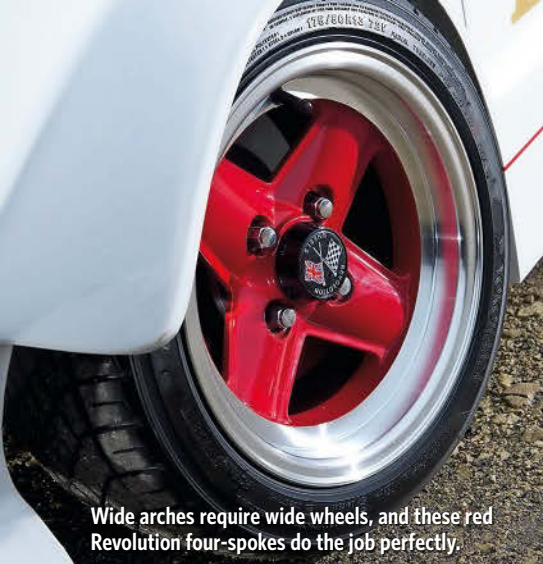
Twin tanks hint at Clubby's motorsport heritage.



Van is kitted out for comfort, relaxin' and supping.



The mildly-tuned 1275 in the van is more suited to coping with long trips to shows all over the country.



Wide arches require wide wheels, and these red Revolution four-spokes do the job perfectly.



New seats, carpeting and cards throughout, with carbon-look dash and a big ICE install.

BUD COMMERCIAL

More memories, this time of Lee's dad's old work vans, led to a search for a commercial Mini to complement the Clubby, and despite arriving second, the van was completed first. Through shopping wisely and waiting for a good base, not too much bodywork was needed before the new paintwork and livery could be applied.



PUBLIC PERCEPTION

Despite the Clubman being the car that set the ball rolling, the van was the first finished. While Lee would have liked both cars ready to make the most of the 2013 show season, the van's first, lone outing, would be a good way to test the water to see what people thought of the design. "It got a lot of attention," he says. "A few people asked if I'd spoken to Budweiser about sponsorship, but I haven't done it for that. It's just for self satisfaction really."

The previous owner's motives behind the livery are unknown, but the clues may lie in the original Clubman's use on Santa Pod's quarter-mile. Although the colours seem to draw a blank here in Blighty, the livery is better known in the USA for its 30-year affiliation with Kenny Bernstein in the world of NHRA drag racing. Known as the 'King of Speed' amongst drag-racing fans, Bernstein raced a Budweiser-liveried Funny Car in the '80s, and in 1992 went on to become the first

man to break 300mph from a standing start on a quarter-mile.

But despite this American motorsport link, you'll find no big block V8s shoehorned into Lee's Minis. That's not to say either car is a slouch, with the Clubby in particular boasting a very impressive spec. Concealed under its square front is a 125bhp fuel-injected 1380cc engine with a Mini Spares aluminium Arden eight-port head, giving enough grunt to cash any cheques the extreme body styling writes. Such a combo has been brought up to date with individual throttle bodies and a fully mappable DTA management system, ensuring it remains tractable.

It's got helical gears rather than straight cut items too, which is user-friendly for road use. "It is relatively easy to drive, but it's just a bit more pokey so you just have to be a bit more careful," says Lee. He claims that it'll hit 60mph in six seconds from a standing start, but flat out isn't the name of the game. "It's



"The livery is known in the USA for its affiliation with Kenny Burnstein..."



Both the van and Clubby have matching seats.

day, but admits he wouldn't want to. "I don't want them out in all weathers – I want them to stay crisp and clean. My Minis in my early days were my wheels full stop and they were used everyday. I'm not in the position where I have to use them all the time now, so can keep them clean and tidy."

Tidy or not, Lee is fully aware that his styling choices have their critics, but takes the flak with a pinch of salt: "I don't blame people," he says. "When I've taken these to competitions people tend to go for traditional Minis which is fine, but I still think it's nice to see what can be done with a vehicle as well."

SAME, BUT DIFFERENT

And when it comes to finding out what can be done with a vehicle, Lee has pushed the envelope to create two completely different Minis while still managing to stick to his prescribed theme. Despite the vivid colours pairing the two together, as your eyes flit

"I don't want them out in all weathers – I want them to stay crisp and clean..."

nice to get out on the open road and give it a bit of a leathering on the throttle, but land speed records aren't high on the priority list."

The van is of a more restrained character. Not wanting to create another road racing weapon, Lee's boosted the power simply by removing the existing 998cc engine and replacing it with a relatively stock 1275cc unit. This tried-and-tested swap ensures it's sprightly enough to cope with long slogs to Mini shows dotted around the country. "It doesn't have to be about out and out racing at Santa Pod, it just has to be a nice looking vehicle with a sensible engine in it," he says.

Lee says that the van in particular has been set up so you could use it comfortably every

between them you find yourself involved in the world's easiest game of spot the difference. It's only when you take away the fact that Lee has applied these colours to two very different shapes of Mini, you begin to notice the subtleties of each design. There are the modern, softer lines of the van, dragged into the 21st Century with the latest gadgets and accessories, set against his Clubman which is firmly stuck in a previous generation. While Lee will freely admit that the Clubby isn't the same car that he used to drive in his youth, it's certainly in the right spirit. Plus, the neat upgrades he's added make it even better – changes he would've made if fire hadn't stopped play all those years ago.

TECH SPEC MINIVAN

BODY 1981 Leyland Minivan, rebuilt with Zeemax kit and modified bulged bonnet, Budweiser decals, chrome windscreen wipers, re-chromed door handles front and rear, chrome sports door mirrors, bee sting aerial, bumpers, grille and numberplate holders, Xenon HID headlights, LED side lights, LED indicators and number plate bolts.

ENGINE 1275cc, re-honed bores, standard pistons and rings, standard camshaft, head skimmed, new valves and unleaded seats, valves lapped, twin SU Cooper S carburettors, T300 GT chrome fuel filter, braided fuel pipes, Cooper S air filter, aluminium sports radiator, Evans 180 waterless coolant, chrome radiator mounting, uprated electric fuel pump, new fuel tank, Sytec 6mm fuel regulator, chromed alternator, electronic ignition upgrade with AccuSpark coil, LCB, stainless twin-exit system.

Power output: 70bhp, 70lb.ft torque

TRANSMISSION Standard four-speed gearbox, titanium clutch arm, new clutch assembly and cover.

SUSPENSION Standard dry suspension with Polyflex subframe mounts.

BRAKES Aluminium four-pot callipers, vented discs (front), Minifin drums, new back plates (rear), Aeroquip hoses.

WHEELS AND TYRES 13-inch Revolution Motorsport wheels with fake studs around rim, red centres, 175/50x13 Yokohama A359 tyres.

INTERIOR Bucket seats, red belts, three-spoke Mountney steering wheel, graphite effect dash, pear-shaped chrome gearknob, carbon-fibre-look centre console, new doorcards, new carpets, dash mounted Savage 52mm gauges, Pioneer DEH-4500BT stereo, Ground Zero 6x9-inch 360w speakers and front dash speakers, Budweiser neon sign and fridge.

It took determination, persuasion and a lot of planning but Lee now owns two distinctive Minis.



THANKS TO:

Lee would like to thank; Mike Barratt, MB Engineering in Lincoln for the engine build, Garath and Lenny at L&G Paintworks Scunthorpe, Martin and Carl at Exton motors for the total stripdown and rebuild, and Mel Hudson Motor Repairs at Stoneacre for all the bodywork.



Sticking to original would have meant this would be full of tasteful blue fur...

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HERITAGE



ORIGINAL EQUIPMENT

BEFORE STARTING



The first rule of working on cars and using tools of any kind is don't be stupid. Make sure personal protective gear - goggles, gloves, ear defenders, masks and a set of overalls - are hanging on a hook in your garage and use them wisely.

Always disconnect the battery before working on your car and if you're working with power tools, protective gear is essential. Never attempt to work under a car without supporting it securely using suitably strong axle stands. If you haven't got a fire extinguisher, buy one and keep it near to hand.

The bottom line? If you're not completely confident of your own ability to complete any task safely, don't start it. Leave it to the experts.

Words and photography **Stephen Colbran**



HOW TO: FIT A HEATED FRONT WINDSCREEN

You don't have to put up with a misted-up front windscreen; here's how to fit a more useful electric heated version.

The cabin heater has never been a particularly strong point of the Mini. Compared to modern cars, the Mini's reasonably inefficient heater design can leave you waiting some time to warm up, even after the engine is up to operating temperature. So when it comes to demisting the front windscreen, it's a case of flicking the switch to reroute the heater's warm breeze upwards, and then hoping for the best. As minutes turn into hours and days pass you by, it's probably easier just to grab that demister pad and give the screen a wipe before you've run out of fuel. But joking aside, it can often take an age to safely clear a misted up screen, especially on cold damp days.

So here's one solution – fit an electric heated windscreen. There are a couple of different types available from the Mini specialists. We bought ours from Mini Spares, and it's the more subtle version with its heater elements mostly concealed by the rubber windscreen seal. Joining the two elements top to bottom is a series of near-invisible connections, sandwiched between the two

layers of glass. It's similar to windscreens you may have seen on modern Fords. The alternative option may better suit rally-style cars or those used regularly in the cold, as the heating elements are far more obvious but the demisting action more effective. There's no direct MPI-type replacement at present with the mirror fixing, but there is a tinted option.

Fitment is no different to a normal windscreen, as you'll see from the guide, but there are two electrical connections to power-up and earth-out the heater elements. The maximum current load is stated as 17 amps - quite a bit - so consider this when fitting a suitable switch and fuse. Some metal toggle switches like Lucas headlamp types can cope with a 20-25 amp maximum load, so you won't necessarily need to install a relay, but we've shown a couple of different options. In any case, double check the switch rating and always install a suitable fuse on the ignition live cable. Also ensure that your charging system is up to the job; if you have extra lighting and audio upgrades already, a 70-amp alternator might be sensible. ➔

TOOLS NEEDED
Large and small flat-blade screwdrivers, trim removal tool, windscreen fillet strip tool, terminal crimper, drill, Pozidriv screwdriver, 12-volt multimeter.

TIME
Two hours
COST
£151.20 - windscreen
£10.74 - rubber seal
£9.42 - fillet tool

DIFFICULTY
★★★★★



1 Start by unclipping the windscreen wipers. These can be pretty stubborn, so give the splines a soaking of penetrant spray if the wiper arms are corroded on. A very gentle lever with a large screwdriver will help.



2 Once loosened, prise off the wiper arms from the splines.



3 Locate the joint in the windscreen fillet strip, often at the top in the centre, and lever out the end with a screwdriver or trim removal tool. There should be a clip over the joint but it's sometimes omitted.



4 Remove the fillet strip entirely from the rubber seal.



5 Now the windscreen can be removed. Push gently on one corner from the inside to release it from the seal. When the rubber seals have hardened or perished with age, great care is required. Don't push too hard!



6 Gently release the windscreen from the rubber seal and remove it from the aperture. An assistant may be handy.



7 Pull the old seal off and check the windscreen frame for any rust underneath. It's a good chance to check this common rust trap and sort any issues before they worsen, even if you're not replacing the seal.



8 When fitting a new rubber seal, it always helps to heat it up beforehand in a bucket of warm water. It makes a very noticeable difference in colder weather.



9 Dry the seal off with a clean towel and fit it to the windscreen aperture, fillet strip groove facing outwards as shown. Usually the joint is centralised at the top, but it's not critical.



10 The heated screen has its wiring taped to the inside whilst in the packaging, so unstick the tape and move the wires away from the screen edges.



11 Here you can see the heated elements sandwiched inside the glass. They're not particularly prominent when the screen is installed, so it's pretty subtle.



12 With an assistant, move the new screen into position.



13 It's easiest to push one lower corner into the rubber seal first, and work around from there.



16 Wiggle and push the fillet strip tool into the groove. It's best to start at the top. Never attempt to install the fillet strip with a screwdriver – you'll likely slip and take a gouge out of the paint.



19 Find a suitable earth point and attach the wire to the body. We drilled a small hole by the inner A-pillar and screwed the ring terminal in place. You can check for a strong connection afterwards using a 12-volt multimeter.



22 Smaller latching push-button switches may be something to consider, but be aware that these will often only be designed for low current circuits – five amps maximum in this case.



14 A plastic trim removal tool doubles up well here to gently ease the seal over the screen. It's not easy on your own. Apply soapy water to the outer edge of the seal and light inward pressure to the glass. Old rubber seals risk being torn when reinstalled, so if funds allow, buy a new one.



17 Work your way around with the tool as shown, pressing the fillet strip into place. This cheaper tool can pop out of the groove quite easily, so take your time and keep firm pressure on the fillet strip as you go.



20 The wire from the opposite side can then be connected up to an ignition live feed. You can connect up to a spare feed from the fuse box, but preferably run a wire direct to the ignition key circuit with an in-line fuse, as the maximum current draw is a hefty 17 amps.



23 For such applications you will need to install a four-pin 30-amp relay in the circuit for the heated screen, to act as a switch between a high and low current circuit.



15 Now it's time to refit the fillet strip to push the seal edges out and secure the screen in place. Use soapy water again, or apply some rubber-safe maintenance spray to the outer channel.



18 Now for the electrics. Cut one of the two wires to length, strip back the insulation and crimp on a suitable ring terminal.



21 The feed from the ignition live source needs to be fitted with a switch. A Lucas-type toggle headlamp switch will cope with this electrical load, but others may not be rated so highly. Mount the switch in a practical location, on the dashboard perhaps.



24 When you've fitted your fused live feed with your desired switch and relay combo, steam up the windscreen and give it a try. You should find it demists much faster and more evenly than with the heater and fan. It's a very useful upgrade.

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BODYWORK

BLAST YOUR BODYSHELL

You can grind and sand it all you like, but sometimes professional help is needed to banish rust from a Mini's intricate nooks and crannies. Here's how Power Park Autos do it...

Words and photography **Jon Hill**

How many of us have stripped back part of our Mini for a quick makeover, only to find a nasty rust trap? If you're lucky, the affected area can be cut out and a new section welded in. But to do a proper job you'll need to replace the panel, and guess what – there are no seams left to weld the new metal to! The bits you thought were OK are in dire need of repair, and your quick resto has escalated into a full rebuild.

Given that most project Minis will be decidedly crusty around the edges and are likely victims of bodged repairs, it's a good idea to completely banish rust from the trouble spots before you start. Aside from soda blasting, which is not so effective when dealing with rust, there are several ways of doing this. Blasting with abrasive media or chemical dipping are the two main protagonists. The latter is a full

treatment and is the more expensive of the two, while the former is a more traditional approach. Blasting is arguably more flexible than dipping – you need only blast the localised areas you want to rather than treat the entire shell, which keeps costs down. However, there are pitfalls if it's done by anyone less than an expert.

The company we're using is Power Park Autos in Banbury – it has a fantastic reputation and is a car restorer itself, so it knows how to treat a car. On our car, we only wanted to go around the edges, those pesky body seams and the underside; certainly nowhere near the centre of the body panels. This is normal practice for this procedure, as large flat panels are generally suckers for distortion – too much concentration and heat build up will buckle them beyond what it takes to shrink them back. As a result, Power Park will only blast

the areas you can't get to with a DA sander unless you specifically ask.

With the 850, we ignored our own advice and neglected to get it blasted before we started the repairs. However, we've been lucky enough to get away with it. We knew our car was mostly sound, but blasting still proved to be the best option in the end. Last month, we stripped off the underseal with a hot air gun and cleaned the residue off with white spirit. This is necessary because blasted media will simply bounce off and at worst, heat the underseal and turn it into a gooey mess. With that done, we could now get on to the serious stuff.

After it's been blasted, PPA boss Darren Jenkins will put the treated areas into etch primer in the paint booth. It's important to coat the blasted surface as soon as possible, or you're just inviting the rust to reappear. Read on to see how our 850 was tackled. ➡

COST
Our car was free of underseal so we saved a fair wad here, but a typical case is likely to cost £420-£700 for the blasting, with another £375 to have it etch primed. All plus VAT.

TRANSPORT

This is a factor you really need to consider – getting it to the blasters. Our car had been more or less stripped to a shell, which meant taking off the subframes so we could get right behind them to kill the rust. Trouble was, that meant it would no longer roll.

When restoring a car, this isn't an uncommon scenario. In many cases the shell will be on a roll-over spit or sitting on a body-rolling dolly. Most restoration shops will build them out of steel box section with a set of casters. Our one picks up on the subframe mounting points, and we've left the connecting frames on the shell for the roll-over spit.

You needn't worry too much about transport though with PPA, because Darren offers a collection and delivery service too. It's one to consider though – can you get it there?

PREPARING THE CAR

As our car wasn't riddled with rust, the whole lot didn't need blasting. All we wanted was a trip around the edges, plus the entire underside. It's normal to strip the whole shell of parts, panels and trim as much as possible. Completely gutted is the maxim here, because the blasting media will kill the stuff you want to keep. It'll etch glass, ruin headlinings and strip the insulation from wiring. Our car still had a bit of dash wiring in, so Darren wanted it removed – he's the boss! We did leave the headlining however, as it'll be replaced anyway.

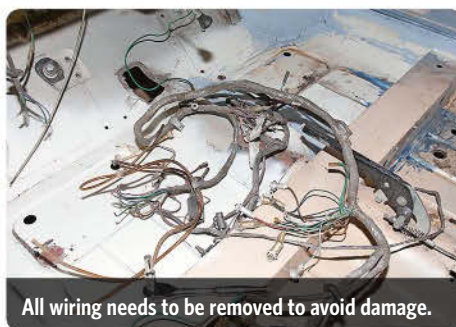
OUR MINI

At first glance at our Mini shell is really not that bad, but there are a few suspect areas. The bulkhead had already had a light blasting with a portable device, whilst the panel below still showed signs of heavy surface rust. This highlights the desired sequence for restoration – if you're having the whole shell restored, strip the underseal off and have it blasted before you do any bodywork. That way, you can see all the hidden nasties that show up before it's too late.

In our case we largely knew where the shell needed restoring, but it still would've been better to get it blasted first along with a coating in etch primer. This way, when the work's finished, all it needs is another light blasting followed by a good thick etch coat ready to go straight into the paint shop. Instead, we'd squirted the bare metal areas with primer after making repairs, but there's nothing like a good blasting for getting into those tricky Mini areas like seams and gutters.



Remember to factor in the cost of transport. Some blasters offer a collection service.



All wiring needs to be removed to avoid damage.



It only takes a few minutes to remove trim clips.

We also took out any small clips from the seams and guttering because we didn't want any rust returning. It literally takes minutes to get them off and store them carefully.

The next job is to either adapt the car to PPA's spit system, or bring your own as we did. Our car was already mounted on our rollover jig, hence cutting the time down. This enables them to spin the car through 360 degrees so they can get to the top and bottom of the car with equal ease. This is the professional and safe way of doing the job, providing the spit's up to the job – PPA's is extremely heavy duty, which reflects the amount of force that blasting generates. You certainly don't want flimsiness since your car could be at risk of being blasted off the jig.

This is an area you need to be sure of when picking a blaster – some roll the car on tyres and we've even seen mattresses too. If the blaster knows what he's doing it might be OK, but you need to be happy with his methods.

The set-up will depend on where you go – some do it in the open air, albeit under cover,

while others, like PPA, have a dedicated blasting room complete with extraction and grit recycling system. It's a whopper at 18 square metres, although it doesn't have any windows so it's not exactly great for photos.

GRIT

There are loads of blasting agents – known as media – according to the subject you're blasting. We needed a small amount of rust removal from our sheet steel and therefore, the media needed a touch of aggression. As such, for virtually every case, PPA use Bengal Bay Garnet, which in its raw state is pretty coarse. Thus, they will have already used the material several times, typically for blasting RSJs and other heavy steel work, until it is pretty much worn out. Then it's deemed safe for use on a car bodyshell, but even then, the operator has to be skilled in what he's doing.

Our blaster, Shaun, spent plenty of time discussing with us what we wanted, explaining that he would only blast the areas we told him



A 360-degree spit allows easy access all round.



The media is reused to reduce its coarseness.





The operator will blast from quite a distance from the object; any closer and the shot is too concentrated.



The before and after effects are evident here.



The shell is rotated to get to the underside.

"It's important to find any horrors before you go sinking money into a project..."

to. PPA won't necessarily blast flat panels such as roofs, doors, bonnets for fear of distortion but it will do the door shuts, under the bonnet and floors – inside and out. Basically, that's anywhere you can't reach with a DA sander.

Believe it or not, the pic above shows just how far away from the bulkhead that he'll blast – that's quite a distance; any closer and the shot is way too concentrated. The reason is heat – there is obviously a lot of friction involved in blasting the rust off. The curved areas can take it because they're already in a formed state and are far more likely to stay that way. But, concentrate too much media on a flat panel and the heat generated is likely to stretch the metal and warp it – you'll never get it straight again. Thus, you can see the constraints the blaster is under in order to get close into the nooks and crannies of a shell – ours had the wings on and fitted properly, which is obviously a touch detrimental in some ways. If they're off then you stand a better chance of hitting everything without compromise.

We didn't need absolutely everywhere touched with the grit. Bear in mind that there can be some sensitive areas, such as lead on older cars used to fill gaps between panels. The media will also take filler out, so if you've got panels that are already prepared and don't want them touched, Shaun will mark them with red

paint, so he can see them whilst in the very dusty blasting booth.

BLAST AWAY

Shaun started by blasting the edges on the top of the car – the seams and gutters. He did all round the boot aperture too, but left the bulkhead for the moment as the roll-over frame



The heelboard and boot floor were also blasted.

made it was difficult to get to the area in its entirety. This is especially so in the Mini's case because the mounting frame is rather sizeable

Next we were able to roll the car on to its side so we could do the wheel arches – you can see the before and after effects in the wheel well picture at the top of the page. Then Shaun went on to tackle the floor, boot floor and around the heelboard area.

Below is a finished shots of the blasted underside. Luckily for us, there are no horrors lurking here. It almost looks factory – not bad for a 1971 shell! You might not be so fortunate, but it's important to find any horrors before you start sinking money into a project. Many Mini builds remain unfinished for this very reason.

Once the main parts of the shell were done including the underside, we turned it the right way up, supported the shell on axle stands and removed the front half of the frame so that Shaun could get to everything.

In this way, we were also able to get round



Any areas not to be blasted are marked in red.



Seams/edges were blasted rather than full panels.



The fully-blasted underside. Looking good!



Our bulkhead had already been blasted at the top, but the bottom half was a different story.



The shell was then taken to the spray booth...



...where non-porous etch primer was applied.



The complete engine bay came in for treatment.



All media must be vacuumed away before primer.



The headlight rims and front seams got a blast too.

the headlight rims and the edges of our new Heritage front panel. There was some very light surface rust on the nearside wing, which was original 1971 metal. Thanks to the blasting, it should remain rust-free for many years now.

PRIMING

The next job was to get some paint on the bare metal, but as the whole shell was covered in media, it needed cleaning first. The media gets absolutely everywhere, meaning the




shell will need to be turned and turned again, brushed out and finally cleaned with a vacuum cleaner until it's as clean as possible. Even then, it'll still be giving up grit...

It's pretty obvious you need to pick your day to take the car to the blasters. Getting it there is not that much of a drama because it's going to be blasted, so a bit of moisture is not going to matter. However, getting it home is the worry unless you want an orange car in your garage. Hence, it's a good idea to have the shell primed as soon as possible – certainly within hours of

being blasted. In our case it was non-porous etch primer that PPA chose for us. This really bites right into the metal and will actually seal up any rust in the panel work that the blasting process hasn't got out.

We shifted the whole shell – now remounted on the spit once again so we could rotate it and paint everywhere. Using this type of etch primer, even on unrestored metal, means you can grind the paint off, restore the panel work then reapply the etch with a brush, or localised spraying. You're supposed to be able to weld through it, although better results are had through removing the paint first.

Below is our freshly-primed 850 shell – we're delighted with the results! Now we just need to get it home. Our etch primer should help against the elements, but as all primers are porous to some degree, you are best off picking your day or properly wrapping the shell as best as you can to keep it dry. If you can get it in a body shop straight away, so much the better. We've a little bit more work to do first, but at least we aren't dealing with rust anymore! 

"It's a good idea to have the shell primed as soon as possible..."



Fully blasted, etch primed and ready for the trip home. It's important to have the shell primed soon after it's blasted to avoid surface rust forming.

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QUICK TECH

FITTING EXTENDED SEAT BRACKETS

Tired of the Mini's restrictive legroom? Try some heavy-duty extended seat brackets.

Words and photography **Jon Betts**

The Mini is still a marvel of packaging even after 55 years, but legroom can be an issue, even for shorter drivers. The standard Mini seats will only move so far back on the standard runners and brackets, which is why there have been a number of attempts to modify them over the years with varying degrees of success.

The latest addition to the range of seat adjusters are these custom-made extended items from JB Fabrication. Rather than bolting to the existing seat pivot bracket on the front of the crossmember, these replace it entirely and allow the seat to mount much further back. They are bolted to the same points as the original brackets, but there are additional

fixing points at the rear of the crossmember to make for a very sturdy seat mount. The additional fixing points can be made using either Rivnuts as shown here with some M6 bolts, pop rivets or even self-tapping screws. Extra Legroom is only a whisker away!

Note that this guide applies to cars with standard seats fitted with the bolt-on pivot-type crossmember brackets. Very early cars used a welded on-type. Some bucket seat subframes also bolt to the standard factory-fit brackets, so they should also be suitable for use with these extended brackets.

CONTACT
www.JB-Fab.com
07810 652929

COST
£27.50 per pair

TOOLS

Electric drill, 7/16-inch AF socket /
spanners, Rivnut tool, Rivnuts/rivets

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1 Before you can fit the new extended seat brackets, you will need to remove the seats and the original brackets. Start by removing the two bolts that fix the seats to the brackets using a pair of 7/16-inch AF spanners. Save the bolts as these will be reused.



2 With both bolts removed you can then lift the seat out of the car and store it somewhere safe.



3 The standard brackets are secured to the cross member with two set screws, so undo these with a 7/16-inch AF socket or spanner. Keep the fixings safe as these will be reused when fitting the new brackets.



4 Using the original fixings, loosely fit the new extended seat brackets. Tighten them up and to ensure they are in the correct position, briefly try the seat back into the car and adjust if necessary.



5 We decided to use Rivnuts for the rear fixings. With the brackets in place, we drilled pilot holes through the fixing hole and then used a 6mm bit. With the brackets removed we followed this up with a 9.7mm bit, which would accommodate the M6 Rivnut. Paint any bare metal after drilling to prevent rust.



6 The Rivnuts were installed using a special tool. These can be purchased fairly cheaply from the likes of eBay, whilst Rivnuts are available from the same sources in a variety of different sizes. Install two fixings per bracket.



7 Once all your fixings are fitted you can then reinstall the new seat brackets using the original front mount fixings and whatever you have decided to use at the rear. Line them up as before and then fully tighten them, before repeating the process on the other side.



8 With both extended brackets fitted on the seat cross member you can then refit the seat, which is attached to the brackets using the original fixings. Tighten the nyloc nut so that it secures the seats but still allows them to tilt.



9 Here you can see how the seats still tilt forward to allow access to the rear. Depending on how far you move the seat back, you might find that you need to move the locking bar, which would require extra holes in the floor and some extra work to relocate it.

Ask the expert

Your Mini questions answered by Keith Calver.



BRAKE SERVO REMOVAL

Q I've bought a 1994 Rover Mini Sprite as a donor car for my 1976 bodyshell, and I've started thinking about the brakes now. I want to do away with the servo as it gets right in the way and I think it looks cleaner without all of that in the engine bay. So how will I set it all up without using the servo? Do I need to change the pedal box, the brake lines and the master cylinder?

Martin Jones

A I have not tried driving a late model car with the servo-mounted master cylinder without the servo operational, so can only make an educated guess on this one. I have driven cars fitted with the 7.5-inch S/early 1275 GT disc brake set-up that has been fitted with a servo that has died. The brakes were truly awful. So, since the servo-type master cylinder is designed to be driven by the servo,

I would expect a new non-servo type master cylinder will be needed. This will mean a change of brake pedal as the servo-mounted master uses a different pedal ratio. You could simply use the pedal assembly from the 1977 car and replace the brake pedal. I am guessing your 1977 car is on drum brakes. The disc brake pedal is canted up higher than the drum brake one to allow for the travel caused by the hydraulic system.

Whether you go single line or

stick with the tandem system (front/rear split) depends on what the cheapest or most desirable solution is. The 1994 car will have the brake pressure proportioning/PDWA valve fitted to it. If that is in good working order, it may be cheaper to stick with the split system as changing to a single-line system will necessitate fitting a rear brake proportioning valve that fits to the rear subframe, as well as the relevant master cylinder. You will need to check whether the rear proportioning valves are still available. One option available if going for the single-line set-up is the fitment of an adjustable rear limiter valve to allow some fine tweaking of the rear brake effectiveness. The rear wheel cylinders of the 1994 car are the same bore size as those used

on the majority of disc brake set-up cars that use a rear brake proportioning valve. Don't be tempted to run without the proportioning valve unless you are prepared to invest in some new and pretty expensive smaller bore rear wheel cylinders. If you do not do this, you will have the rear wheels locking up when nail the brake pedal.

For my money, simplicity and the fact that those PDWA valves can cause problems that are difficult to pin down, I would go for the single-line system with an adjustable rear limiter valve mounted somewhere convenient, typically on the bulkhead support gusset next to the master cylinders.

SUBFRAME SPACERS

Q I'm about to refit the front subframe to my Mk1 and I notice there are no spacers. Mini Spares shows that there should be a metal spacer and in the SC Parts book I can see a rubber pad. Which should you fit? Are there any problems with omitting them?

"One option is the fitment of an adjustable rear limiter valve..."

HANDBRAKE WOES

Q My car always seems to fail the MoT on the handbrake every year. I fix it, only for it to work loose again a few months later. It has quite a new cable, reasonably new brake drums and shoes, and they have loads of meat still on them. It seems to be fine with the rear braking using the pedal, but it's just the handbrake that's really suffering. I've adjusted all the drums up and it's still struggling to give me three or four clicks on the handbrake. I'm out of ideas.

Julian Humphrey

A When the handbrake is correctly adjusted up, the lever should only make three or four clicks on the ratchet, so that is normal. With everything else adjusted up as you say, it is a bit weird it loses its strength after so

short a time. Though it may of course be down to a cheaply-made pair of operating cables - something us Mini owners are having to deal with on a depressingly increasing basis. One issue I came across recently concerning hand brake cables was that the return springs were way too long, preventing the handbrake being pulled on correctly. The spring was going coil-bound (solid) before pulling the actuating arm its full distance to properly engage the shoes on the drums. So that is something to check.

You have not stated any particulars about your car. If it has been rebuilt or messed about with by previous owners, it may have ended up with the earlier actuating levers that have a shorter lever arm - the bit that sticks out of the brake back plate that the cable connects to. This effectively lowers the leverage you can apply to the shoes. Later cars were fitted with



The handbrake actuating levers are shorter on earlier cars.

actuating arms that have a longer lever to increase the lever ratio and therefore the pressure applied to the shoes against the drums. It could be that at sometime somebody has replaced a whole radius arm from another car that had the shorter lever

on it, so you have one of each. That will not help matters. I don't know what the specific difference is in terms of measurement but I think the older ones are no longer available new anyway. The only ones available new are the longer-lever type.



A Getting the rubber pad question out of the way first – SC should ensure the parts book listing indicates that this rubber pad is for the later, 1976 and onwards ‘rubber mounted’ front subframes. The steel plate is needed on the pre-1976 solid-mounted dry suspension subframes to prevent the raised ridges around the mounting bolt threaded holes in the tops of the subframe towers from distorting the bulkhead. The underside of the bulkhead does not have clearance holes for these. I have never tried fitting one without the plates, but you could enlarge the holes in the underside of the bulkhead to clear those ridges. The other problems associated with mounting the frame without are a possible loss in positive location/alignment of the frame in the body, and issues with the front subframe to front panel and rear subframe leg to floor pan mounting hole alignment. I would think the rear legs would hit the floor pan before the towers fitted up against the bulkhead. This would mean something would have to distort to allow the relevant retaining fasteners to be done up correctly. There could be other fouling issues as well. It’s not something I would recommend without some detailed examination.



An MPI airbag-equipped steering wheel should have its electrics disabled before fitting to a non-MPi.

ROVER WHEEL

Q Does anyone know if a Rover MPI-type steering wheel can have the airbag removed from the centre without disturbing the centre? I want to fit the whole column, shroud, and switches on my earlier car, but I don’t want the airbag.
Damien

I have had a ring round on this one, as it is not something I have done, nor considered doing. My initial thoughts were to just leave the airbag installed but make sure the cables that connect it to the ECU on MPI cars under the rear

seat are disconnected from any possible source of electrical supply and tape the cable ends over individually. The airbag is deployed by a signal given from the ECU in the event of an impact. No signal, no deployment. Having spoken to several colleagues and friends, they all said pretty much the same thing – just install it with the cables cut and taped up. A couple voiced the possibility that it could deploy in the event of a heavy impact. But then that would work in your favour anyway as that’s what they are there for.

recommend for this sort of thing are Dave Yardy at Track Road and Race in Northampton (01604 624186), Steve Hoe at Tyre and Tech in Lincoln (01522 529972), Andy Harrison at Ace Speed in Shipley (01274 585803) and Andy at ML Motorsport (01474 825123).

SOLID REAR MOUNTS

Q Hello, I was just wondering what your views are on solid rear subframe mounts. Are they a step too far on a road/trackday car? The front subframe is solid mounted, so it’ll already be quite harsh for the road, but I’m not too concerned about that.
David

A Despite the standard items being made of nitrile rubber, they do not give as much movement as many believe. Consequently they are fine for a car used mainly on the road. I would, however, suggest solid mounting the rear subframe for cars being used in anger for trackdays and high-performance use. The reason for this is it is very likely that most owners will have gone to some

expense on solid mounting the front subframe and fitting adjustable suspension components to attain the optimum settings for their use. It would be somewhat pointless going to those lengths, then leaving the rear end to be somewhat less precise. The subframe mountings do not really do much to affect the actual ride of the car – that is mostly down to the suspension springs and the quality of the dampers used and how stiff they are set.

MPI STORAGE

Q I want to take my MPi off the road for six months or so. Not to work on it, but to just store it (don’t worry I have other Minis!) Are there any extra precautions I need to take with the ECU and extra electronics or is it OK to just leave the battery disconnected? I don’t want to mess it up when it comes to using it again.
John Amos

A Leaving the battery disconnected is no problem. The ECU will simply reset itself when powered up next time around.

WELD-IN CAGES

Q Hello, more of a personal interest question than a tech question, but how on earth do these racing Minis get their rollcages welded up all of the way round. I mean, it’s obvious with the bolt-in ‘cages that they are welded up beforehand and bolted in, but how are you supposed to weld the top when the roof is in the way?
Craig Holt

A Because the welded-in rollcages have to be fitted to the sill/floor pan on regulatory-sized reinforcing plates, the ‘cages are fitted, holes cut in the floor to drop it down through and the top sections welded up. Then the ‘cage is raised, the reinforcing plates fitted and welded into place, and the bases are welded to them.

BOOT FIXINGS

Q Hi Keith, thank you for all the technical help and advice you give us through the magazine. I have in the past used cable ties on the CV joint rubber boot. When I was looking on eBay, I found two tools to do a professional job. However there were no instructions with the tool and the supplier is unable to help me. Is it possible that you could do an article on fitting boot clips with these tools?
Peter Driver

Peter Driver

It might be an ideal for Mini clubs to share expensive diagnostic tools for injection cars.



POOR RUNNING

Q I have a 1996 Mini Cooper and it keeps conking out when I come up to stop, at traffic lights, junctions and such. I’ve had this before with my carb Mini when a carb rebuild sorted it out. But I have no idea what’s what with the injection system. Is there a diagnostic tool I can plug in to see what the issue is? I’ve changed the plugs, HT leads and cap/rotor arm but still no joy. I haven’t started down the fuelling route yet. I spoke to someone

else with an injected Cooper and apparently there’s a motor controlling the idle and that can go wrong?
Julian Snell

A Your best bet is to find out from your local Mini Club who in your area posses one of these diagnostic tools, as buying them is a little on the costly side unless you intend on keeping the car for a long time and carry out servicing and repairs on it yourself. Folks I would personally



You might not always need to change the rear brake cylinders when changing front braking set-ups.

SMALLER BRAKE CYLINDERS

Q I have a 1994 Mini with 7.5-inch discs and the backs lock up before the fronts. Am I right in saying that it has 0.75-inch rear cylinders, and I need to put smaller bore ones on, but which ones?

Josh

A A 1994 Mini would have the built-in servo, front/rear split (tandem) braking system fitted with the regulator/PDWA valve. If all this was retained and only the front discs changed to 7.5-inch ones, then there shouldn't be a problem, as the existing regulator/PDWA

valve will sufficiently regulate the rear braking. The servo'd 7.5-inch discs originally fitted to the Cooper S used 0.625-inch bore rear wheel cylinders in conjunction with a regulator fitted to the rear subframe. If you do not want to run with a servo and have removed the regulator/PDWA valve, then try the 0.50-inch rear wheel cylinders as fitted to the 8.4-inch diameter disc, single-line braking system without servo. Alternatively, where the standard regulator/PDWA valve has been binned, fit an adjustable regulator valve. This gives you some latitude of adjustment and retain the wheel cylinders currently fitted to your car.

A I have come across probably three different types of the standard metal CV boot gaiter retaining bands. One has a plain steel band with tabs on. The band is passed through, tightened, two tabs folded in, folded back over this and a further pair of tabs are folded in to hold the band end down. Another has a series of raised louvers in one end and tags in the other. When tightened, the tags engage the louvers and once tightened to the required point a pair of tabs are folded into keep them engaged. Lastly there is a type that is a complete band with a raised 'gate' section in it. This gate section is squeezed together to tighten the strap on the boot. All three really need special tools to fit them, as the manufacturers would prefer, though two of them can be done by ordinary tools. To advise on how the tools you have work I would need to have them in front of me, as I am not familiar with the tools you have shown. Rather than tie-wraps, I tend to use lock wire. Perhaps we should consider doing a quick tech on this subject.



GAUGE ADAPTER

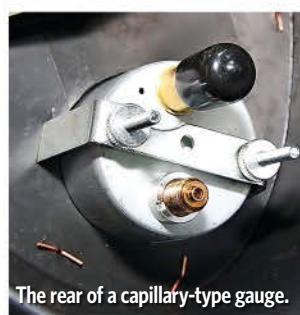
Q I've picked up an oil pressure gauge for my project, I've got the thing that screws into the oil pressure switch fitting in the block, and I have the metal pipe that attaches to the bag of the gauge. But how am I supposed to connect the two? Can I just connect up some hose or will it leak? And I've also bought an electric water temp gauge, so how do I convert from a

capillary one to the electric? I've removed some of the electric stuff and there was a nut and a spring on it. I hope you can help me.

Ken

A The original oil pressure gauge pipework features the two sections of metal pipe you already have linked by a specific rubber pipe, part number FAM2807, secured at each end by hose clamps, part number AAU1818 (two needed).

As for the water temp gauge question, Your description is a little confusing - you want to change from a capillary-type gauge to an electrical one, but then say that you removed the electrical one and it had a nut and



The rear of a capillary-type gauge.

gauge uses and make alterations accordingly. Pre-1990-ish Minis all had a separate voltage stabiliser fitted to the back of the clock pods. With the later Nippon-Seiki gauge equipped cars, the stabilisers are built into the gauges themselves.

"The design is somewhat fragile and prone to breakage..."

spring which sounds like the remnants of a remnants of a capillary gauge sensor. The capillary-type gauge has a long spiralled sleeve that looks like a spring to support and protect the micro-tube that transfers the temperature registered at the cylinder head (not the block) to the gauge. This design is somewhat fragile and prone to breakage from heavy-handed users. An electrical gauge works from a sealed one-piece sensor (sender unit) that screws into the head. The transmitting cable attaches to it via a spade terminal. To run the electrical gauge you will need to have a sensor that is compatible with whichever gauge you have decided to use. Some gauges will need to run through a voltage stabiliser, some have them built into the gauge. You will need to find out which system your chosen

SOLID CLUTCH PEDAL

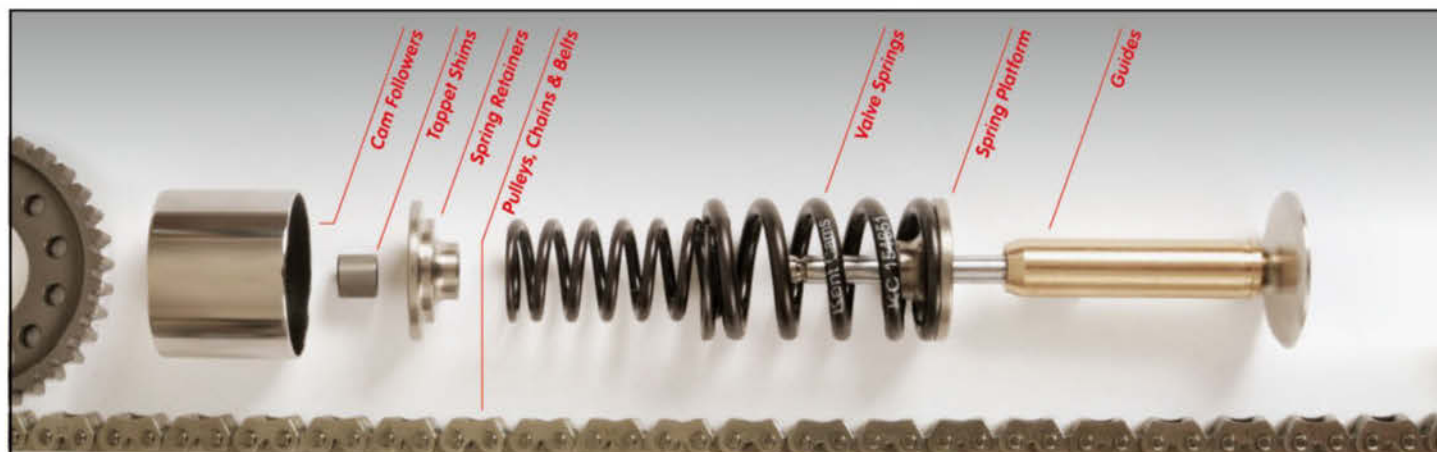
Q Hi Keith, I recently rebuilt my Mini, had the engine done and a full respray. Everything went well for the MoT but then having driven about for a while, the clutch pedal has gone rock solid. It was working fine, then I tried it again and now it's completely stuck. The car's got a Verto-type clutch and the hydraulics seem fine. I just can't get the arm with the two nuts on to move - it goes outwards, isn't seized up, but then goes rock solid towards the end. What do you think is up with it?

Dan Field

A The most typical reason for the pedal mechanism to go solid, when the pedal and hydraulics are in perfect working order, is the flywheel either coming off or the end of the

crankshaft has snapped off at the primary gear retaining C-clip groove. Perhaps the flywheel retaining bolt has come undone. The broken crankshaft end is not that common, but I have seen way more Verto/Valeo-clutch equipped engines suffer this fate than any pre-Verto/Valeo equipped engines. The breakage tends to be caused by the flywheel bolt coming undone. Quite why this happens to so many Verto/Valeo equipped engines I have no idea, as the torque setting for the bolt is the same as the earlier pre-Verto/Valeo set-up. Maybe it is something to do with folks not getting the locating key plate correctly positioned as this is much harder to do than on the pre-Verto/Valeo set-up. But then I have seen engines that have suffered this failure that have not been touched since they left the factory, even if the same issue may be the cause. Checking this problem out is straightforward - simply remove the starter motor and observe the flywheel assembly. It should be quite obvious if the aforementioned is the issue.

There is not too much else it could be by your description. It may be that the release bearing has collapsed, the outer race falling down and being trapped between the plunger/remains of the race and the thrust cup. It could be the thrust ball on the end of the clutch arm has broken off. The reason the mechanism goes solid in this case is because the tapered section the ball is machined on to jams in the hole in the release bearing. To check, remove the clutch arm by removing the clevis pin it pivots on in the casing and pulling the arm free. This can be a bit of a pain to do as, for some reason, the clevis pin retaining split pin is at the back of the casing, making access and sight very awkward. 



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SUBFRAME MOUNTS

£75 set

These billet alloy rear subframe trunnions are manufactured without the provision for a rubber or polyurethane bush, so you can solid mount your subframe. This would probably be a step too far for most road cars, but on a trackday weapon or race car, these will be very effective, especially if the front subframe is already solid mounted. Light modification may be required to these mounts if your subframe or subframe mounting points are out of alignment.

■ 01269 887117

■ www.owensfabrication.com



UPDATED CLUTCH ARM PLUNGER

£17.28

A heavy-duty version of the pre-Verto clutch lever arm plunger. This has been made for Mini Spares from high-spec EN24T steel for extra strength, as the standard replacement items can be a little weak for the job. Order as part number 22A180.

■ 01707 607700

■ www.minispares.com



CATCH TANK

£85

Owens Fabrications' alloy oil catch tank is shaped to fit neatly inside the offside inner wheelarch, up by the scuttle panel on Minis without fresh air vents. If your high-performance engine is plumbed to vent its crankcase pressure to the open air, you'll ideally want to fit an oil catch tank like this one. There's a plug in the bottom to then drain out any excess oil.

■ 01269 887117

■ www.owensfabrication.com



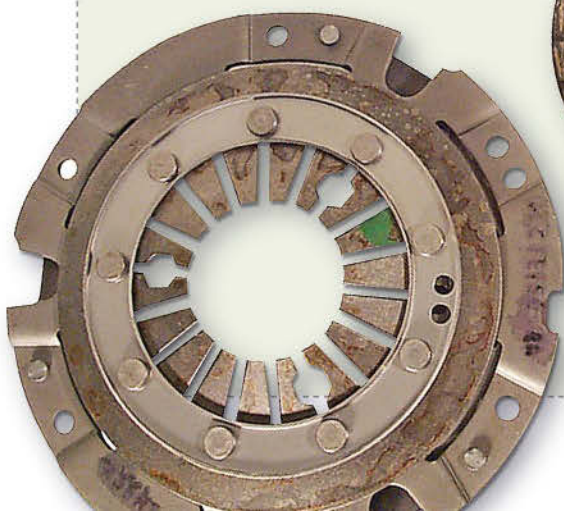
VERTO CLUTCH KIT

£91.76

After reports of poorly-fitting Verto clutch kits on the market, Mini Spares has released two new precision-engineered kits. Mini Spares says that you can rely on these fitting properly, saving any hassle if you've set aside a weekend for the job. There's a kit for Verto clutch-equipped 998s and one for post-1990 1275s. The 998 version has an AP 180mm diameter clutch plate, whereas the 1275's is 190mm. Both kits include a new release bearing and AP pressure plate.

■ 01707 607700

■ www.minispares.com



COIL PACK BRACKET

£37.25

Racraft Motorsport has developed this very neat stainless steel MPI coil pack bracket as a replacement for the standard steel version. It's supplied with all required fixings in matching stainless steel and comes polished up for some durable under-bonnet shine. The bracket would go nicely with the top hose clips we featured in the last issue.

■ 01707 654177

■ rmsdevelopment@hotmail.com



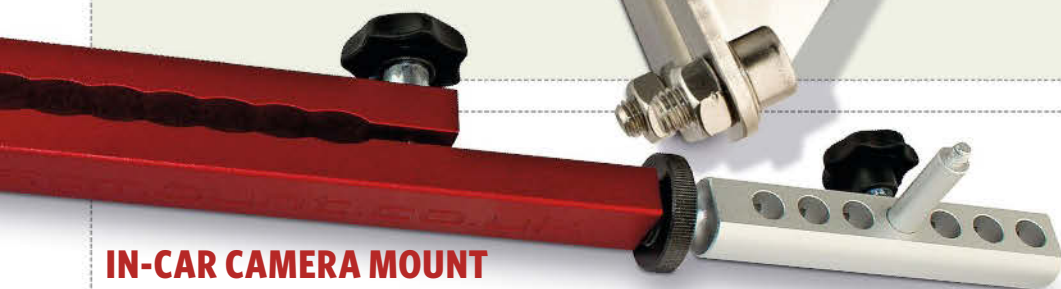
IN-CAR CAMERA MOUNT

£120

GoPro digital video cameras are pretty easy to mount in a Mini using a sucker cup, but if you have a heavier camera, like a DSLR or high-quality digital video camera, mounting it securely and centrally in the car can be very difficult. Unlike suction cup mounts, this sturdy headrest mount is approved for trackdays and will fit a very wide range of cameras and standard car seats.

■ 07756 915693

■ www.headrestmount.co.uk



BULKHEAD PLATES

£7.20 each

Shiny stainless steel bulkhead blanking plates or pretty anodised alloy versions can look fantastic on a modified Mini, but sometimes you only need a standard replacement. Mini Spares now sells three different types of these steel bulkhead plates, so you can simply swap over any rusty bits when performing a standard-spec restoration. The three different versions are pictured below.

■ 01707 607700

■ www.minispares.com



STEERING LOWERING BRACKET

£54

DSN Classics has developed this sturdy-looking steering column drop bracket as part of the RetroSport range. The bracket replaces the entire standard unit on the parcel shelf, rather than traditional drop brackets which are added to it. The fixings are recessed for security and the bracket extends with a unique sliding mechanism, so taller drivers can sit further back in the car without stretching for the wheel. It's available in red, silver, black or blue.

■ 01953 455551

■ www.dsnclassics.co.uk



Alpine head unit

£229.99

Alpine single-DIN head units don't seem to have changed in appearance for donkey's years, not that it's a bad thing for us retro-loving Mini owners. But thankfully the technology inside has developed considerably over the years. The CDE-185BT packs a powerful amp, high quality CD deck and more source inputs than you can shake a stick at. Top stuff.

■ www.alpine.co.uk



Twin Weber service kit

£53.94

Webcon now offers a complete service kit for twin 38/40/45 DCOE Weber carbs, so if you have a carb-fed cross-flow head on your Mini, this will be a useful kit to hang onto for when rebuild time arrives. Supplied in the kit are all the gaskets, O-rings, seals and needle valves required for an overhaul.

■ www.webcon.co.uk



Pocket multimeter

£15.54

This pocket-sized multimeter from Sealey is ideal for basic circuit testing when on the move, or rather, when broken down on the side of the road! It features a flip-down lid for added screen protection and storage of the leads. The above price is a promotional offer valid until May 2014. Don't go on a long road trip without one in your tool kit.

■ www.sealey.co.uk



KEITH CALVER

Keith has been *Mini Magazine's* tech expert since we launched in 1996. Keith's Mini CV speaks for itself: he joined the motorsport scene as a Miglia competitor in 1978, before a five-year stint at the Mini Spares Centre (London) in the early '80s. Now independent, Keith builds race engines for numerous disciplines. His 1275 GT race car and sharing his vast amount of Mini knowledge are also main focuses.



Various alternatives of the original design have been produced over the years. Centre is the Mini Spares example. It's somewhat different to those produced by others, as various original design problems were addressed in its making. The majority of other options were pretty-much straightforward copies of the original.

CALVER'S CLASSROOM

OIL SUPPLY AND THE PICK-UP PIPE

Keith explains the ins and outs of centre oil pick-up pipes, how to fit one, and when they're required.

Recent discussions on the need for a centre oil pick-up pipe have prompted this feature, as I can't recall writing anything on the subject. I've covered oil, what it does, how it does it and which is best suited to the A-Series, and some time ago I did a bit on oil pumps. But there's been nothing specifically on pick-up pipes and oil starvation.

Almost as soon as the first Mini hit the road and owners started taking advantage of its astonishing level of grip, one design fault - if you could call it that - was discovered. Attacking any right turn with verve would have the oil light flickering on, or the oil pressure gauge needle dropping to zero. Both instances indicated a moment when no oil was reaching the crankshaft and associated components. The metal surfaces being starved of their lifeblood, the oil, is clearly not a good thing. When this occurs occasionally for a nano-second, little harm is usually done. But when it occurs for more protracted periods, such as when hurtling round roundabouts, or long sweeping curves when competing, oil starvation will cause

dramatic, costly and feasibly terminal damage to the crankshaft, con-rods and bearings.

The design 'fault' was having the oil pick-up pipe that draws the oil out of the gearbox (sump) positioned in the front right corner of the gearbox. Sir Alec never envisaged the little car to be driven at anything more than a sedate, fuel conserving pace, so it's not a design fault as such. The design was certainly more convenient for easy assembly on the production line.

For those seeking to exploit their Mini's cornering capability, something needed to be done however. The result has become known as the centre oil pick-up pipe (COPUP for short). Instead of drawing oil from the corner of the gearbox, the pipe was extended using a curved section to the centre of the gearbox. Providing the oil level was kept at the correct level, this ensured a constant supply of oil, no matter how furiously the car was cornered.

EARLY ATTEMPTS

The very first COPUPs utilised the existing standard upper section with the necessary

flange and its two threaded holes that hold it in place. It traversed the gear assemblies, then bent downwards to where the original oil filter gauze is sited. To this was added another section of pipe that turned the pipe towards the centre of the gearbox with a wire gauze tube fitted to the end to filter out debris. The filter gauze is essential in the A-Series because the oil gets to the pump before the filter. Too many particles getting to the oil pump will eventually destroy it, the result being no oil pressure.

Those early COPUPs were fine, providing the joint half way along the pipe was airtight and well done. If not airtight, it would cause issues with drawing oil up the pipe, and if not strong enough it would fail in use for an instant oil cut off. The solution came along pretty quickly in the form of a purpose-made, one-piece COPUP, the vast majority being supplied by Abingdon Special Tuning. These sported a neatly-made gauze covering a slash-cut tube section, the open side facing the bottom of the casing. The march of progress and ever-improving technology has seen various



The tube bends are pretty important. A simple bend as per the pipe on the left causes the pipe to kink/ovalise, consequently reducing the internal cross-sectional area. This in turn reduces the flow capability. When shaped using a mandrel to give a proper bend, illustrated by the pipe on the right, flow capability is optimised.

versions of the COPUP produced from a number of companies, culminating in what is readily available today. Some stick with the original design but have tweaked the tube shape to fit later rod-change gearbox casings, some have really looked hard at the application and made design changes to optimise the product.

Typically this includes a much finer gauze as used in many race car oil systems, ranging from Formula Ford to Formula 3000 and many dry sump systems for touring car applications. This helps filter much smaller oil-pump damaging particles from the oil, yet does not reduce flow as some believe. If it did, it wouldn't be used in the aforementioned applications. And rather than a slash cut on the end of the pipe, the pipe is simply cut off straight giving a 360-degree access to the oil. This design gives approximately 25 per cent greater effective



The filter gauze needs to filter out as much debris from the oil in the gearbox as possible to protect the oil pump without restricting oil flow. It also needs to stay attached to the pipe and in one piece. Some steel meshes had a habit of fracturing from vibration, others fell off from poor quality fixing. Maximising the area for oil pick-up ensures constant oil flow. The pipe on left uses phosphor-bronze material with a straight cut-off end, the others use steel-based gauze and slash cut end. The one on the right has a very fine gauze less prone to fracture.

filter/supply surface area than the slash-cut type. It also allows cleaner oil to be picked up. The slash cut design causes pick-up to be made from the sludge and debris-infested area on the bottom of the gearbox. Consequently the 360-degree design gauze is far less prone to blockage. Some gauzes are made from a special phosphor-bronze material to prevent vibration-induced breakage. Contrary to popular opinion, the 'slash-cut' design does



The slash-cut end design with the gauze removed.

threads in the flange for a start. I'd like a pound coin for every thread I have had to de-burr or retap. Make sure the flange is flat and fits squarely against the mounting point on the casing without the pipe/gauze fouling on the bottom of the casing. Check the pipe for clearance all around it – through the web in the gearbox, which can sometimes have excessive casting flashing around it and likewise with the bottom of the gearbox.

Make sure a clearance exists between the reverse idler gear on the older remote-type gearboxes. When fitting to three-synco gearboxes it is necessary to modify the small laygear thrust washer to allow it to be fitted after the laygear has been rolled into place. The close proximity of the laygear to the COPUP prevents the gear from being rolled into place with that small thrust washer in position. The solution is to grind the two 'ears' of the thrust


"The slash-cut design does nothing to enhance flow or oil pick-up..."

nothing to enhance flow or pick-up – the pipe bore is the determining factor.

FITMENT

Fitting one is not terribly complicated, but does require the laygear to be removed – easily executed using instructions from a manual. I very strongly advise trial fitting the pipe with the laygear out of the way, including fitting the flange to gearbox retaining bolts. This is so anything that needs dealing with can be done without a vast volume of blue air! Check the

washer down by half so they clear the casting centre web when sliding it into place between the laygear and centre web. Place the engine on the gearbox, but before bolting it down, rotate the crankshaft a couple of times through the full 360-degrees to ensure crank webs and rods/bolts/nuts clear the pipe and anchor bracket – particularly on long-stroke engines.

When is one necessary? Fit one whenever the gearbox is rebuilt. It's essential for any form of performance/racing use, they're inexpensive and worth every penny. 



Original two-piece type pipe with a join half way up. This is when the standard OE pipe was simply extended to turn it into the centre oil pick-up pipe we are all familiar with today.



This is why the slash-cut end design can be fatal for the engine. Over-enthusiastic use of gasket sealant is a very common problem with engine builds, and the excess ends up falling into the gearbox and getting stuck to the underside of the filter gauze of the oil pick-up pipe. When this happens with a slash-cut end pipe, it could eventually cause a loss of oil flow and severe engine damage will ensue.



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Keith Calver
Minimag Tech Expert

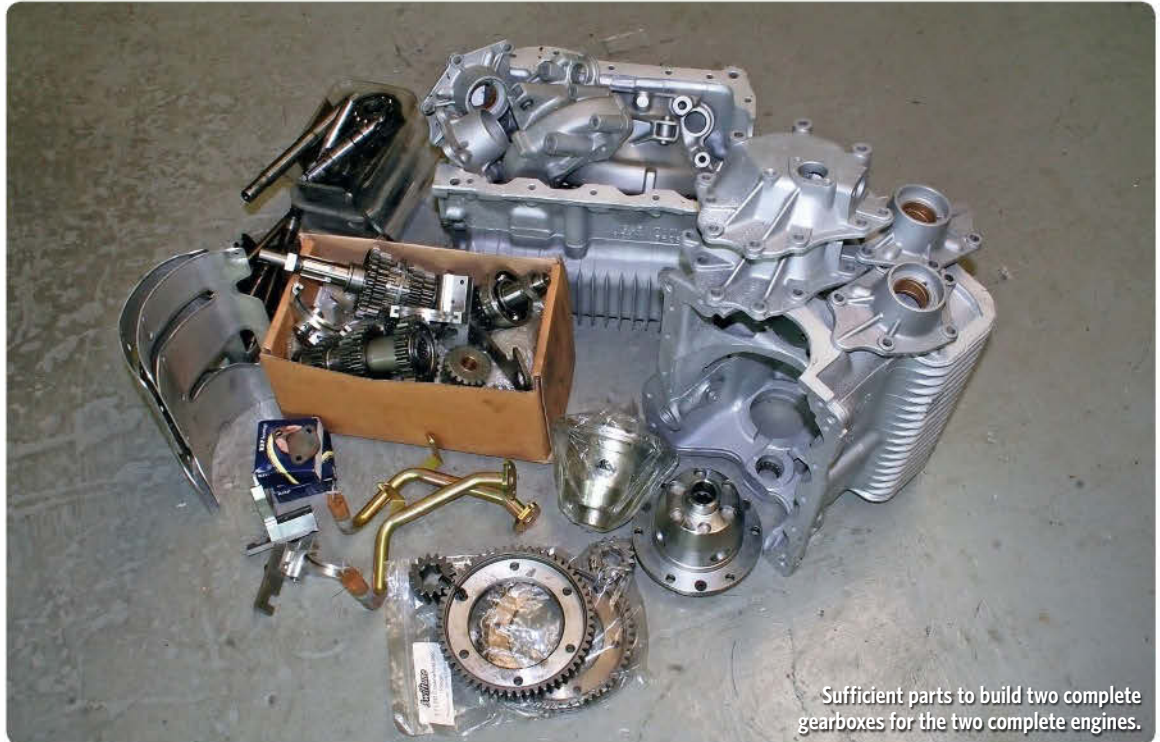
MINI LIFE Started out as 'a hand with the spanners' to my cousin Peter who'd just started racing in Mini Miglias. Spent fortunes at Mini Spares Centre building a couple of Miglias before joining the company for five years. During my 'Mini Life' I've had everything on the road from bog standard 850s to monstrous 1600s and every conceivable variation you can imagine in between.

MINI SPEC 1275 GT shell undergoing a serious diet. Initial engine will be 1380, trying out one of Swiftune's DC5 crank, rods and pistons kit. Cam will be a Graham Russell 308 full race cam using bigger diameter followers for reliability and accuracy of valve timing. New spec cylinder head done, 1.4:1 ratio solid rockers with 'W' shaped posts for extra valve train rigidity, MSC competition push rods. Starting season on a Weber 45DCOE on Manifold steel inlet manifold. MBE Race Engines dog box kit, MSC EVO drop gears and new Swiftune plate-type LSD. AVO dampers, 8.4-inch slotted discs, four-pot alloy callipers, Mintex F4R pads.

MINIS OWNED
1275 GT racer
1990 Mini City
1985 Ol' Red
1973 Clubman

Challenging find

Keith's assembled a collection of GKN Silverstone rims, but it hasn't been easy.



Sufficient parts to build two complete gearboxes for the two complete engines.

Having finally sorted out the project Mini I had been working on last issue, and despite having to work at lunatic speed during the day to catch up, I have finally got my evenings back. That's good news as I can now turn my attention back to the GT racer. A couple of evenings sorting through all the boxes of parts removed from the car when I did the stripdown was necessary to familiarise myself with the whole project. The good news is that I will have to spend very little to get the car rebuilt now. Aside from the stuff I removed being in serviceable condition, I spent quite a wad of cash at the beginning of last year collecting all the parts needed to build two full engine and gearbox units. This meant

"Getting hold of the rims has become seriously difficult..."

I'd have a full working spare should anything bad happen to one of them. One component was a second super-duper crankshaft. I went in with two friends to have a small batch of these made to get them at a sensible price, made to the original 'false mains' spec as developed by Graham Russell.

Elsewhere, although I have bought a set of the lovely MB split-rims in 6x12-inch, I have always really liked the old 1275 GT Challenge regulation rims – GKN Silverstones. I have been trying to buy up these rims for quite some time, and though I have

managed to put together 10 rims, getting hold of them has become seriously difficult now. It hasn't been helped by Swiftune building a new replica of the Longman & Co. Patrick Motors 1275 GT, nor by Jonathan Lewis building a replica of his brother Chris' ex-1275 GT Challenge car, as featured last issue. It looks like I am going to have to make a set of wheel nuts, as I have yet to find some. But then I would want them in stainless steel anyway and the originals were never made from stainless...

But the bad news is that my welding mate has not had time to make my liquid fluxer, so it's back to making flux paste to carry on with the bronze welding of the shell.



Shiny new super-duper crankshaft for the second engine to back up my Swiftune DC5 equipped unit.



GKN Silverstone rims, part of my small collection.

To do list

1. Resume bronze welding the shell back together.
2. Get a new rear subframe.
3. Contemplate some front suspension geometry changes.



Jeff Ruggles
Editor

MINI LIFE I'll run out of fingers and toes if I try and count all the Minis I've had. I love to spend all my spare time working on them, although progress can be tricky as my lock-up is 200 miles away from where I live!

MINI SPEC At present I own six Minis in various states of repair. Currently only a couple are road legal, although I'm working hard to change all that!

MINIS OWNED
1995 Sidewalk



1994 Mini Sprite



1970 1275 GT



1971 Mini 850
1972 Mini 1275 GT
Mini Innocenti 1001



Blast of happiness

Power Park Autos works its magic on the 850, and Jeff tweaks the Sprite.

Last month I reported that I was as happy as Larry with the underside of my 850 project after all the underseal had been stripped off. Well now I'm happier than Larry's even cheerier cousin, for it's since been shot-blasted and etch primed to great effect by Power Park Autos in Banbury (see page 79). Given that I'm used to tackling gaping holes in bodyshells half its age, I'm understandably delighted.

On top of the car, Power Park also went round the seams and edges,

blasting any areas which might be a concern. I was particularly worried about the roof corners and bits of the bulkhead, but both have survived unscathed – albeit with quite heavy pitting. I also discovered a few rust patches on the roof, which were lurking under a nasty coat of aerosol. These weren't blasted, as it would've most likely caused the panel to warp out of shape. Here's hoping I can sort it all without any drastic surgery.

After blasting, the shell was transported to the Mini Magazine



Valance closing plates will need work...



...but the new doorskin lines up well.



The offside wing/scuttle join will need sealing up to match the nearside.



Most of the metalwork is in great shape, especially inside the wheelarches.



Holes drilled in the Sprite's thermostat.

To do list

1. Get the engine back in the Sidewalk and get it running.
2. Find someone to repaint the 850.
3. Resist the growing temptation to fix the crashed Sprite...



workshop for the very first time. Contributor Jon Hill has fabricated a neat dolly enabling it to be moved around, which also allowed it be rolled on and off the transporter with ease when being delivered. Again, a big thanks must go to Jon for all his hard work on the shell and fellow contributor Marc Stretton for going to fetch it for me – that's the second Mini he's dropped off at the workshop this month, following the arrival of an accident-damaged Mini Sprite last month.

Now within easy reach, I've been busy looking at what will need to be done before the shell is painted. Aside from the issues with the roof, I'll need to fit a suitable passenger door and tweak some of the panel gaps. One of the wing joins where it meets the scuttle is welded as per original, while the other has been left open. Ideally I'll need to weld it up to match, so that will require a bit of head-scratching in order to make a neat job of it. Just using filler is a big no-no, as it'll crack in no time.

Meanwhile, I've also got the Sidewalk to finish. Progress has slowed over the last month, largely due to being called for the dreaded jury service. Instead of fitting the engine as planned, I've spent all my spare time fettling my on-its-last-legs Fiesta daily driver to make it to court each morning. Still, I have at least found time to clean many months' worth of dust and muck off the Sidewalk, and doesn't it look better for it?

As for the Sprite, it looks like changing the timing cover gasket, oil seal and rocker cover gasket several weeks ago has cured any oil leaks – judging by my garage floor, at least. Sadly, they were replaced by niggling coolant leaks from the thermostat housing and the heater tap. The former was down to me disturbing things when I removed the radiator, and was easily sorted with a new gasket. However, the heater tap was more troublesome – it's the type that bolts directly to the head and genuine items are hard to find. I've

control the flow. It's a top quality item, but sadly the angle of the outlet combined with sturdy silicone hose pulled the heater valve too close to the throttle linkage, as it necessitates running the heater hose behind the rocker cover to look correct.

So I've gone for the arrangement fitted to late 998 cars instead, where the hose runs around the front of the rocker cover. This meant I needed an upright take-off for the cylinder head. DSN make these too, but as I was short of time I bought an OE-type item from MiniMine at the Brooklands Mini Day for just £6.50. My car doesn't have a bypass hose and this set-up has no provision for coolant flow before the thermostat opens, so I've had to drill six 3mm holes in the thermostat's peripheral ring to ensure it all works.

The only silicone hose I had of the correct bore to plumb it all together was bright metallic pink, but it's allowed me to get everything connected and verify it all works. Some blue hose is on order, and then

“The only silicone hose I had of the correct bore was bright metallic pink...”



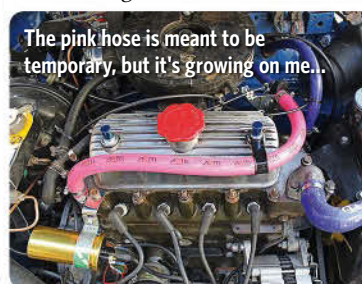
Progress? Not really, but at least the Sidewalk looks better for a good wash!

heard several reports of repro items weeping coolant in the same way as mine, so an alternative was needed. I considered blanking off the outlet on the head completely and going back to the car's original set up, which has the heater outlet on a sandwich plate under the thermostat housing and a plastic inline valve instead. Neil from Minidivision kindly sent me the necessary parts to get cracking too, but then I had a change of heart.

After having a word with Keith Calver, I've decided to keep a water outlet in the traditional position, as it provides better cooling across the head and helps prevent number four combustion chamber/cylinder from getting too hot. For a suitable take-off, I bought a neat RetroSport alloy outlet from DSN Classics with the idea of using the inline valve to

it'll be time for a few more stainless fittings and a good engine bay spruce in time for the summer.

Lastly, I've been sent a nice birthday present by Sticky Fingers Decals in the shape of a neat leather fuel filler bib. These have been popular in Japan for decades, and really look the part on a retro-themed build. They're available in six different colours, with any motif or design. As you can see, I've gone all promotional with mine!



The pink hose is meant to be temporary, but it's growing on me...



Neat leather fuel bib from Sticky Fingers.

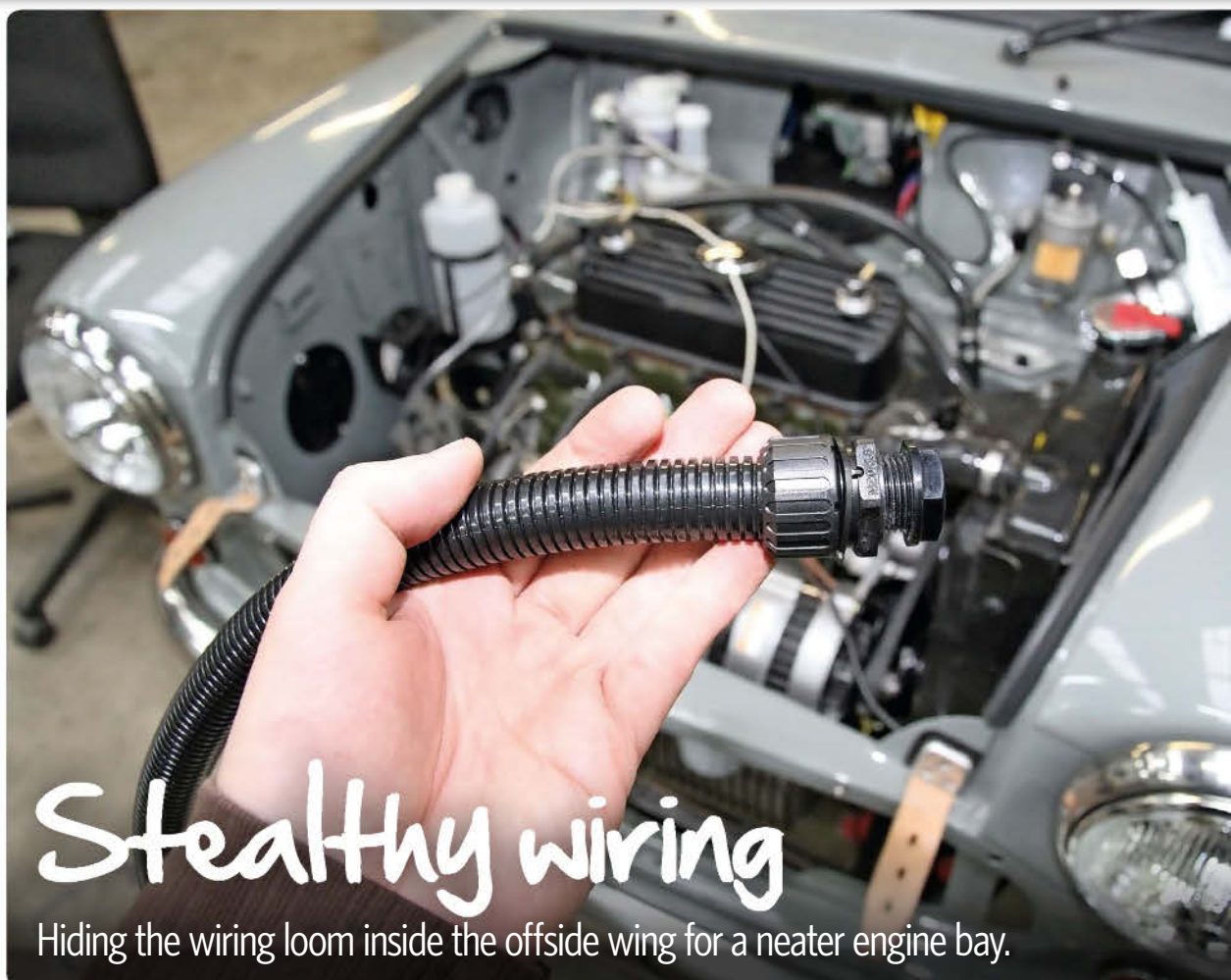


Stephen Colbran
Features Editor

MINI LIFE My Mini life began aged 13 with a SEGTO Junior race Mini, followed by the usual path of learning to drive in a Mini, joining a local club and getting involved in the shows. 13 years later, I've driven, photographed and written about some of the best cars on the scene. I've now got two project cars – a stripped-out trackday warrior and a supercharged MINI Cooper S daily drive. Both have their merits, but only one works...

MINI SPEC My classic Mini project car has evolved over 10 years from scabby daily drive to weekend ICE machine before its latest reincarnation as a stripped-out performance Mini. The R53 is a supercharged daily drive that's becoming faster and more enjoyable with each performance upgrade.

MINIS OWNED
Austin Mini 1330
R53 MINI Cooper S



Stealthy wiring

Hiding the wiring loom inside the offside wing for a neater engine bay.

Wiring, wiring and more wiring it seems. The plan to simplify and improve my Mini's electrics was ironically far from simple for a relative beginner, but so far it's definitely been worth the hassle. Last issue I mentioned the pre-'76 loom and that it only features two main fuses in an old fashioned box on the inner wing/bulkhead area. Simply chucking that in seemed somewhat at odds with the effort I've invested on the rest of the build, so once again, I headed over to 12voltplanet.co.uk, in search of a more effective solution.

I've always admired feature cars and well-prepped circuit racers with minimalist engine bays, the unsightly wiring hidden away so there's just the bare essentials on show. It finishes the car off nicely, even if the casual observer doesn't notice the difference.

The best way to do it, as far as I can tell, is to feed the main wiring loom inside one of the front wings and then under the bonnet slam panel, as usual. But you obviously can't just feed a bulk of wiring in such a vulnerable area, so I ordered up a reel of convoluted plastic sleeving for protection. Plastic P-clips hold it in place along the inner wing and a waterproof bulkhead fitting is a great idea where feeding it into the cabin. I haven't seen anyone using this particular bulkhead fitting before, but it looks good and does the job very well. On a standard car with fresh air vents in the cabin you'd be a bit more limited for inner wing space, but on

this one I'd already fitted some carbon-fibre blanking plates from Carbon Weezel, so that was the perfect place to drill a hole for the bulkhead fitting.

With the stealthy new cable routing in place, it was back to the loom itself. A new blade fuse box would be fitted inside the cabin to tidy the engine bay further, so the cable lengths in the loom were all wrong. But luckily I'd preempted that when it was stripped back last month, and prepared myself for a weekend of loom building in the *Mini Magazine* workshop. Haynes manual and tea at the ready, I got to work, and two days later it was complete. The best approach is to start

"The wiring is hidden away with just the bare essentials on show..."

A weekend down the workshop with a wiring loom and Haynes manual for company.



Convoluted sleeving for the inner wing.

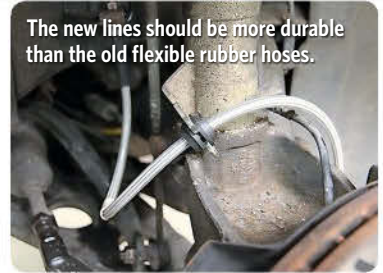
Hosetechnik braided stainless steel lines.



An upgrade to high-temperature DOT 4.



The new lines should be more durable than the old flexible rubber hoses.



"It was a good chance to test the hoses on a working car..."

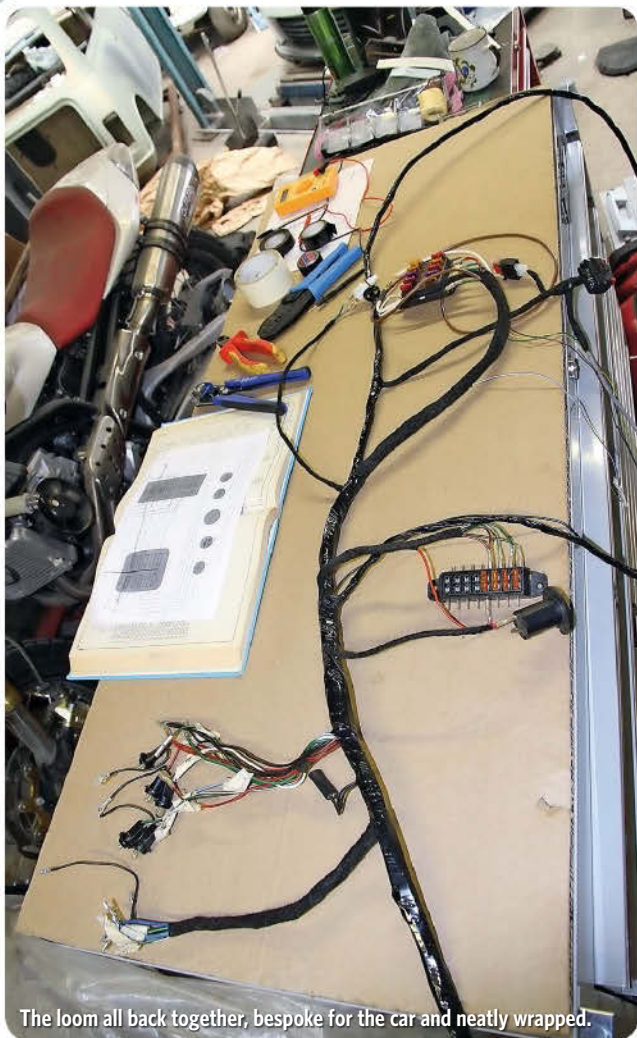
at the front, the connections to the headlamps, indicators, horn and whatever else is required on your particular car, and work back. Only wrap it all back up once it's definitely ready or, like me, you'll be unwinding it all again to add and remove wires you've forgotten about. It's slow work requiring much concentration.

I decided to also integrate the harness for the Specialist Components ignition ECU and Stack tacho to keep things neat. Then it was all pulled taught and wrapped in non-adhesive black loom tape. This stuff works great, but you need to wind it on as tightly as possible for the best factory-look finish, and then stick each end down with normal PVC sticky tape.

Now I've just got to feed a permanent live from the main battery cable to a distribution box and on to the ignition key, horn and headlamp flash circuits. There's also a plan to fabricate a panel on the dash for easy access to the new fuse box. So after all the work, I've realised that making a simple wiring harness is definitely not the most simple option; if you want to truly simplify matters, just install a standard one! But that's beside the

point – it's a bespoke loom now.

And a quick note on the project R53 – I've just fitted up some sexy stainless steel braided brake lines from Hosetechnik, the same type as fitted throughout the grey car. It was a good chance to actually test the hoses out on a working car and sort a brake fluid upgrade at the same time. For road use, there's not a huge difference back-to-back with the rubber flexible hoses, but they should provide a firmer pedal over a much longer lifetime. They look much better too. A very sensible upgrade for the long-term then. 

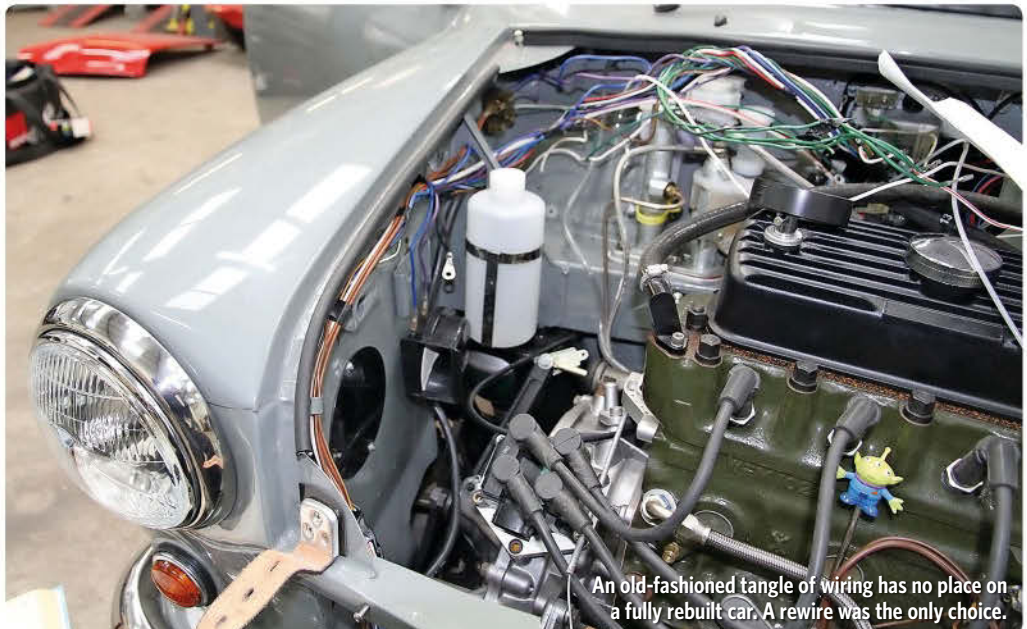
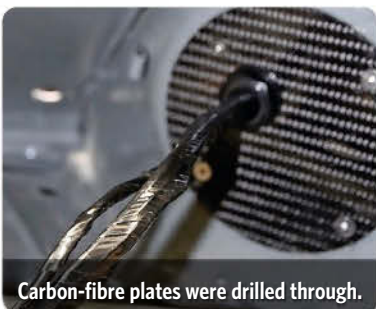


The loom all back together, bespoke for the car and neatly wrapped.

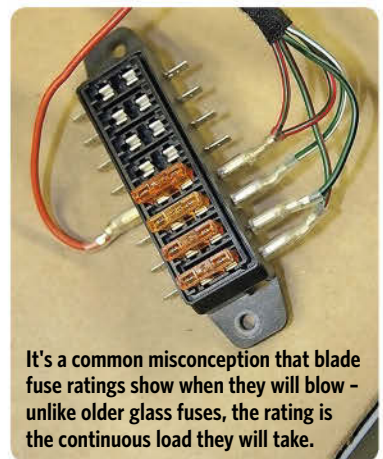
Non-adhesive loom tape pulled taught.



Carbon-fibre plates were drilled through.



An old-fashioned tangle of wiring has no place on a fully rebuilt car. A rewire was the only choice.



It's a common misconception that blade fuse ratings show when they will blow – unlike older glass fuses, the rating is the continuous load they will take.



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Barry Tilbury
Guest contributor

MINI LIFE I've been a part of the Mini community now for 12 years and own 18 Minis in total (I've had to sell some too believe it or not!).

MINI SPEC The Mini 55 project is to rebuild a 1970 Clubman Estate in time for the UK's IMM 2014 and to be displayed as part of the Clubman 45th celebrations. The car will be painted in its original Blaze Orange and built to the same spec mechanically as a 1275 GT.

MINIS OWNED

1970 Clubman Estate
Mystery Machine van
1960 MPi Domino
1962 Mk1 track car
1963 Mini Pick-up
1964 Harrier Hustler
1966 all-steel Traveller
1967 Minivan
1971 Mk1 Scamp
1972 Mini Shorty
1972 Mk3 Mini 850
1973 Mk3
1974 Clubman Estate
1974 Clubman Estate
1978 Mini Roadster
1982 Jiffy Pick-up
2004 MINI Cooper

The front inner arches are easy to access on the roll-over jig.



Kevin repaired the rear arch metalwork.



Barry's new spraygun might not be very big, but it's very effective.

Underfloor paint

Barry attends to the floor, prepping and priming it ahead of the respray.

Oops I did it again! I went to look at a set of glass for Project 55 and ended up buying another car! The new one is a 1974 Clubman Estate, so although it has a lot of early features like a twin-bolt front subframe, the floors are the later type. Having had a good look over it, I decided it was too good to break, as I first thought. So it looks like another project for later, although it will be a good source of much-needed parts for Project 55 in the meantime. It's just a shame that the trim is missing and the rear doors are not the best.

This month Kevin from Sussex Road And Race has fitted the rear closing panel and the rear wheel arch. Meanwhile I've been busy with the underside, and during a visit from my friend Will Budd, we spent a day

grinding down all the welds on the floors and the front inner wings (note to self: buy ear defenders!).

Next up was protecting it all. I opted for POR15 after being impressed with the results on the subframes. So the cleaning began, and first I used POR15 Cleaner Degreaser, diluted with water and applied with a squeegee bottle. After an hour I washed it off with water, and when dry I applied POR15 Metal Prep. This was applied neat, also with a squeegee bottle, and had to be kept wet for 20 minutes and left for another 30 minutes before being washed off with water. This is quite a cool product, and

when the water dries you find it not only dissolves the rust, it also etch-primers the clean surface and leaves a Zinc Phosphate coating (a grey chalky substance) that prevents further rusting. With POR15, I found that if you get it on your skin and it dries, the only thing that will get it off is time.

It was then on to the paint itself. I was going to be spraying this on, so to do this I purchased a small airbrush and a pressure regulator. Because I was using such a small paint gun, it was a lot easier to control the amount used, although it took longer. After a first coat I waited about 40 minutes for the paint to go tacky (almost dry)

"If it gets on your skin, the only thing that will get it off is time..."

and applied a second coat. I then waited overnight to let it dry properly.

After a meeting with Steve, the painter SRR uses for all of its restoration work, he expressed some concerns about painting over the POR15, mainly because it has a very glossy finish. So another call to Frost, the UK distributor of POR15, and it was recommended to use Frost's own primer as a coating. It's now time to get on with the next part of the project and push to get it painted so I can start to reassemble the car, where the fun will begin.



Barry and Will grinding away on the floor. The Clubman Estate's floor...

To do list

1. Rebuild the front and rear subframes.
2. Paint the shell.
3. Begin the long job of reassembly.

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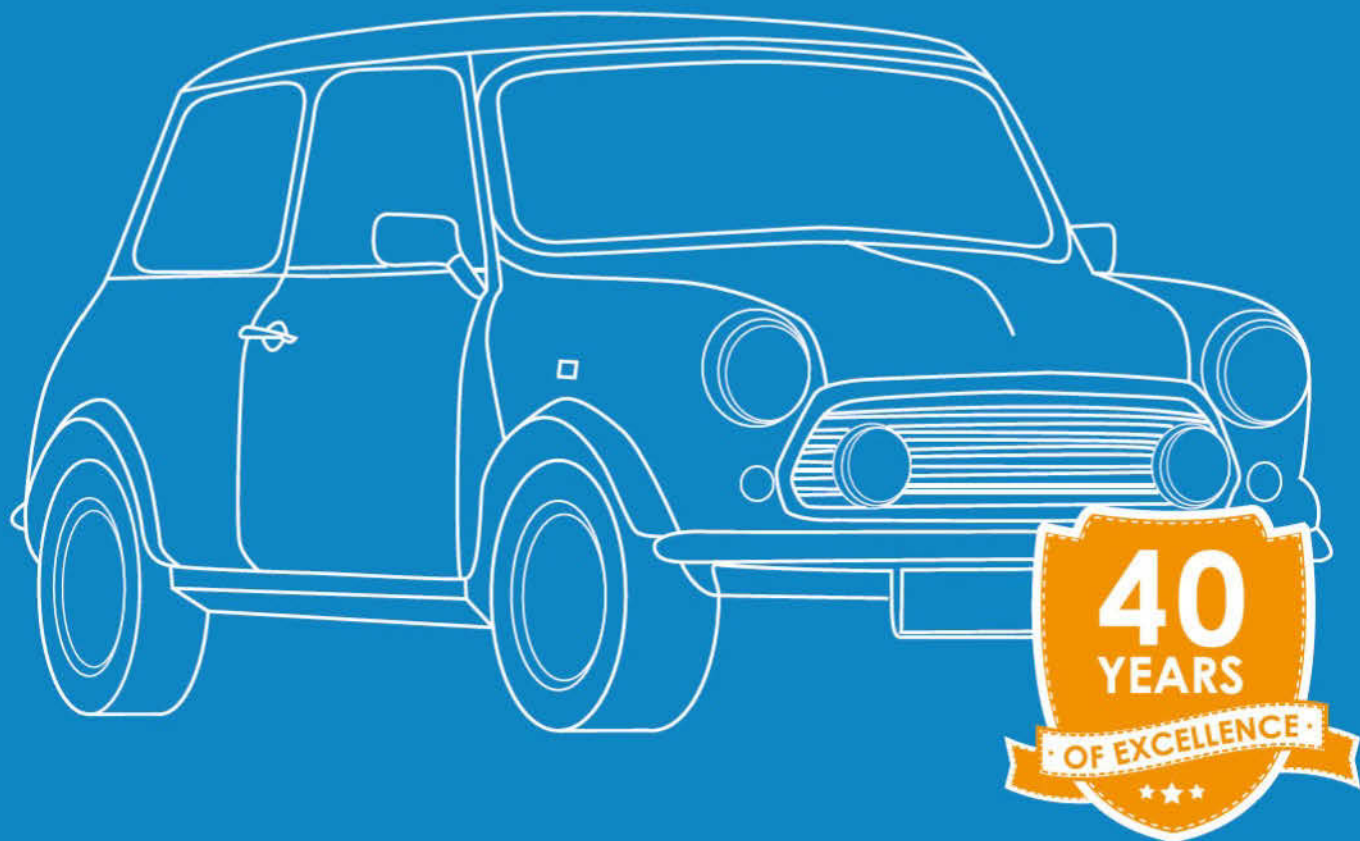


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► **1999 Rover Mini Cooper**, 12 months MoT, four months tax, 55,000 miles, two lady owners, good condition in Tahiti Blue, Union Jack roof, FSH. £3550 ono. 01373 858944. Westbury.

The price of late twin-point Coopers can vary wildly, but this one looks to be very keenly priced providing that rust hasn't taken a hold. The mention of 12-months MoT and a full service history are both plus points too, and the mileage is low at 55k.

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► **1991 Studio 2**, 48,000 miles, 998cc, MoT Dec '14, four months tax, complete rebuild and respray in RS Focus Green, new wheels and tyres, custom interior, many new parts including brakes and subframe, serviced, Waxoyled. £4695. meljervis@hotmail.co.uk



► **Mini 25**, 59k miles, genuine, resprayed, runs perfect, good interior, Minilites, nice brightwork, all 25 original parts inc. lots of history/paperwork, Tax/MoT. £4950 ono. 07546 939702. Bedfordshire.



► **Monte Carlo 1.3i LE**. E-mail Montecarlo4sale@icloud.com for loads of pics and full details. 55k, T&T, migration forces sale, must be seen, one of only 200 ever made. £4250. 07719 019747.



► **1993 British Open Classic Mini**, in excellent condition has been stored in garage, runs perfectly. 56,612 miles, tax may '14, MoT June '14. £5500. 07792 759523.



► **1994 Mini Cooper**, full year's MoT, new suspension cones and serviced, white Superlite wheels, walnut dash, angel eye headlamps, half-leather interior, Astrali steering wheel, in very good all round condition, no rust or any other issues. £2795. 01233 750508.



► **Matt-black wrapped Mini Sprite**. MoT 'til 6/1/15, 54,000 miles, one previous owner, good little runner, wiring for sub and audio system, tax expires June, few rust bubbles here and there plus small dent on driver's door. £2995 ono. dufftheborder@aol.com.



► **1991 Mini Mayfair**, two owners, history, many repairs and upgrades, slight rust to wings, daily driver, MoT. £2300 ono. 07973 481271. Deal, Kent.



► **1999 Rover Mini Cooper**, 12 months MoT, four months tax, 55,000 miles, two lady owners, good condition in Tahiti Blue, Union Jack roof, FSH. £3550 ono. 01373 858944. Westbury.



► **1991 Mini Cooper**, 43,000 miles, BRG, last of the carb models, new rad, clutch and steering rack RC40 exhaust and original standard engine. Good bodywork, small dent on driver's door, RSP extras, taxed with nine months MoT. £3600. 01803 526051. Devon.



► **1976 Austin Mini V8 Roadster**. 4-litre Rover engine, five-speed gearbox, 1400 miles from new, MoT March, tax June. £7950. 07709 707219. Hitchin.



► **1996 Mini Sprite**, 1275cc, only 53,000 miles, bodywork and paint needs attention. Good runner with solid chassis MoT until Oct 2014. Reluctant sale. £1749 ono. 07751 473404. Manchester.



► Fully-restored and re-shelled **1963 Mkl Morris Cooper**, year's MoT, 970 S engine, S running gear, been garaged since rebuild, except for shows. £11,000 ono. 07751 027928. Canterbury.



► **1995 Mini Sidewalk**, original, 1275 SPi, Charcoal metallic, genuine 41,000 miles, excellent condition throughout, totally unmolested and reliable, some history and original bill of sale, will have full MoT. £4750 ovno. 01512 012440. Wirral.



▲ **Tax exempt 1380**, 1000cc on logbook, powder-coated subframes, mint underneath, Spax, Cobras, new carpets, twin pipes, reliable, long T&T. **£2500 ono.** 07921 153122. County Durham.rral.



▲ **1973 Austin Minivan**, white, new interior, rebuilt to a high standard, MoT, tax exempt, sorry to let go. **£9650 ovno.** 01406 381145. Spalding, Lincs.



▲ **1992 Mini British Open Classic**, lovely condition, completely restored in 2008 at great expense, all done as original, used one day weekly since. Really nice, reliable car. **£3000 ono.** 07718 521276. Cambridgeshire.



▲ **12000 Mini Cooper Sport**, Tahiti Blue/white, burgundy red leather upholstery, chrome dashboard, electric roof, 53,000 miles, MoT Jan 2015, good condition. **£5500 ono.** 07786 078553. Peterborough.



▲ **1993 Rover Mini Sprite**, 1275cc, 49,000 miles, MoT Sept '14, tax Aug '14, reliable runner, recent service and exhaust, very original car, used daily, garaged, slight TLC required, good interior. **£2600.** 07779 061264. Taunton.



▲ **1994 Mini Monte Carlo**, celebrate the Monte 50th anniversary with this Limited Edition. Tax and MoT, service history, restored 2009, two owners from new. **£5900 ono.** 07994 377340. Aberdeenshire.



▲ **1993 British Open Classic**, professionally built in 2012 with new Heritage shell by Bill Richards, 1380cc fast road engine, carbon fibre roof, rollcage, Recaro seats, twin tanks, Mini Magazine cover car. **£10,995.** 07951 994909. London.

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▲ **Complete dashboard from a Metro**, complete with all dials and switches. Could be modded to fit a Mini. In excellent condition. £150. 0121 705 0849. Birmingham area.



▲ **1968 Austin Mini Cooper MkII**, Island Blue, Snowberry White roof, MoT'd June 2013, agreed insurance valuation of **£12,000**, other extras included. Sensible offers. 07944 698484.



▲ **Race-spec Mini**, known on the Mini scene, Mini Magazine featured, full spec available on request, too much to list, owned for over 10 years but only goes out a few times a year, garaged, new tax and MoT. **£4-6000.** 07780 817943. Kent



▲ **1974 custom built Mini '1275 GT'**, taxed and MoT'd, 47,000 miles, garaged, pop-on roof cover, three sets of wheels including Minilites and Mambas. 07884 106456. **£3000.** Guildford.

▲ **Set of six white eight-spoke Weller Wheels**, 7x13-inch, one unused, one hardly used (good tread on Yokohama A008 tyre), four used, complete with centre caps and nuts. **£175 ono.** 07779 061264. Taunton.



▲ **Mini 1380 hillclimb and sprint car**, race engine, lots done to Mini, phone for details, road legal car. **£2500.** 07778 452699. Devon.



▲ **1986 Mini**, rust free, 998cc, Stage 1, 12 months MoT, six months tax, full respray in Jaguar Tektite Metallic Grey, 6x12-inch Minilites, Sony CD player, 6x9s, classic bucket seats, rear rollcage. **£5500 ono.** 07972 857302. Nottingham.



▲ **1991 Rover Mini Studio 2**, 998cc, 81k miles, MoT 'til August 2014, tax Jan 2014, new exhaust system, sunroof, used most days. **£1200 ovno.** 01483 770442. Surrey.

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▲ **1987 Mini Advantage**, fully restored to high standard, Sportpack, brand new subframe, full respray, full new leather interior, many new additions, MoT September 2014, tax end of Feb 2014. **£12,495.** 07958 315990. Bradford.



▲ **2005 MINI Cooper S convertible**, automatic with black leather interior, only 20,000 miles. **£7499.** 07944 941700. Dagenham.



▲ **1991 Rover Mini**, 998cc 60,776 miles, red with white roof, grey interior, very good condition, taxed 'til July 2014, six months MoT, alloy wheels, alarm/immobiliser, recently fitted. **£4500 ono.** 07763 751709. Leicester.

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HOW TO DO IT!

All you need to do is send
your details with a photo
of your Mini or parts.
IT'S THAT EASY

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**Future Publishing,
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Beauford Court,
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with a photo to:
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HUDDERSFIELD SPARES LTD

www.minispares-online.co.uk

TEL: +44(0)1484 658524

GAZ SPAX SUPERLIGHT REVOLUTION ULTRALITE YOKOHAMA ALLEYCAT PROTECH CORBEAU WIPAC COBRA TAROX

TOP BRANDS AT
MINI PRICES



www.minispares-online.co.uk

Bridgecroft Mills, Tanyard Rd, Milnsbridge, Huddersfield, HD3 4NB UK

SUSPENSION



Rear Beam and Gaz coilovers	£312
Front Gaz coilover kit & brackets	£235
Front Protech coilover kit & brackets	£277
Gaz rear coilover kit	£172
Protech alloy rear coilover kit	£208
Rear replacement beam axle	£140
Front coilover brackets	£82
Coil Spring conv. front	£103
Coil spring conv. rear	£103
Coil spring conv. full car	£178
Coil spring conv. & adj ride heights	£235

Available in soft, std or hard

SHOCK ABSORBERS

Protech Billet steel	£51 ea
Protech Alloy	£51 ea
Spax adjustable low or std	£46 ea
Gaz adjustable low or std	£43 ea
GMAX	£19 ea
Set Gaz, ride heights & knuckles	£230
Set Spax, ride heights & knuckles	£240
Set Protech, ride heights & knuckles	£245
Set KYB, ride heights & knuckles	£104



Adjustable ride height full car	£52
Adjustable ride heights & knuckles	£60
Adjustable ride heights rear	£35
Adjustable ride height front	£30
Cone compression tool	£26
Knuckles ea	£2.75
Std engine mount ea	£4.75
Std bottom arm bushes (4)	£4.75
Std eng stab bushes (4)	£4.75
Std tie bar bushes (4)	£4.75
Std Front sub rear mount ea	£5.50
Solid front sub rear mounts pr	£15

DEFLEX BUSHES

Full Deflex kit	£29
Bottom arm bushes (4)	£6.50
Tie bar bushes (4)	£6.50
Quick release engine mounts	£21.50
Front sub rear mounts pr	£20
Rear sub bush & pin kit	£18.50
Pear drops pair	£13
Top tower mounts	£10.50
Bump stop pr	£10.50
Rear sub mounts	£10.50
Rebound rubbers pr	£7.50
Eng stab bushes (4)	£6.50
Ult engine stab bushes (4)	£6.50

CAMBER



Adjustable tie rod kit: Adj tie rods, adj rear camber brackets, bushes	£41
Adjustable camber kit: Adj bottom arms, adj tie rods, adj rear camber brackets	£99
Fixed kit	£89
Heavy duty spherical jointed arms pr	£99
Adjustable bottom arms pr	£59
1.5 deg fixed bottom arms	£49
Adjustable tie rods pr	£24
Rear adj camber brackets pr	£19.50
Lower arm sub pin	£12.50

SERVICE PARTS



Front wheel bearings each	£17
Rear wheel bearings each	£12.50
CV Joint outer	£19
Radius arm repair kit per side	£16.50
Top arm repair kit per side	£16.50
Ball joints top & bottom per side	£11
Rear wheel cylinder	£6.50
Front wheel cylinder	£6.50
Long track rod end	£6.50
Std track rod end	£4.50
Brake flexi hose disc	£4.50
CV joint hub nut	£3.75
Outer CV boot	£3.75
Inner CV boot	£3.75
Alternator from '96 on	£115
Alternator '80-'96	£58
Alternator uprated	£41
Starter motor pre engaged	£98
Starter motor inertia	£46

STEERING

Steering rack MK onwards RHD	£65
Steering rack gator each	£5.50
Steering column lower bush	£2.99
Steering column upper bush	£2.75

BRAKES

8.4" Discs and pads	£25
8.4" Discs, pads & pin kit	£29
8.4" Discs only	£24.50
8.4" Metro vented discs	£46
Tarox 6 pot kit	£750
7.5" Cooper S discs	£21.49
Alloy finned drums pr	£59
Brake drum std ea	£14
Back plate for rear drum ea	£25
Drum brake shoes	£12.50
Brake shoe spring kit	£4.50
Brake adjuster	£3.50
Stainless caliper pistons	£7.50
Caliper seal kits	£3.75
8.4" brake pads	£8.50
7.5" Cooper S pads	£14.50
8.4" Green Stuff pads	£20

EXHAUSTS

QUALITY STAINLESS SYSTEMS



Twin DTM	£114
Twin Supersport	£104
/ends to suit	£30
Side Exit	£92
Link upto CAT	£26
Link upto LCB	£30
Reducer pipe	£15

MILD STEEL

Side exit & link upto LCB	£46
Centre exit & link upto LCB	£46
LCB manifold	£45
Alloy inlet manifold	£33



ULTIMATE ENGINE STEADIES ea £24



STAGE ONE KIT

£156

MISC PERFORMANCE



Stainless quality sumpguard	£51
Alloy quality sumpguard	£40
Cone performance air filter	£16
Lift Reverse quickshift	£39
Std quickshift	£29

PANELS

Front foot well	£12
Full floor pan	£77
Front panel	£59
Bonnet	£81
Scuttle full	£49
Scuttle qtr	£16.50
Under scuttle	£7
Wing	£36
Door step	£8.50
Inner sill	£12
Outer sill wide	£13
Hinge panel	£12.50
More panels available check out our website	

Doorskin	£25
Doorskin alloy	£40
Door repair pan	£14.50
A panel van	£16.50
Seam capping	£7.50
Subframe rear	£205
Rear floor	£22
Boot lid	£60
Rear lower valance	
Mounting panel	£14.50
Rear side full	£21.50

WE STOCK A HUGE RANGE OF INTERIORS AND CHROME & BRIGHTWORK PARTS - CHECK OUT OUR WEBSITE
WWW.MINISPARES-ONLINE.CO.UK

Check out the website - special offers on wheels changed weekly

www.minispares-online.co.uk

Bridgecroft Mills, Tanyard Rd, Milnsbridge, Huddersfield, HD3 4NB UK

Other wheel & tyre combinations available on the website

5X10 MINATOR		6X10 REVOLUTION		6X10 ULTRALITE		6X10 MINATOR		4.5X10 COOPER REPLICA		WHEEL ARCHES	
WHEEL £57 PACKAGE FROM £349	colours: Black Chrome WHEEL £59 PACKAGE FROM £373	colours: Silver Anth Gold Black WHEEL £59 PACKAGE FROM £373	colours: Silver Anth Black Chrome WHEEL £59 PACKAGE FROM £373	colours: Silver Anth White WHEEL £59 PACKAGE FROM £349	10"/12" WHEELS Std plastic arches £25.00 Group 2 arches £42.50 W&P type arches £49.00 Group 4 arches £47.00 13" WHEELS Group 6 arches £49.50 Group 7 arches £59.00 Spock f/glass arches £85.00 Miglia type arches £59.00 ARCH ACCESSORIES Black Arch to body Sms £6.00 Full car chrome trim £26.00 Sill trim rubber both sides £9.50 5/5 side trims pair £15.50 Chrome flexible arch edging £15.50 Full car rubber trim £18.50 Fitting kit for Miglias £11.90 WHEEL ACCESSORIES Tapered or rounded nuts (16) £15.00 Tuner nuts (16) £35.00 Revolution Nuts (16) £25.00 Rover nuts (16) £25.00 Locks Economy £12.50 Locks quality £22.00 Centre caps from £10.00 Spacers & studs £16.00						
5X12 ULTRALITE SATIN BLACK WHEEL £57 PACKAGE FROM £349	colours: Silver Black Chrome WHEEL £57 PACKAGE FROM £349	colours: Silver Anth Gold Black WHEEL £57 PACKAGE FROM £349	colours: Silver Anth Gold Black WHEEL £47 PACKAGE FROM £349	colours: Silver Anth Black White Chrome WHEEL £57 PACKAGE FROM £349	USED PART EXCHANGE WHEELS AVAILABLE - ALSO NEW OLD STOCK - CALL FOR PRICES AND AVAILABILITY						
5X12 ULTRALITE	6X12 REVOLUTION 4 SPOKE	6X12 SUPERSTAR	6X12 REVOLUTION 4 SPOKE	6X12 SUPERLIGHT							
WHEEL £57 PACKAGE FROM £349	colours: Silver Anth Black Chrome WHEEL £59 PACKAGE FROM £414	WHEEL £59 PACKAGE FROM £414	colours: Silver Anth Black Chrome WHEEL £59 PACKAGE FROM £414	colours: Silver Anth Black White Chrome WHEEL £59 PACKAGE FROM £414							
6X13 ULTRALITE SATIN BLACK WHEEL £75 PACKAGE FROM £479	colours: Silver Anth WHEEL £79 PACKAGE FROM £479	WHEEL £89 PACKAGE FROM £499	WHEEL £79 PACKAGE FROM £499	WHEEL £79 PACKAGE FROM £499	WHEEL £79 PACKAGE FROM £499						
7X13 EXTREMES SATIN BLACK WHEEL £79 PACKAGE FROM £499	7X13 SUPERLIGHT DEEP DISH CHROME WHEEL £109 PACKAGE FROM £639	7X13 SUPERLIGHT DEEP DISH colours: Silver Anth Gold WHEEL £75 PACKAGE FROM £479	7X13 REVOLUTION MOTORSPORT WHEEL £89 PACKAGE FROM £519	7X13 ULTRALITE EXTREMES colours: Silver Anth Gold Black White WHEEL £79 PACKAGE FROM £499	7X13 SUPERLIGHT MATT BLACK WHEEL £75 PACKAGE FROM £479						
7X13 ULTRALITE SATIN BLACK WHEEL £79 PACKAGE FROM £499	7X13 ALLEYCAT WHEEL £79 PACKAGE FROM £499	7X13 SUPERLIGHT SOFTLINE colours: Silver Anth Black White WHEEL £75 PACKAGE FROM £498	REVOLUTION SPLITRIM WHEEL £285 PACKAGE FROM £1360	7X13 SUPERSTAR WHEEL £79 PACKAGE FROM £499	7X13 ULTRALITE WHEEL £79 PACKAGE FROM £499						
ALL WHEELS ABOVE CAN BE FITTED WITH A CHOICE OF THE TYRES BELOW - PRICES ON APPLICATION OR VISIT OUR WEBSITE FOR ALL COMBINATIONS											
145/80/10 £36.00 FALKEN	165/70/10 £54.00 A008 YOKOHAMA	165/70/10 £42.00 FALKEN	165/70/10 £56.50 A032 YOKOHAMA	145/70/12 £29.00 WINTER TYRE	145/70/12 £32.50						
175/50/13 £47.50 NANKANG	175/50/13 £89.00 SP2000 DUNLOP	175/50/13 £71.00 A539 YOKOHAMA	175/50/13 £101 A048R YOKOHAMA	165/60/12 £45.00 NANKANG	165/60/12 £45.00 FALKEN						
165/60/12 £58.00 A539 YOKOHAMA 165/55/12 £84.00 A048R YOKOHAMA											

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EASY TO FIND

2.5 MILES OUT OF HUDDERSFIELD

TURN RIGHT OPPOSITE VITALITY SIGN

200 YARDS TURN RIGHT AT FOUR HORSESHOES PUB

WE ARE ON LEFT HAND SIDE





www.midlandwheels.com 01926 817444

Telephone:

Cornwood Farm, Napton Road, Stockton, Warwickshire CV47 8HU Fax: 01926 817784 Email: sales@midlandwheels.com

Information

UK Mainland Delivery Prices: Set of 4 Wheels Only £17.87 Wheels & Tyres £22.98
Contact us or use our website for carriage charges for all areas outside UK Mainland.

* All prices include VAT @ 20% *
* STOCK SUBJECT TO AVAILABILITY *

Minilight - 10"



4.5x10" 6x10" 5x10"

4.5x10", 5x10", 6x10" From: £44.95
Various Colour Options Available

Minilight - 12"



5x12" 4.5x12" 6x12"

4.5x12", 5x12", 6x12" From: £57.25
Various Colour Options Available

Minilight - 13"



5.5x13" 7x13" 6x13"

5.5x13", 6x13", 7x13" From: £66.25
Various Colour Options Available

Mamba



7x13" 6x10" 5x10" 6x12"

5x10", 6x10", 6x12" 7x13" From: £52.06
Various Colour Options Available

Superlight - 12"



5x12" 5.5x12" 6x12"

5x12", 5.5x12", 6x12" From: £61.99
Various Colour Options Available

Superlight - 13"



7x13" Mk2

7x13", 7x13" Mk2 From: £78.55
Various Colour Options Available

Rally Special



12"/7x13" From: £64.39

Rose Petal



10" - 12" From: £92.10
Various Colours

D1



10"/12"/13" From: £52.52
Colour: Black

BRM



4.5x10" Price: £59.95
Colour: Black

Web Offer
20% OFF

All Tyres when purchased as apart of a Wheel & Tyre Package

*Please see website for terms & conditions

Mag



10"/13" From: £56.78
Colour: Black

Cosmic



6x10" Price: £68.78
Colour: Black

NEW - CSR



4.5x10" Price: £59.95
White & Silver