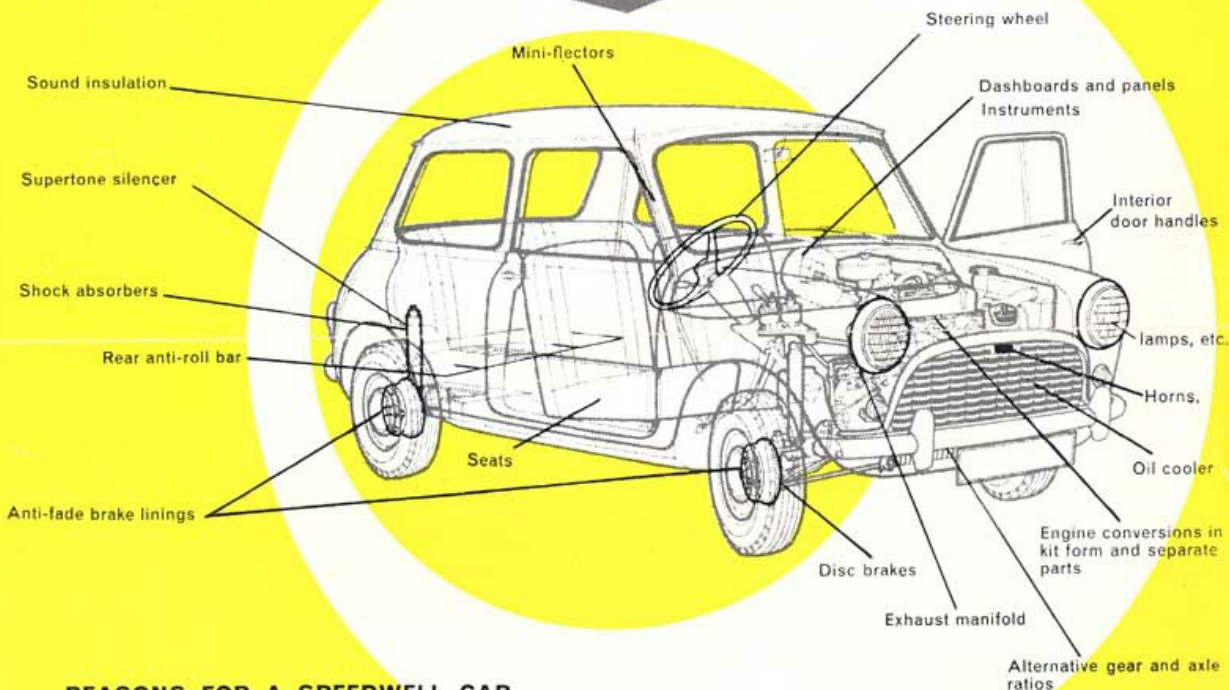


# Speedwell equipment for the austin seven    hornet mini-minor    mini-cooper elf              austin cooper



## REASONS FOR A SPEEDWELL CAR

You are a keen enthusiastic motorist. You want a car that is different. But your choice is limited unless you are willing to spend a lot of money. Probably you will decide on a mass-produced model.

How can you personalize your car—give it individuality—make it quieter—safer—faster—more comfortable and economical, or just plain different? The answer is: Have it Speedwelled.

Speedwell offer a wide range of accessories and performance equipment from which you can select the exact specification you require.

From the outside your car will look little different from any other apart from the small Speedwell Badge. But a mile behind the wheel and you will soon find out what Speedwelled means. A Speedwell engine conversion will give you the performance you want at a price you can afford.

For very little cost road holding can be improved—brakes can always be made better and there are lots of other parts, improve-

ments and accessories to make your motoring a greater pleasure than ever before. Since every Speedwell component is guaranteed for twelve months you can motor happily with fewer worries and the sure knowledge that Speedwell is ready to help whatever your problem and to back you with service and advice.

On the next page are full details of engine parts and kits with performance figures indicating the improvements of each stage. You will find it more economical to purchase complete kits rather than separate components.

On page 3 other parts are listed—suspension components, exhaust systems, braking equipment, additional instruments, etc. Separate leaflets are available providing full technical details of each item and a complete catalogue is also available covering all products, price 5/-.

Any BMC car can be supplied new fully modified to your individual specification. Further details on request.

Special parts are available for racing and rally enthusiasts. These are listed on the Racing Parts leaflet.

**Speedwell Equipment is sold all over the world and guaranteed for 12 months**

# SPEEDWELL ENGINE EQUIPMENT

## How to tune your car with Speedwell

Speedwell engine equipment is available in complete kits with all necessary parts required to improve engine performance to a specific stage of tune. Alternatively, all parts are obtainable separately and a parts list is available on request. However, complete kits are more economical to buy and they are designed to give a specific increase in power for a given outlay. As a general guide, and to help you choose your equipment, we list the recommended order of fitting, indicating the parts included in complete kits thus\*:

- \*Supertone silencer
- \*Valve springs
- \*Additional SU,
- \*Twin Amals or
- \*Weber carburettors with matching inlet manifolds
- Full-flow exhaust manifold



By replacing the standard silencer with the straight-through Supertone exhaust back pressure is relieved. Speedwell single valve springs are satisfactory up to 7,000 r.p.m. Fitting a second S.U. carburettor gives flexibility and economy with improved acceleration and top speed. Twin Amals give better acceleration and top speed with slightly less flexibility and higher fuel consumption. The twin choke Weber combines flexibility and economy with outstanding acceleration and maximum speed but involves a higher initial cost. The Mini-Cooper would certainly benefit by using these alternative carburetors. Fitting a three-branch full-flow exhaust manifold ensures maximum scavenging and lower combustion chamber temperatures.

- \*Light Alloy Cylinder head
- \*Oversize inlet valves

Rocker gear



The Speedwell light alloy cylinder head is an outstanding new design which provides 20% increase in power, exceptional flexibility and fuel economy. Excellent heat dissipation allow the use of a reliable 10:1 compression ratio. Unusually short flame travel result in a cool sparking plug even under continuous hard driving. Austenitic iron valve seats ensure long life. The extra power produced by the cylinder head calls for improved valves. Speedwell racing valves are world famous for quality and design. Oversize inlet valves are made of EN 52 steel and exhaust valves in KE 95S.

As an alternative a completely re-machined cast-iron BMC head with redesigned ports and combustion chambers is available on exchange at a slightly higher cost. Austin Seven and Mini-Minors should be equipped with twin carburetors before fitting a modified cylinder head. Mini-Cooper owners will start at this stage as these cars are already fitted with twin carbs. The Speedwell rocker gear has an effect similar to fitting a high lift camshaft, it will maintain the characteristics of the standard cam but with accelerated opening and closing rates. The complete set comprises 8 rockers and 4 pillars with adjusting screws which are fitted to the original rocker shaft and studs.

- Camshaft
- Oil cooler
- Increased engine capacity
- Oversize pistons and liners
- Balance crankshaft assembly
- Clutch springs

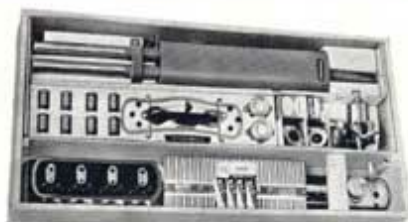


The engine above the block has now been suitably modified and for further improvements it will be necessary to change the camshaft. The Speedwell high speed CS2 cam permits the use of higher r.p.m. with better acceleration and maximum speed due to higher power output at the cost of slightly less flexibility below 3,000. The high torque CS4 cam gives terrific acceleration and flexibility up to 6,000 r.p.m. Increasing the capacity is the simplest way of improving engine torque. Special pistons and liners increase the Mini to 950 c.c. and Mini-Cooper to 1,100 c.c. Boring the block is a precision engineering job which should only be undertaken by a qualified machine shop. The Speedwell guarantee in this case applies only to cars modified by us. Balancing the crankshaft ensures a smooth revving engine and fitting Speedwell clutch springs will take care of the additional power to be transmitted to the gearbox.

## COMPLETE ENGINE KITS



Sport Kit



Grand Touring Kit

### SPORT KIT

30% better acceleration and a 10% increase in top speed are the features of the SPORT kit, intended as an inexpensive first stage. Instead of the second S.U., twin Amals or a Weber carburettor will give further improvements. Note the total value of this kit.

Contents		£4 9 6
Silencer	..	£9 10 0
S.U. carb.	..	£1 17 6
Air belts	..	£2 18 0
Valve springs	..	£5 0 0
Inlet manifolds	..	5 0
Balance pipe	..	£1 17 0
Linkages, etc.	..	£1 2 4
Choke cable	..	17 6
Splash plate	..	15 0
Moly slip	..	5 0
Nuts and bolts, etc.	..	11 0
Gaskets and badge	..	
<b>Total cost of separate items</b>		<b>£29 8 0</b>

Sport Kit Price List		Fitting
S.U.	SA.1	£27
Amals	SA.1/A	£33
Weber	SA.1/W	£42

Performance Figures	0-50	0-60	Max.
Std. Mini	18 secs.	28 secs.	73 mph.
SA.1	14 ..	19.3 ..	79 ..
SA.1/A	11.3 ..	16.2 ..	82 ..

### GRAND TOURING KIT

This kit contains all Sport kit parts plus a Speedwell alloy cylinder head. A kit\* less carburetors and manifolds is also available for the Mini-Cooper (GT.A1/C). Air cleaners are available optional with all S.U. kits—35/- extra.

Contents		£29 8 0
Sport kit	..	£32 10 0
Cylinder head and guides	..	£2 14 0
Inlet valves	..	£3 18 0
Exhaust valves	..	£1 17 6
Special gasket set	..	£2 5 0
Plated rocker cover	..	£1 0 0
Sparkling plugs	..	
<b>Total cost of separate items</b>		<b>£73 12 6</b>

GT Kit Price List		Fitting
*Cooper SU	GT.A1/C	£47 10
Mini SU	GT.A1	£45
Cooper Amal	GT.A1/CA	£70
Mini Amal	GT.A1/A	£70
Cooper Weber	GT.A1/CW	£80
Mini Weber	GT.A1/W	£80

Performance Figures	0-50	0-60	Max.
GT.A1/C	8.7 secs.	15 secs.	88 mph.
GT.A1	11.8 ..	17.3 ..	81 ..
GT.A1/A	10.6 ..	15.4 ..	81 ..
GT.A1/CW	9.5 ..	14.1 ..	90 ..

### CLUBMAN TUNING

These items are not available in kit form but may be purchased individually (see also separate Parts List). It is obviously more economical to have all modifications involving an engine strip-down done at the same time.

Contents		£15 10 0	Fitting
Set of Hi-lift rockers	..	£11 0 0	£10 0 0
CS2 or CS4 camshaft	..		
950 c.c. pistons and liners (Mini)	..	£18 10 0	
1,100 c.c. pistons and liners (Cooper)	..	£21 10 0	
Boring block	..	£15 0 0	
New balanced crankshaft (Mini)	..	£18 10 0	
New balanced crankshaft (Cooper)	..	£20 10 0	
Balancing existing crankshaft assembly	..	£7 10 0	
Set of clutch springs	..	£2 5 0	
Oil Cooler	..	£12 0 0	

\* No extra labour charge if rockers, camshaft and GT kit are fitted at the same time.

Performance Figures	0-50	0-60	Max.
Complete specification	8-50	12-60	84 mph.
Standard Cooper	12.6 secs.	18 secs.	84 mph.
950 c.c. Mini	8 ..	12 ..	84 ..
1,100 c.c. Cooper	7 ..	10 ..	100 ..

# SPEEDWELL EQUIPMENT FOR MINI AND MINI-COOPER

## Suspension

### Rear Anti-roll bar

By fitting a rear anti-roll bar a tendency to understeer is corrected. Front wheel lift under hard cornering is practically eliminated. Manufactured from high grade steel and supplied complete with brackets, bushes, etc.

### Speedwell Telescopic Shock Absorbers

Speedwell telescopes not only last four times longer, they will not leak, break or go soft and they carry a unique 2-year guarantee. Four settings allow wear compensation or variation of ride characteristics from soft to hard depending on individual choice.



Rear anti-roll bar  
BMC.2  
Front telescopic  
TS/F 3352  
Rear telescopic  
TS/R 2326

Cat. No.	Price	Fitting
BMC.2	£7 0 0	£3 10 0
TS/F 3352	£8 15 0 pr	£1 0 0
TS/R 2326	£8 15 0 pr	£1 0 0

## Exhaust systems

### Supertone Silencer

Normal baffle-type silencers hinder the flow of exhaust gases and reduce the efficiency of the engine. The Supertone silencer with straight-through absorption allows these gases to escape freely. The twin chrome tail pipes are plated to British Standard for severe exposure and the body is stove enamelled in red hammer finish.

### Three-Branch Full-Flow Manifold

These tubular manifolds extract residue combustion chamber gases and assist scavenging. The result is no back pressure and maximum engine efficiency.



### Supertone Silencer

Mini	XS.1	£4 9 6	
Mini Traveller	XS.1/T	£4 9 6	
(Tank under floor)	XS.1/TF	£4 9 6	£1 10 0
Riley Elf and Hornet	XS.1/R	£4 9 6	
Mini Cooper	XS.1/C	£4 9 6	

### Full-Flow Manifold

Mini—all models	XM.1	£8 15 0	£2 10 0
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## Brakes

### Anti-fade Brake Linings

Fast cars need good brakes. These linings will stand repeated application without fading. Required pedal pressure is somewhat higher but not excessive. Supplied in complete sets mounted on shoes. Linings are concentrically ground.

### Servo Unit

Vacuum operated Servo unit takes most of the effort out of pedal pressure for those who like a light pedal.

### Disc Brakes

Complete set of front disc brakes as fitted to the Mini-Cooper. All parts required to modify existing drum system. No slow-down can be made for old parts.



### Mini anti-fade brake lining set

BK.A.1	£6 0 0	£4 0 0
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### Mini vacuum Servo unit

BKS.A.1	£12 10 0	£4 0 0
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### Mini front Disc brake kit complete

BKD.A.1	£35 0 0	£12 10 0
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## Instruments

### Water and oil gauge

There is no need to stress the importance of being able to keep a check on water temperature and oil pressure. Speedwell gauges are precision instruments with black dials clearly legible white figures and internal illumination. A combined gauge is also available. All instruments are 2" in diameter.

### Electronic Rev Counter

Nobody has equalled the quality and accuracy of the Speedwell transistorized rev counter. Requires only to be connected. Internally illuminated. Supplied complete with bezel and cables.

### Dash Panels, etc.

Panel are available to take a variety of instruments. Also small brackets to take single gauges.



### Temperature gauge

IT/W/12	£3 3 0	£1 10 0
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### Oil pressure gauge

IT/O/12	£3 3 0	£1 10 0
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### Combined water/oil gauge

IT/C/12	£5 10 0	£2 0 0
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### Electronic rev counter

IT/TC4/12	£31 0 0	£1 10 0
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### Single gauge bracket

ITP/15	9 6	5 0
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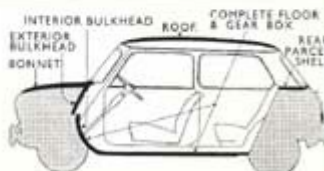
### Mini dash panel

ITR/25	£2 17 5	10 0
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## Sound insulation

### Sound Insulation Kit

Is there anything more wonderful than travelling fast but silently with a minimum of engine noise? The Sound Insulation Kit consists of thick felt pads for bonnet, bulkhead, floor and back shelf. Roof section available extra.



### Mini sound insulation kit

BP/S/A.1	£5 0 0	£1 10 0
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### with roof

BP/SR/A.1	£6 5 0	£2 0 0
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### Mini-Traveller sound insulation kit

BP/S/A.1/T	£8 0 0	£1 10 0
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## Accessories

### Mini-Flectors, 39/6 pr.



No more draughts with open windows.

### Sanor Horns, 79/6 pr.



Melodious blast for motorways. Supplied in matched pairs.

Relay 9/6  
Air Horns £14 0 0

### Interior Door Handles, 18/6 pr.



Does away with cables. Fitted in a few minutes.

### Headlamp Flasher Switch, 18/6



Mounted on steering column. Fingertip control. Maximum safety.

### Cibie Headlamps, £5 0 6



You can really see with Cibie. Asymmetrical dipping. Fit straight into existing housing. A simple adjustment and you have right-hand dip for the Continent.



De-luxe wood rimmed steering wheels. Available in two-spoke or three-spoke form with boss.  
Mini 2-Spoke SW2.A1 £10 19 6  
Mini 3-Spoke SW3.A1 £11 19 6

Please remember that separate sheets are available detailing each product.

### ORDER PROCEDURE

**How to order.** Speedwell equipment may be purchased from Speedwell Stockists, BMC Dealers, specialized tuning shops as well as direct. When ordering always state catalogue numbers as well as vehicle details.

Unless previously arranged, no components are supplied on exchange.

Though fitting charges quoted apply to our works only they give a good indication of approximate charges elsewhere.

Prices of engine kits and fitting charges do not cover parts that may need replacement upon dismantling and not included in kit specification.

**SPEEDWELL EQUIPMENT IS GUARANTEED FOR 12 MONTHS**