

Welcome to newsletter number 120, for February and March 2005



LANDCRAB

CLUB OF AUSTRALASIA INC.



Daryl Stephens 22 Davison Street Mitcham, Victoria, Australia, 3132 Ph: (03) 9873 3038



THE WIND BAGS

PRESIDENT

Vacant Ability to read and write
Helpful but not necessary
Applicants invited

DATA REGISTRAR

Peter Jones
4 Yarandin Court
Worongary QLD 4211
07 5574 8293
landcrab@tpg.com.au

PUBLIC OFFICER

Peter Collingwood
18 Lighthorse Cres
Narre Warren Vic 3804
03 9704 1822

SPARES CO ORDINATOR TREASURER LIBRARIAN

Patrick Farrell
4 Wayne Avenue
Boronia Vic 3155
03 9762 4457
farwar@ozemail.com.au

EDITOR / SECRETARY

Daryl Stephens
22 Davison Street
Mitcham Vic 3132
03 9873 3038
stephensdaryl@hotmail.com

SOCIAL CONVENORS

Brisbane Peter Jones
Melbourne Nil
Sydney Nil

Opinions expressed within are not necessarily shared by the Editor or Officers of the Club While great care is taken to ensure that the technical information and advice offered in these pages is correct, the Editor and Officers of the Club cannot be held responsible for any problems that may ensue from acting on such advice and information

Austins by the dozens

English trailblazer will
celebrate 100 years,
writes **JOHN WEBB**

THE largest gathering of Austin vehicles in the company's history is expected in the British midlands city of Birmingham next year.

They will rendezvous to mark the centenary of the founding of the marque and 100 years of continuous car production at Austin's Longbridge factory.

Herbert Austin founded the Austin Motor Company in 1905 and established its headquarters and production base in an unoccupied former printing works at Longbridge.

The company really boomed through World War I from 1914-1918 when the Austin workforce rose from 2000 to 20,000



Mover and shaker: an Austin 7 driven by A.C. Waite hit 80mph (130km/h) to win the first Australian Grand Prix at the old Phillip Island circuit in 1928.

people to meet demand for everything from armoured cars, trucks and ambulances to generators, searchlights, aircraft and munitions.

After World War II the company became part of the British Motor Corporation, British Leyland and — most recently — the MG Rover group, losing the Austin name along the way. No vehicles bearing the badge have been built since 1986.

The centenary gathering of Austins will take place at Croft Park,

opposite the main gate of the Longbridge car production plant, from July 8-10.

Birmingham City Council has already approved a parade of 100 Austin and Longbridge-built vehicles spanning the 100 years, from the earliest known surviving examples right up to the latest MG and Rover vehicles.

But many thousands of vehicles are expected to take part, from stately Sheerline limousines to tiny

Austin Sevens and Minis, taxicabs, military vehicles, Devons, Cambridges, 1100s, 1800s, Maxis, Alleghros, Montegos, sporty Austin Healeys, Princesses with their distinctive wedge-shaped front and even a replica Austin Whippet bi-plane from the 1920s.

The celebrations will also include a WWII Lancaster flypast, to mark the time when the Longbridge plant also built Stirling and Lancaster bombers.

**THE WORKFORCE
ROSE TO 20,000
PEOPLE TO MEET
DEMAND FOR
EVERYTHING FROM
ARMOURED CARS TO
SEARCHLIGHTS**

London Press Service

Editorial

Regular readers will no doubt be over come with sympathy when they read of our latest holiday incident. In the past, we have been

- stranded in Albury with a blown head gasket in the 1800
-
- stranded in Alice Springs with blown rear hydro units in the 1800
-
- stranded in Bordertown with a blown motor in the 1800
-
- stranded in Parkes with a blown front hydro unit in a Mk 11 Kimberley
-
- stranded in Batemans Bay when the clutch master cylinder went through the fire wall in a Rover SD1

We have also had these holiday dramas

- Swept out to sea at Nambucca heads
-
- Had a caravan catch fire and burn to the ground
-
- Reversed 20 ks down a mountain [Caravan attached] when a Kimberley refused to climb any more.

The current one? The 5 year old Holden Commodore VT with 110,000 ks on the clock dropped a big end just south of Gilgandra, [which is just north of Parkes].

The numbers being thrown around were \$5,000 for a new motor or \$2,000 to freight the car and caravan home, plus get us home. Plan B evolved- trade the thing in as, where is. The only car dealer in town, a Holden one, generously offered \$2000 trade in !

Found a motor broker in Sydney. After ruling out Magna's – they are truly awful and a too small Camry, we decided on a Falcon. We would never buy a Holden again. Not a problem, but he could get us a 2003 Commodore now or wait a week for a Falcon. Everybody has their price and ours was another week in Gilgandra.

The VY Commodore was duly delivered. Quite strange examining a car that we had paid for and never seen! The Good Book says that in all circumstances, we should Praise God. We are working on that!

On a more positive note, there has been a positive reaction to allowing 1100's into our club!.

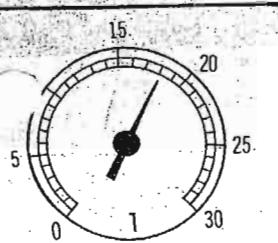
New member

John Hurdman

66 Duke Street Mk 11
Clarence Town NSW 2321

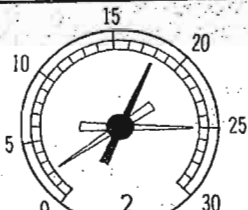
VACUUM GAUGE READINGS

AND THEIR MEANINGS



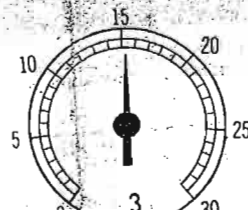
NORMAL MOTOR

Gauge reads between 17 and 21, hand steady, when motor idling.



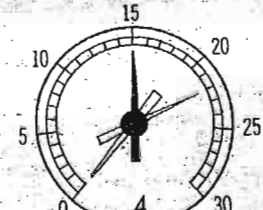
NORMAL MOTOR

When throttle is opened and closed rapidly hand falls to 2 and swings back to 24 or 25, falling back to normal idle reading steadily. Indicates rings and valves O.K.



POOR RINGS

Motor idling, hand reading steadily but two or three points lower than normal. This may also indicate inferior lubricant.



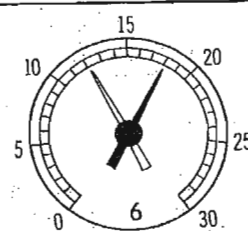
POOR RINGS OR INFERIOR LUBRICANT

When throttle is opened and closed rapidly hand falls to zero and rises to only 23 or less.



STICKING VALVE

Hand drops occasionally about four points at idling speed.



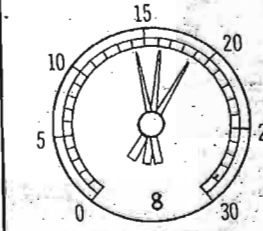
BURNT VALVE

Hand drops regularly by several points at idling speed.



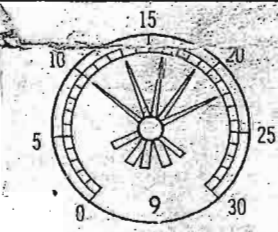
LEAKY VALVE

Hand drops two or three points when valve should close. Short circuiting individual spark plugs will indicate cylinder in which the valve is defective, when motor idling.



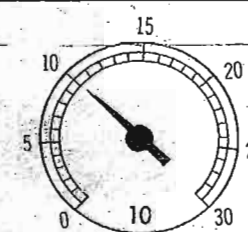
WORN VALVE GUIDES

Rapid vibration of hand between 14 and 19, when motor idling.



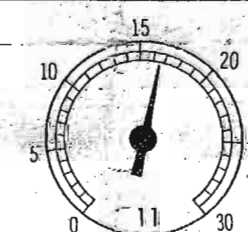
WEAK VALVE SPRINGS

Motor running fast, the hand registers between 10 and 22. Further increase of speed increases hand variations.



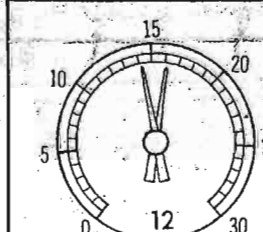
LATE VALVE TIMING

With motor running, at fast idle speed hand reads from 8 to 15 and remains steady.



RETARDED IGNITION

Hand gives steady reading between 14 and 17 with motor running at fast idle speed.



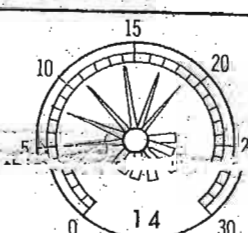
DEFECTIVE IGNITION

If hand moves slowly between 14 and 16 check for plug gaps too close or contact breaker points not synchronizing, at idling speed.



INTAKE SYSTEM LEAK

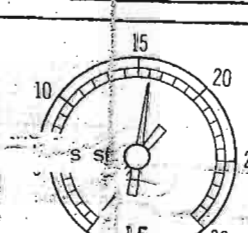
With motor running at idle or fast idle speeds, hand reads between 3 and 5. Check induction manifold gaskets.



HEAD GASKET LEAK

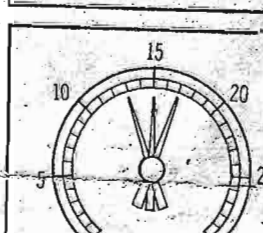
Leaking Between Cylinders.

Hand moves backwards and forwards regularly between 5 and 19.



EXHAUST SYSTEM BLOCKED

High rising when engine first started, falling back to zero or gradually increasing to about 15-16.



CARBURETTOR NOT ADJUSTED

Hand moves slowly backwards and forwards between 13 and 17. Check slow-running mixture.

IMPORTANT!

These readings are for 6 and 8-cylinder motors. In 4-cylinder motors, a slight fluctuation will always be noticeable. This can be overcome by fitting an ordinary petrol tap in the tubing, closing same slightly. This will correct fluctuations.

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AUSTRALASIAN STEEL PRODUCTS
PTY. LTD.

MELBOURNE

AUSTRALIA

BITS AND PIECES

By Herb Simpfendorfer

Rims and Tyres

You may recall my article about working with 1800 tyres. Neil Melville from W.A. wrote to me and said that the 13 inch tyres come off on the inside, i.e. the side opposite the wheel nuts. Quite correct. I work only with 14 inch rims, so missed this important point. 13 inch tyres come off on the inside, 14 inch tyres come off on the outside. I went out to my spare cars and had a good look at a 13 inch rim, and the shorter flat of the rim is on the inside, so the tyre has to come off on that side. This also explains why some of the diagrams seemed to be incorrect. They were for 13 inch rims, and not 14 inch rims. A guy at Bob Jane told me that there are only a very few tyres that come off on the inside like the 1800 13 inch.

Engine Mounts Modification

I've seen a fair few 1800s. and still come across modifications that I have not seen before. There would be an infinite number of possible modifications to this one model, so we could keep coming across new ideas for a long time yet.

Here is an interesting one. You would all know that the rear engine mounts (near the battery) are vertical, that is the metal pieces are up and down, and the rubber is glued to these pieces of metal. The original Mark 1 in England used only one engine mount at the back of the engine. Two were used when the car was modified for use in Australia. Having vertical mounts leads to considerable shear forces, which tends to separate the rubber from the metal.. This seems to be a weakness in the design of the engine bay, and few if any car makers (to my knowledge) used this configuration of mounts. Cars that I have seen have the metal pieces horizontal, or near horizontal, which minimizes shear forces. What is absolutely amazing is that some 1800 engine mounts that have been in use for many years are still on one piece!

A solution used by our club is to replace the rubber with neoprene, and an exchange system is available to club members. It seems very successful in that, as far as I know, in none of these has the neoprene separated from the metal, but the drawback is that neoprene is not as springy as rubber, so more engine vibrations are transmitted to the rest of the car.

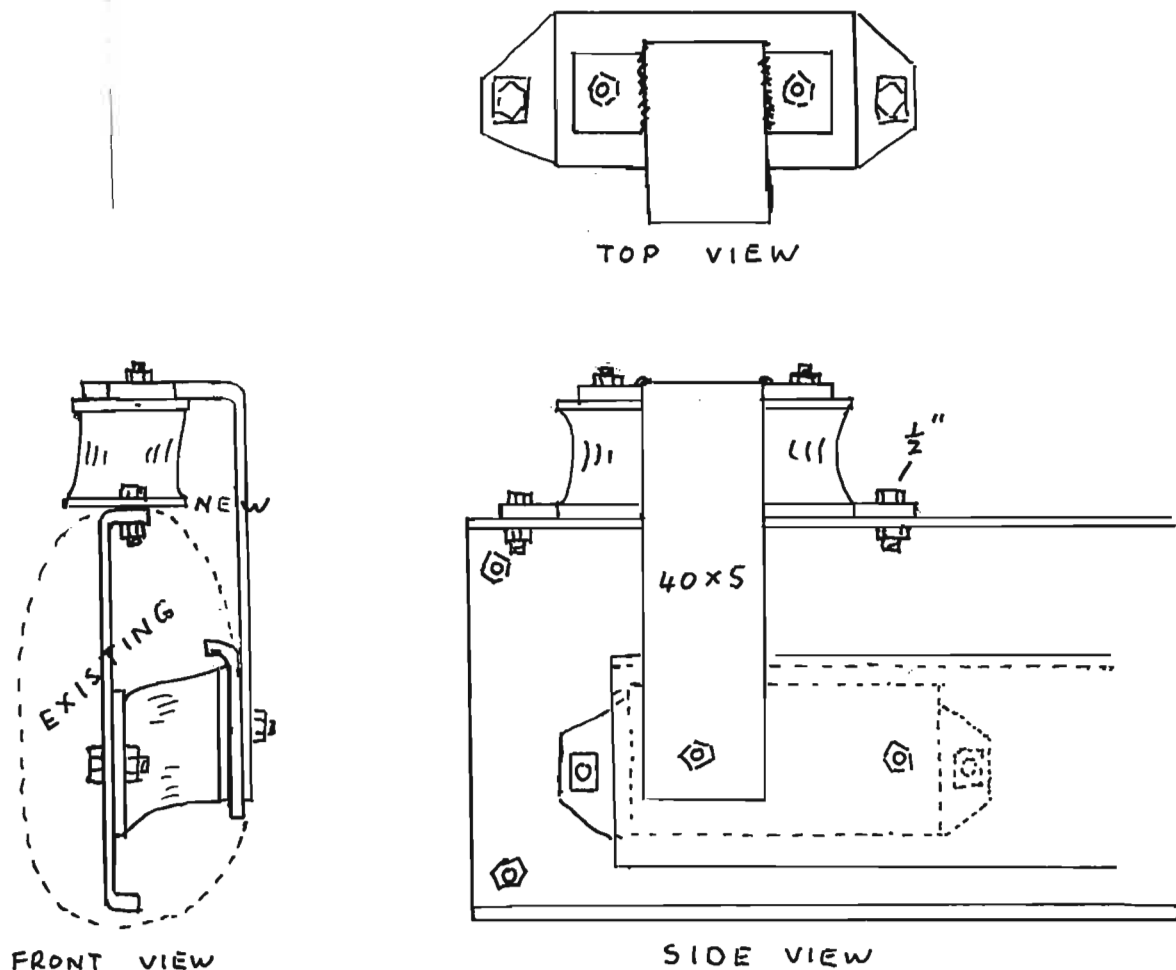
There is another solution, and it is to make a bracket to allow the rear mounts to be horizontal. This removes practically all shear forces and theoretically the mounts will not have separation of rubber from metal ever. I had often thought about this solution, but have not seen it done until the other day, so now know it can be done. To do this mod, two more rear engine mounts are needed, and if the rubber is partially separated from the metal, it does not matter. Some bits of flat steel and some 1/2 inch and 9/16 nuts and bolts are needed. Without doing any tests, I feel it would be best to leave the existing mounts in position. That's how it was in the car I had a look at, anyway.

The car I looked at had one piece of wide flat metal joining the old and "new" mounts. It had four holes in it. It looked quite cumbersome, probably stronger than need be. I looked for a simpler way of doing the same job, and came up with something that looks neat and is much less cumbersome.

The "new" engine mounts are attached to the same cross member to which the original mounts are attached, but are horizontal at the top of the cross member. They are attached with 1/2 inch bolts and nuts. A piece of specially bent flat metal then joins the old and the new mounts. In the car I saw with this mod, the shock absorber near the battery was removed, and a larger battery was fitted, but this may or may not be desirable to a particular owner. For me, the smaller battery normally fitted is adequate for the job.

See diagram on the next page for the way it turned out for me for the modification closer to the grille. A good sequence would be to bolt the "new" mount on first, then drill the bottom hole into the 40 x 5 flat. To find the correct place to bend this flat, bend it so that a lot of the weight of the engine is carried by the "new" mount. Lastly, add the small pieces which connect the bolts of the "new" mount to the 40 x 5 flat. Tack weld while the pieces are in position, then take the whole lot off and do a good weld.

Engine Mounts Modification (cont.)



For the mod. next to the firewall, a similar technique can be used, but some method of securing the rear of the "new" mount so that it is horizontal must be used, as the cross member there is not horizontal at the top, but has a downhill angle. Some packing, or an additional bit of flat steel will solve the problem. Working on this rear mod is much harder, as it is in an awkward spot.

Another way to reduce the shear forces on the rear engine mounts is to jam the rubber from two busted engine mounts between the bottom of the engine and the sump guard. If this rubber is not available, any rubber would do, for example pieces of the tread from a large tyre. The rubber pieces are put into place by undoing the front of the sump guard, letting it drop about 15 cm, putting the lumps of rubber in place, placed to support the weight evenly, then jacking up the sump guard and reattaching it at the front. The jack is necessary because the weight of the engine/transmission must also now be lifted a bit.

It helps, of course, if there are no oil leaks, since a lot of oil tends to change the consistency of the rubber.

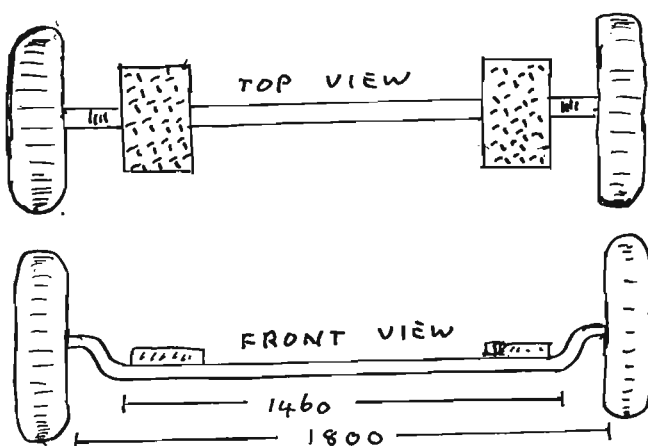
Moving an 1800 which has no wheels.

How can a car without wheels be moved from A to B? In New Guinea, you would get 20 natives and carry the car to the designated spot. They would sing a nice song as they do it. Not being in New Guinea, we have to think of some other way. What about a quite large fork lift? Not a practical solution for most of us. What about fitting wheels and tyres and then pushing the car to the designated spot? May not be possible, and is time consuming. Is there an easy solution? Yes, there is. Here is an method which makes it possible to move a whole car or any part thereof all by yourself, over virtually any terrain and over any distance using no power except your own muscles. It is done by turning the vehicle into a two wheeled wheelbarrow by using a simple aid, and then one person can push it to any desired spot. But first you need to make the aid, which is called a **vehicle moving device** designed for people who need to get things done by themselves with minimal expenditure.

The first step is to find an abandoned old vehicle which has a drop centre front axle. If its wheels and tyres are intact, good, otherwise it is necessary to fit cheap common wheels and tyres. Anything that is lying around will do, as long as both are the same size. An old trailer axle with wheels still attached could be used, but the drop centre bit is much better. Get rid of everything except the axle and the wheels/tyres. Weld the king pins, so that the wheels are always parallel and pointing straight ahead.. Cut the centre of the axle, and add a piece of strong metal, so that the wheels of the device are a bit further apart than the total width of the 1800. It is important that the flat length of the device is not less that 1.4 m. Add flat horizontal metal plates to the top of the axle as shown in the diagram. About a foot square is ample. Footplate is ideal for this purpose. A piece of timber on top of this metal would also be a good idea. Just before use, pump up the tyres real tight.

Now you are ready to go. Jack up the front of the car (or body) which is to be moved. A high lift jack is best, as a lift of about 60 cm is needed. Manoeuvre the car moving device under the car to its centre of gravity. With engine still installed, the position is just to the rear of the middle of the front doors. With engine out, it is a bit further back. Lower the car onto the device. Remove the jack. Lift the front or back of the car, whichever end is lower, until the vehicle is horizontal. If it is not real easy to lift, jack up again, and put the moving device a bit closer to the end where you are lifting from.

The car can now be moved any distance by using a wheelbarrow technique. With the vehicle horizontal, start pushing the vehicle. Real easy on a smooth hard surface. If the ground underfoot is sandy or mud or uneven, put wide planks where the wheels are going to go. If there is an uphill slope, block one wheel and push the vehicle so that the other side moves. This moves one side of the vehicle about one metre. Repeat for the other side. If the slope is downhill, be very careful that the car does not get out of control. Use blocks to restrict movement.

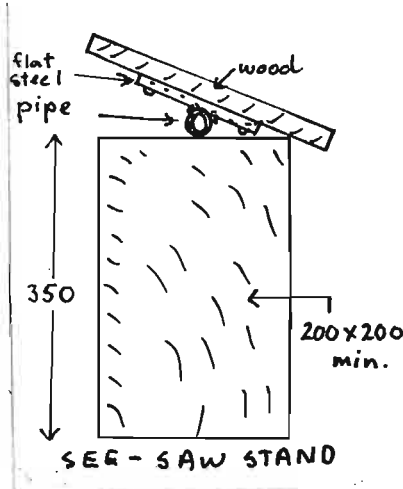


Of course it is possible for the car to move relative to the plates if the going gets too hard. It is then necessary to have a friend hold the car off the ground while you apply force to the the circumference of the wheels of the car moving device, one wheel at a time, with a chock holding the wheel on the other side. Not hard, and you get there pretty soon. In a worst case scenario, it may be necessary to use ropes to fix the position of the vehicle onto the device, but I have never had to do this.

Using a endless chain hoist

You may recollect I posed a challenge to you on how to quickly lift the rear end of an 1800 which has no tow bar, using a chain hoist

I gave you a method of lifting the front end off the ground with a chain hoist easily and quickly, and with minimal expense. The new challenge was to find a way to lift the back end of a car having no tow bar, using only a chain hoist. But there is no easy way to attach anything to the back end.. After some reflection I have worked out a quick, simple and cheap way to do this.



A bit of simple Physics using the Law of the Lever can be used. It is real easy. Two *see-saw stands* are required with the approximate dimensions shown in the diagram. I used two large blocks of oregon which were lying around in the shed.. These are the bases, and just happened to be the right height. But the bases can be anything else, but must be very strong and stable, because the weight of the whole vehicle will be supported on these two stands. Think of something the size of four gallon drums.

Also, for each stand, a bit of one inch pipe about 5 inches long, a bit of thick flat metal about 5 inches wide, a short length of 4 X 2 timber and two self tapping screws are needed. A bit of welding is then done, and they are completed.

I'm sure that a pair of axle stands could be used, but it may be necessary to modify them to make them more stable, as they are designed only to support vertically, and in this application, some horizontal forces exist.

Here's how it's done. First, lift the front end of the car off the ground to a height of about 40 cm, measured from the floor to the bottom of the tyres, using the chain hoist. Next, place the *see-saw stands* under the car, as far as possible to the sides of the car, but in the flat part underneath. The stands will be placed **just behind** the centre of gravity of the vehicle, which is 110 cm from the front axles. Important: There must be more weight to the front of the see-saw stands for safety. Now let the front of the car down to the ground using the chain hoist. Important: There must be tension on the chain hoist all the way. If not, start again, and put the stands further back. The rear end of the car will rise to a height of about two feet measured to the bottom of the tyres, which will allow very good access to everything to the rear of the car. Of course, and **very important**, use additional safety stands under the car if you are going underneath.

But, I hear your cry, the 1800 is not meant to be supported from the points where the see-saw stands are placed. I can tell you that the 1800 is very strong at every point of its body, and can easily be supported from these spots. If you are a bit worried, use larger pieces of timber at the stop of the stands. Also, I would recommend caution if there is a lot of rust about.

To lower the car to the ground again, remove the safely stands, raise the front of the car up until the see-saw stands are no longer supporting the vehicle, remove these stands, and lower the front of the car.

Once the chain hoist is set up, the front lifting device made, and the see-saw stands made, lifting the car up for repairs could well be always done with the chain hoist as it is so quick and easy, and jacks will be used only when the car cannot be brought under the chain hoist.

Useful hint. You may already know that, if you want to change both wheels on one side of the 1800, you only need to use the car jack at the front position, and jack up a bit higher than is needed to get the front wheel off the ground. The back wheel comes up quite soon after the front wheel. Use chocks on the other side, of course.

Another challenge: Maybe someone out there has had my present problem, and knows the solution. In one of my Austin 1800 cars, I open the driver's window when going along, and smell petrol fumes. No smell if the window is left closed. The petrol tank is sound, the pipe and hoses between tank and engine are good, It is a Mark 1, and the electric petrol pump shows no sign of a leak.

There are two other spots where fumes could come from.

1. Through the breather at the top of the carburettor bowl. I have carefully adjusted the height of the float, and checked the gasket at the top of the bowl. The breather hole needs to be there, otherwise the carburettor cannot work properly, so the fumes could come from that spot.
2. Past the seal of the petrol filler cap. This seal has to let fumes and air go past, to ensure that air can get into the tank as petrol is used up, and also to relieve pressure when there is a build up of vapour pressure on a hot day. I do not know how to check this seal. It looks OK.

To finish on a **personal note**, I restored my two genuine black Mark 1 Austin 1800 sedans for the weddings of two of my children, in October and December. I did it all myself, which meant a lot of work, and a steep learning curve, as I am not a mechanic or upholsterer, or painter or panel beater.

Both cars had been completely neglected for years, one having been a paddock basher and the other left under a pine tree, when I bought them. I ended with what I call 20 metre restorations. That means that anyone who wants to have a close look at the cars is not allowed to come any closer than 20 metres. The interiors ended up looking very good, and neither the cameras nor the people there picked up the small imperfections in body and paint work. Indeed, there were smiles all round, and the great Austin 1800 Mark 1 appeared on many photos.

A lesson to be learned here is that restorations can proceed at a very swift pace when needed for a wedding in a few months time.

At the receptions, I did say that if anyone was interested in restoring an 1800, I knew where there were a few available, but not one person showed interest. Disappointing, but probably reflecting the apathy of the general public for this much under-rated vehicle.



Herb's two black Austins

HOW TO BLEED GIRLING BRAKES

THE Technical Department of the V.A.C.C. often receives enquiries for advice on the procedure to be followed to ensure a good brake pedal after bleeding Girling hydraulic brakes.

As the incidence of a low brake pedal after normal bleeding methods appeared to be quite high, the Australian representatives for Girling Limited were approached and they supplied the information published below.

It is strongly recommended that only genuine Girling seals are used in systems of that manufacture as these parts incorporate the latest modifications.

Girling seals are designed to function in NON-RESIDUAL PRESSURE systems particularly with private cars. The construction of the seals is such that a "trapline" pressure is not necessary.

HONING OF CYLINDER BORES IS NOT RECOMMENDED WITH GIRLING SYSTEMS.

If the practice of honing is carried out it can result in seal "nibble" between the piston and cylinder bore and also AIR INGRESS into the system.

If difficulty is found in removing air from the system this could be due to any of the following, or a combination of these points:—

1. Cylinder bores honed oversize.
2. The use of non-genuine Girling seals.
3. Incorrect method of bleeding.

Obviously the worst condition would be a combination of all three points.

It must be appreciated that air ingress can occur even though there is no fluid leakage, if either or all of the above factors prevail.

The importance of using the correct procedure for bleeding cannot be stressed too strongly and the following details give the approved mechanical method of removing air from the system.

BLEEDING PROCEDURE

1. Pressure bleeding methods are not suitable for Girling systems and are not recommended.
2. The vehicle must be in a level position throughout the operation of bleeding.
3. Remove the rubber cap from the bleed screw on the wheel cylinder farthest from the master cylinder. Fit a bleed tube over the bleed screw and immerse the free end of the tube in a clean jar containing a little Girling Brake Fluid.

NOTE: To discharge the fluid to atmosphere is not satisfactory as this practice will only result in

air re-entering the system through the bleed screw on pedal return stroke.

4. Open the bleed screw about three quarters of a turn. This is an important point for excessive opening may allow air entry around the bleed screw threads and insufficient will restrict the flow of fluid.
5. **PRESS THE BRAKE PEDAL DOWN WITH HARD RAPID STROKES.** Ensure the pedal has a full stroke and is not restricted by floor mats etc. Where a C.V. cylinder (Fig. 1) is fitted the pedal should be allowed to fly back freely, but in the case of the C.B. type cylinder (Fig. 2) the pedal should be returned more slowly.
It is advisable to **PAUSE** at least five seconds between each stroke to allow full recuperation.
6. Repeat the procedure until it is apparent that all air has been

excluded. **ALLOW THE PEDAL TO RETURN SLOWLY AND WITH THE FOOT REMOVED FROM THE PEDAL, LOCK THE BLEED SCREW.**

7. Repeat with each wheel cylinder in turn, finishing with the cylinder situated nearest the master cylinder.

8. It is essential to ensure that at no time during the operation of bleeding should the fluid reservoir level be allowed to fall to a point where air may be admitted.

NOTE: By locking the bleed screw AFTER the pedal has been released this prevents a condition of very high vacuum being developed in the master cylinder. This condition is more predominant on bleeding than during normal use of the brake pedal, due to the master cylinder piston achieving the full stroke available.

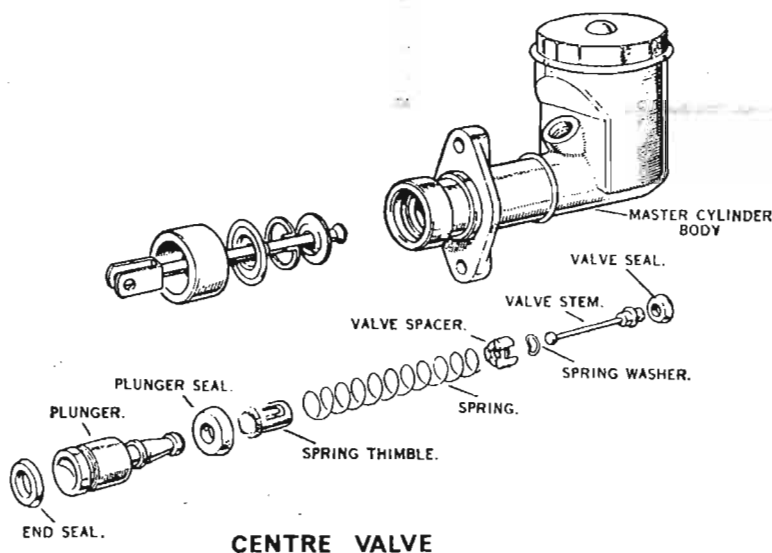
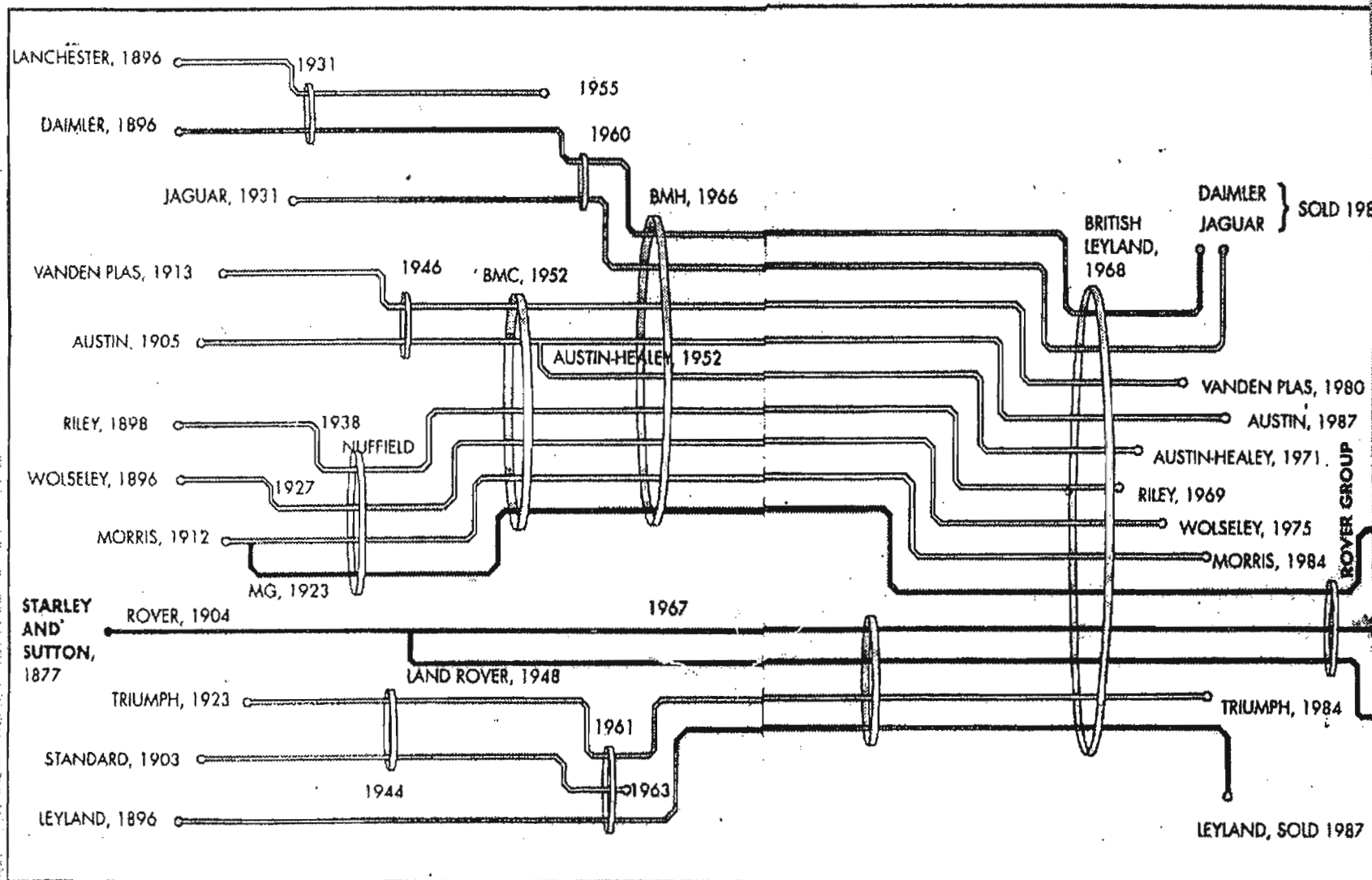


FIG. 1

THE FAMILY TREE



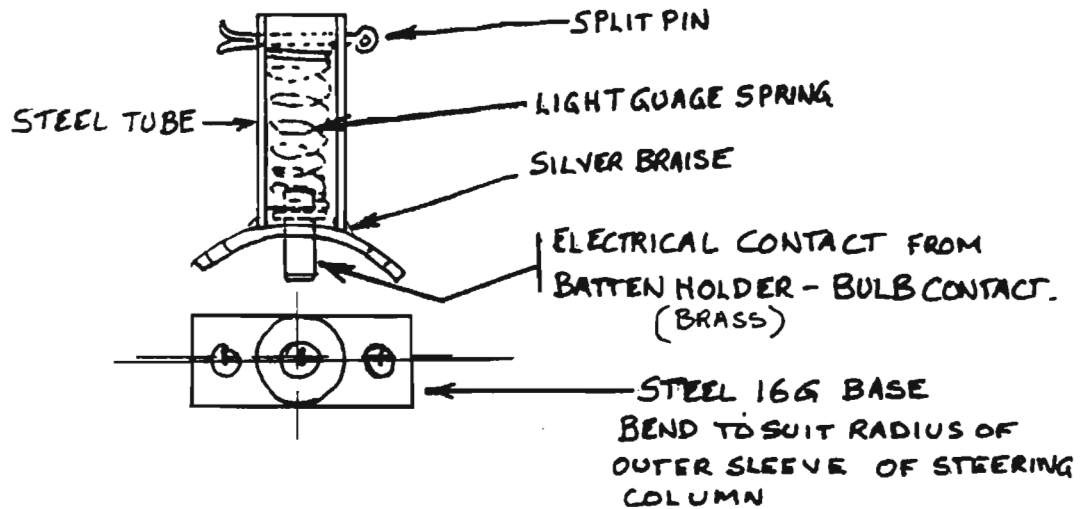
Family Tree

This Diagram provided by T Benchendorf and previously appeared in *aviagecraft* magazine.

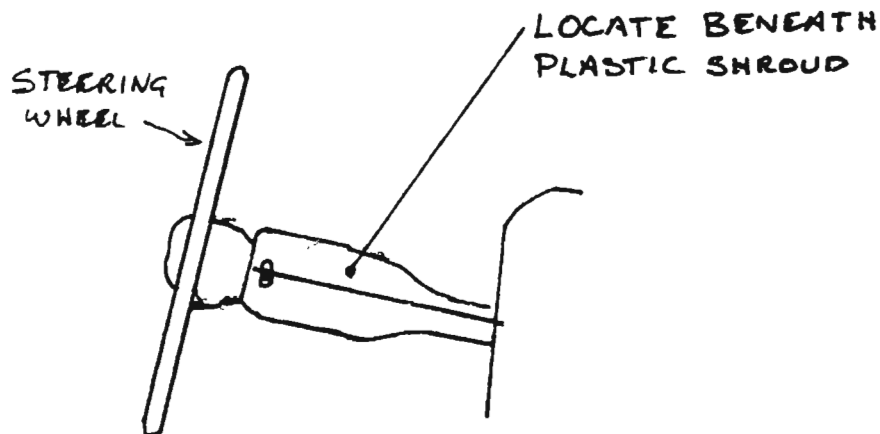
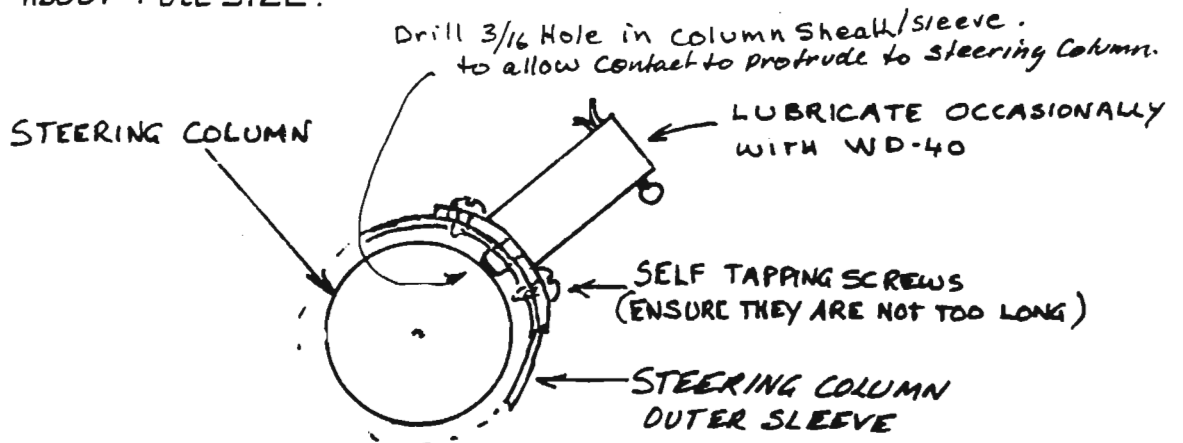
A GEM FROM KEN

EARTHING BRUSH — AUSTIN 180D — HORN, EARTH RETURN.

ENSURES CONSTANT EARTH RETURN CONTACT FROM HORN BUTTON WHEN ORIGINAL SYSTEM BECOMES INTERMITTENT.



SCALE: ABOUT FULL SIZE.



Supplied by Ken Patience

MODEL PROFILE: BMC LANDCRABS

The Landcrab family: from left to right, Wolseley 18/85, Morris 1800 Mk 2 S, Austin 2200, Wolseley Six, Austin 1800 Mk 3 and, in front, Austin 1800 Mk 1



Stage Three of the Issigonis BMC master plan was the 1800/2200 series.

Brian Palmer takes a sideways look at the once unloved Landcrabs

Enigma variations

Was Alec Issigonis way ahead of his time in advocating a whole family of cars with transverse engines and front-wheel drive, offering good road manners and ride with unrivalled interior space, or was he simply stuck in a groove?

Should he have left well alone after the Mini or should he have gone on even further than he was able and swept away all the conservative rear-wheel drive models from BMC's line-up?

The evidence on which to base any answer is patchy to say the least. The

revolutionary Mini certainly brought kudos and acclaim, and eventually large sales, but hardly any profit. The 1100 series that followed was Britain's best selling car for five years but only made modest profits. And it could be said that the 1800 was somewhat like the Emperor's new clothes: people



MODEL PROFILE: BMC LANDCRABS

were, perhaps, beginning to see through the master's clever tricks.

This is not to say that the 1800 was a bad car – far from it – but somehow it didn't 'click' with the buying public in the way the others had. The space-saving formula that had made the Mini so surprising and the 1100 so habitable just didn't translate so well into the 1800.

It *had* space all right – almost too much space – but maybe Issigonis' minimalist interior styling simply looked parsimonious at the price, while in character the whole concept was a little too anodyne to generate any strong emotions.

And, lastly, BMC was clearly falling out of love with its prolific spell of badge engineering, so only a Wolseley variant was hatched to relieve the

such a frump. Pininfarina did the initial concept but Issigonis – who had an almost pathological contempt for 'stylists' – and his merry men soon got to work

Though it looked considerably larger, in fact the 1800 was less than 1½ft longer, yet miraculously allowed passenger space of almost ball-room proportions and a usefully large boot within its bustle.

Intended originally as a replacement for the ageing Farina 1600s, the B-series engine was reworked to 1798cc and to produce 80bhp mainly because, somewhat unbelievably, the new car was 172lb heavier even than these old fossils. BMC countered bravely by saying the 1800 shell was the most torsionally rigid in history.

The engine also gained five main bearings for extra

The whole concept was a little too anodyne to generate strong emotions

monotony of Austin and Morris labels.

Trouble was, the 1800 needed more variety than its smaller siblings simply because the basic car was

to render the whole thing anonymous.

This was a shame because BMC had been commendably prompt in following the 1100 with the 1800 in 1964.

Austin 1800 Mk 1

If you were a Morris enthusiast and wanted one of BMC's new 1800s, that was tough – only Austins were available until March 1966. As with other Issigonis designs, however, no other car in the class offered so much interior space within such compact external dimensions.

Trouble was, space seemed an unusually expensive commodity at this level, given an interior so stark and with such miserly instrumentation that made the Mini look almost luxurious.

Still, as a practical receptacle for passengers, luggage, and odds and ends, the 1800 was without peer. A full-width parcel shelf, four rigid door bins, cavernous interior and large boot made this the family car *par excellence*.

BMC's Hydrolastic suspension offered roll-free handling and good ride at the expense of some vertical pitch when travelling quickly over rough surfaces.

Performance is steady rather than spectacular, though up to class standards, with persistent BMC gear whine dominating. Where the 1800 scores is that its relatively modest performance is so usable, allowing surprisingly fast averages across country.

Horizontal tail-lights featured on the Mark 1

Produced	1964-68
Total built	373,356 of all types, inc 2200
Engine	4-cyl ohv, all-iron
Capacity	1798cc
Max power	80bhp at 5000rpm
Max speed	90mph
0-60mph	17.1sec
Fuel cons	24mpg
Length	13ft 8.2in
Width	5ft 7in

Hydrolastic suspension reduced body roll when cornering

Early 1800s have a very basic fascia – the wood isn't original



Ken MacKenzie

Ken MacKenzie, 36, from Berkshire, is a production manager for a software house. His rare 1965 Austin 1800 Mk 1 was bought new by his late great aunt and he has owned it since 1986.

Still only showing 16,000 miles on the clock, Ken's pristine example has been largely untouched apart from routine mechanical maintenance. At some stage in its career, though, a polished wood fascia was added to fill the charmless void below the strip speedo, but Ken has no information on who did this or when.

smoothness and the 1800 was the first BMC car to boast an all-synchromesh gearbox, which, though it had cable actuation, never suffered the ignominy of the Maxi's similar system.

Suspension was all-independent using the now familiar Hydrolastic units but felt more stiffly set-up, obviating the water-bed float of the 1100s. The 1800 shared a similarly fine ride and handling compromise for the day with its smaller sisters.

The sight of an 1800 hurtling bodily sideways through a bend at speed like a giant Mini, in the hands of ace rallyists such as Paddy Hopkirk in the London to

Sydney Rally of 1967, became legendary and earned it the apposite nickname 'Landcrab'.

Strangely, a Morris version did not arrive until

sion of a slightly longer profile. A mildly breathed-on engine and larger 14in wheels featured, along with a narrow strip of wood along the dashboard to relieve the

Longbridge fans had to wait a further twelve months with an inscrutable logic that would tax the Chinese. Even more bizarrely, you could now buy a 'sporty' Wolseley 18/85 S model if you were so minded.

The biggest change occurred in 1972 when the 2200 model arrived, effectively scuppering the S models. In many ways this was the best of the bunch, using a six-cylinder version of the overhead camshaft E-series engine as found in the Maxi.

Of 2227cc capacity and developing 110bhp at 5250rpm courtesy of twin SUs, this was a real peach of an engine. It offered useful

The sight of an 1800 hurtling sideways through a bend became legendary

March 1966, the Wolseley came a year later still, and a Mk 2 bowed-in during May 1968. These are easily identified by the vertical rear fins which gave the car the illu-

austere interior.

A sportier S model debuted in October, oddly bearing the Morris badge, with twin SUs and a modest 6bhp improvement, while

Wolseley 18/85

IN retrospect it was amazing that the Wolseley version took so long to appear, but when it did arrive in March 1967 there were highly significant differences over the base models.

Power was now quoted as 85bhp, automatic transmission was offered for the first time (cleverly fitted into the manual 'box space in the sump and controlled by an odd dashboard lever), while power steering also became a cost option.

The Wolseley's trad rad gave the model a much more distinguished appearance and its rump was neatly squared-off with fancy chrome strips and given special vertical lamp clusters.

Inside, a polished wood dash and three large round instrument dials set the upper crust tone, along with armrests on all seats and deep pile carpet. For that, owners shelled-out £1040 (plus £95 for the auto 'box) rather than the £883 of the Austin.

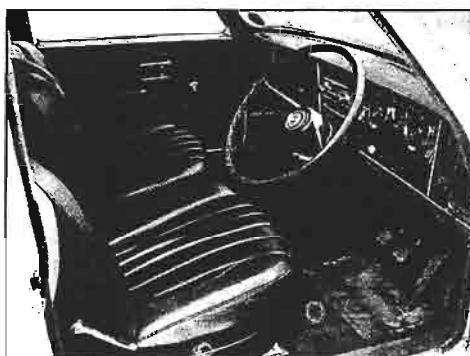
To be honest I couldn't

Produced	1967-69 Mk 1, 1969-72 Mk 2, 1969-72 18/85 S
Total built	35,597 of all types
Engine	4-cyl ohv, all-iron
Capacity	1798cc
Max power	85bhp at 5,300rpm
Max speed	90mph
0-60mph	18sec
Fuel cons	22mpg

Wolseley variants were much plusher inside, to match image

Below, front and rear ends were restyled to distinguish the Wolseley

discern any great benefit from the extra 5bhp, especially as the Wolseley is quoted as being lighter than



Bill Fraser

Bill Fraser, 32, a civil servant from Wales, started the Land Crab Owners Club International back in 1988.

Bill purchased his 1970 Wolseley 18/85 from the first owner in Worthing, Sussex, but only realised afterwards that it had originally been supplied by Howells of Cardiff and was, therefore, a local car.

With only 26,000 miles on the clock the Wolseley proved something of a bargain, having been used as a second car and Waxoyled from new.



the others when all sense suggests it should be the other way around.

Nor could I detect any extra degree of cathedral-like hush – at least not without the aid of a decibel meter.

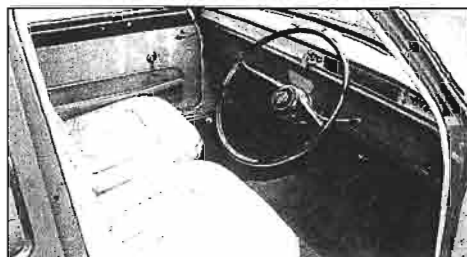
The most obvious difference is in the steering, which is not only lighter but much higher geared and somewhat feel-less. Going into a bend at speed needs practice to avoid inadvertently applying too much steering input, which can prove somewhat disconcerting as well as untidy.

Austin 1800 Mk 3

SADLY, our Morris 1800 Mk 2S developed mechanical maladies on arrival, so we were not able to try this one. The Mk 2S was capable of 99mph, with 0-60mph coming-up in 13.7 seconds.

The Mk 3, owned by Steve Lee, continued the styling improvements wrought on the Mk 2 – vertical rear fins and classier interior – adding a floor-mounted handbrake and rod-operated gearchange to its repertoire, while keeping the single-SU, 86bhp engine.

It proved a most enjoyable and commendably taut machine.



Mk 3 1800 had better interior than Mk 1



Upright tail-lights, otherwise little change

Produced	1972-75
Engine	4-cyl ohv, all-iron
Capacity	1798cc
Max power	86bhp at 5300rpm
Max speed	93mph
0-60mph	16.3sec
Fuel cons	27mpg

Austin 2200

THE 2200 arrived in 1972, some five years after the Leyland takeover. As we've already said, it gained a six-cylinder version of the single overhead camshaft E-series unit – just about the first all-new engine in BMC's history. With SUs offering 110bhp, this model finally gained the performance edge the design always craved.

Inside, the dashboard was a much simplified version of the Wolseley's, with straight grain matt finish and an ugly padded Leylandesque steering wheel.

At least the handbrake lever had now moved to between the seats, where it could be more easily reached in a hurry.

Driving the 2200 after the 1800 you are left in no doubt as to the improvements brought by this new engine.

Power is delivered smoothly and imparts a much more refined feel over the rough and ready nature of the smaller unit. And the performance really quite startling.

This is a car you can have great fun with, exploiting the Landcrab's handling to the full. Over a cross-country route I know well, this model – which is nearly 20 years old now, remember – gave nothing away to many a fast modern car.

Produced	1972-75
Total built	20,865 Austin/Morris versions
Engine	6-cyl ohc, all-iron
Capacity	2227cc
Max power	110bhp at 5250rpm
Max speed	104mph
0-60mph	13.1sec
Fuel cons	22mpg



Six cylinders make the 2200 a pleasure to drive, with good handling too

Confusingly, the Austin 2200 had a simplified Wolseley dash



Externally, there's little to tell late 1800s and 2200s apart



Steve Crocker

Steve Crocker, 34, originally from Cornwall but now living in Essex, has owned his 1974 model 2200 for two years. He bought it from a colleague at work because he'd always admired them, his father owning an 1800 when he was younger.

Steve's car is used by his schoolteacher wife daily and is usually loaded-down with books. Bodily it is in good original condition, but Steve would ultimately like to have this highly practical classic resprayed.



Steve Lee

Steve Lee, 36, from Southend, bought his example from Bill Fraser soon after being introduced to the Club. It had been used previously by only one family and had run-up just 39,000 miles.

Steve, who is a mechanic, worked on these cars while serving his apprenticeship, and both his father and brother owned Landcrabs, so he reckons to know them inside out. Steve says Landcrabs make ideal family port.

BUYING NOTES

Rust is confined to the inner and outer sills, floor, front box section and wings. The 1800/2200 does not suffer from the 1100's rear sub-frame problems because it doesn't have them. Watch out for fuel tank corrosion, though, as replacements are scarce. Screen rubbers go; fronts are available and rears should be soon through the Club.

Hydrolastic suspension units could prove problematical. As with all BMC front-drivers, the driveshaft couplings should be checked for wear and knocks on full lock.

The 1800 engine is a rough and ready unit which often displays tappet noise, while oil consumption may be anything from 200-1000

Landcrab Owners Club International

The Landcrab Owners Club International now has 345 enthusiastic members and is looking for more to expand its activities. It offers a newsletter, meetings and technical advice as well as help with spares. You can contact them at PO Box 218, Cardiff, CF3 9HZ.



miles per pint. Idler gear chatter and weak synchromesh are common but not detrimental.

The 2200 engine, though sweeter and faster, has a number of drawbacks. It is not as strong and is extremely heavy for the DIY enthusiast to handle. An unfortunate trick is shedding its crankshaft centre main

thrust washer which disobligingly falls down and jams the gearbox. Watch head gaskets and timing chains, too.

Overall the 1800/2200 series is a robust design that should give years of faithful service. They are also a lot rarer than people imagine, and survivors should certainly now be preserved. ■

Wolseley Six

THE final variant in our cache of classic crustaceans is the Wolseley Six. In many ways, it is also the best. Like so many BMC/Leyland cars of the period, they only seemed to get things right just as they were about to phase the model out. Rather contrarily for Leyland, which abhorred BMC marque names, they really got to grips with the Wolseley Six, making it much more suited to its refined, upmarket role.

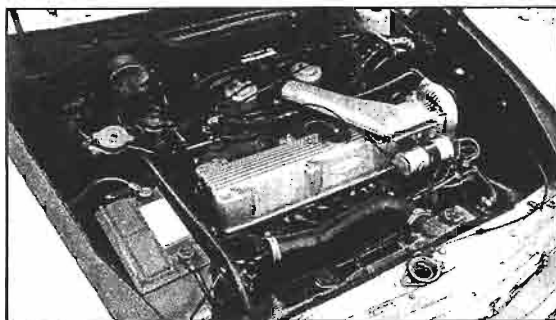
This is a car that looks, feels, sounds – or rather doesn't – like a proper luxury vehicle. The interior ambience has the clubbable atmosphere of Wolseleys of old and the smooth six-cylinder engine has more than enough power to propel this right royal barge at a respectable rate of knots. Like its smaller sister it enjoys power steering, but in this instance the heavier engine dulls the oversensitivity which mars the 1800, making it feel just right.

You don't have to take my word that it's the best of the bunch, either. The Wolseley Six – you can spot one by the twin supplementary grilles either side of the famous illuminated grille badge – actually outsold its Austin/Morris cousins despite a purchase price premium of £158. And today these still remain the most sought-after versions of all.



Refined mechanics and luxury interior make this Wolseley a quality car

Performance is assured thanks to a twin-carb, 2.2-litre engine



Mid-brown was a favourite early-seventies colour!

Produced	1972-75
Total built	25,214
Engine	6-cyl ohc, all-iron
Capacity	2227cc
Max power	110bhp at 5250rpm
Max speed	104mph
0-60mph	13.1sec
Fuel cons	22mpg



Trevor Woodford

Trevor Woodford, 42, from Southsea, has owned his Wolseley for about two years. This one was also a one-owner car previously, bought by a retired gentleman and only used for local shopping trips. Consequently it had just 14,000 miles on the clock when Trevor snapped it up.

Trevor used it every day for a while, adding 7000 miles to the total, but the patrician Wolseley now leads a life of leisure, appearing at shows and rallies.

Austin 1800 Trivia

Contributed by Herb Simpfendorfer

1. What are the smallest parts on an Austin 1800?



It might be the small round retaining clips that hold the throttle link in place on the side of the carburetter body. They are so small that I cannot see them in the Parts List book. They are just visible in a diagram in the Workshop Manual. They are hard to get off, and easily lost. *

2. When was plastic first used in any Austin vehicle? The proliferation of plastic parts is one of the big problems in modern cars (no necessarily the opinion of the editors) so it would be interesting to find out when this disease first got into vehicles. My guess is that it was first used as insulation for wiring, but someone with a lot of vehicles of different ages to look at could find out for sure.

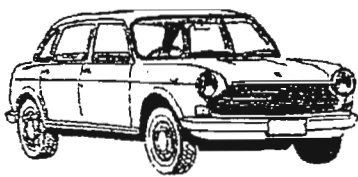
3. Why do the Austin factory produced books use the spelling CARBURETTER while most, if not all, other publications use the spelling CARBURETTOR? Most of my dictionaries have CARBURETTOR, but my biggest one has CARBURETOR as the best spelling, and CARBURETTOR and CARBURETTER as alternatives.

*My hint. Next time you have to take them off, say goodbye to them as they fly into the corner of the workshop where they will never be found again. Replace them with something that is absolutely free, very easy to get off and on, and easily replaceable. Every good workshop would have these better parts lying around. Here's how to do it.

Get an old 240 volt electrical household fitting that has wires coming to it that have to be held there with a screw, e.g. an old wall switch, power point or light socket.



Get a hammer, and break one into small pieces. Find those little cylinders that have screws coming into them. Extract two, cut off any surplus parts, and use them in the 1800 where those clips were used before.



LANDCRAB

CLUB OF AUSTRALASIA INC.



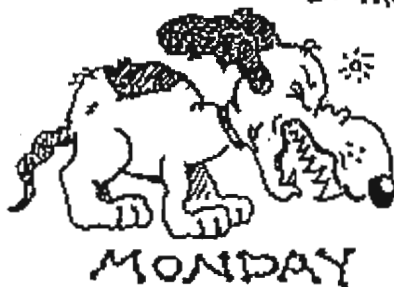
Daryl Stephens 22 Davison Street Mitcham, Victoria, Australia, 3132 Ph: (03) 9873 3038

Welcome to newsletter number 122 for April and May, 2005

TYPICAL WORK WEEK



Don't speak
to me!!



get me
through this day!



Life is slowly
seeping back
into my
body!



Anticipation!



THE REVOLUTIONARY FIRESTORM SPARK PLUG

by Robert Stanley © October 2004

During the past nine years while I was working as a market researcher for a major Japanese auto company, I learned that the price of oil worldwide would continue to climb higher due to a steadily growing demand for a limited supply. It was clear from the reports I read that this presented a very real problem to the auto companies of the world. There was a general agreement in the auto industry that the answers to the problem would come in the future via new technologies.

For years now, I have wondered where and when the next Edison with a bright idea will appear and invent a "lean, green, driving machine". I have finally found such a man. He lives in Farmington Hills, Michigan, and his name is Robert Krupa.

We have all heard the saying, "If something sounds too good to be true, it usually is". The amazing new spark plug designed by Mr Krupa, which he named "FireStorm", is the exception to this rule.

I know that when it comes to buying spark plugs, they are all basically the same except for the price. So, why make a big deal about another new spark plug?

FireStorm's Capabilities

First, let's look at what Krupa's FireStorm spark plugs give an internal combustion engine:

- More horsepower;
- 44-50% increase in mpg;
- Dramatic decrease in emissions.

Second, let's see what FireStorm plugs eliminate:

- Smog pump;
- Catalytic converter;
- Radio frequency interference (RFI) and the use of resistors in the centre electrode;
- Gap growth;
- Exhaust gas recirculation (EGR) systems;
- Misfire/hesitation/detonation/stutter and stumble.

How, you may ask, is all this achieved?

In a word, *plasma*. The revolutionary design of FireStorm spark plugs creates an electric plasma that fills the entire combustion chamber like a firestorm. It allows you to take an internal combustion engine from the standard 14.7:1 air-to-fuel ratio to an incredibly lean 24:1. At this ratio, all the air/fuel mixture is burned much more efficiently without increasing heat, thus giving an engine more power and fuel economy while creating much less pollution. That's the good news

The bad news is that you can't buy a set of FireStorm spark plugs anywhere right now. No spark plug company wants to make them.

Robert Krupa is no stranger to the way the automotive industry and spark plug industry operate. He has worked as a technician, then as an engineer for GM and Ford.

Krupa explained: "Before I entered college and earned a BS [Bachelor of Science] in engineering, I was taking electrolytic capacitors and mounting them to the plus side of a distributor, which would smooth out the electrical pulses going to the distributor and the spark plugs. With that little improvement, I was able to make cars run smoother. So, that was the start of this engineering journey I am now on.

"I have an electrical background that's very heavily into automotive applications. I have an extreme sensitivity to mechanical noise. I can listen to an engine running and tell exactly what's wrong with it. My hearing is so keen that when I worked at General Motors they sent me to Mexico and to Germany and New York to fix engine assembly plants. When I went to New York, they were having problems with engines going in the repair loop. So I looked at what they were doing, thought a while, then made changes to 22 machines and got the engine plant running faster than design intent. The plant manager offered me a job right on the spot."

Krupa knows spark plugs and has worked very hard to bring improved designs to the automotive market. Although it was not his design, he is solely responsible for bringing the "SplitFire"

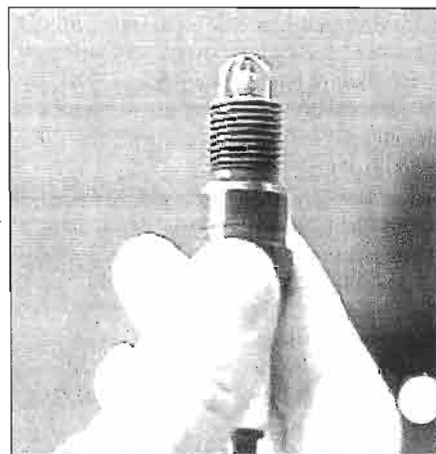
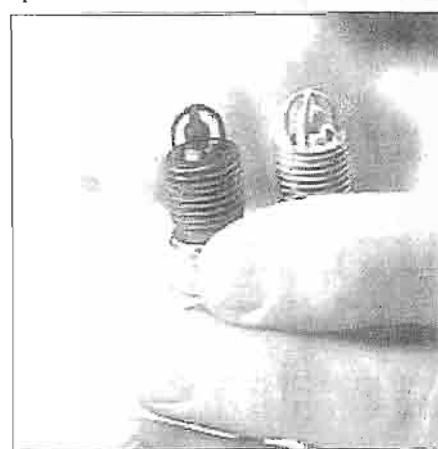


Figure 1 (above) and Figure 2 (below):
Close-ups of the FireStorm spark plug.

spark plug to the market over a decade ago. It was a simple variation on standard plugs which featured a split electrode, designed like a snake's tongue, that increased the sparking area of the plug somewhat. It cost more than an average spark plug and generated annual sales of US\$60 million in 1993.

As fate would have it, Robert Krupa became friends with the legendary Henry "Smokey" Yunick, of Daytona Beach, Florida. Smokey was a Hall of Fame NASCAR stock car and IndyCar builder, entrepreneur and inventor extraordinaire. They met while working on a project for GM. At that time, Smokey was having a little bit of trouble hearing. So Krupa



it up to an oscilloscope for Smokey to use. The next morning, Smokey asked Krupa to come and work for him. Krupa politely turned Smokey down, but the end result was they became good friends.

Because of this, Krupa decided to take his first prototype of the FireStorm to Smokey. While witnessing the new spark plug firing on a portable test stand, Smokey declared: "After 30 years consulting for Champion, I have never seen a spark plug fire like yours. You are going to turn the automotive industry on its ear!"

With that endorsement, Krupa knew he had a winner. That afternoon, he signed Smokey up as a consultant to Krupa's new, formed company, Century Development International Limited.

Genesis of the FireStorm

It was Krupa's unwavering determination to discover a better plug that led to the technical breakthrough of the first FireStorm prototype back in November 1996. When asked about that life-changing event, Krupa recalled:

"I was brought up by the NOS [nitrous oxide systems] Racing guys in California. Their theory was a spark plug either works or it doesn't and there is no in-between. After a lot of investigation, I essentially found out that there was something special about spark plugs.

"During this time, I went through a 55-gallon drum full of grimy used spark plugs. I inspected them all very carefully and found that the older the model of spark plug was, the more the centre electrode of the plug was worn all around the side. It took the shape of a small ball. It was a half a ball—a dome shape, to be exact.

"That's when I thought, 'If that's what the spark plug wants to be, then why not start off with that shape and see what it does?' So, I took a brand new plug and filed it down into the shape of a dome and fired it and noticed it worked a little bit better. But I still had a problem with the grounding side. Next, I whacked the ground off and started putting different configurations of grounding electrodes on it, and I held everything together with toothpicks to make it easier to change.

"When I put a half a loop on the grounding side, it seemed to fire a little better. Then I took the head of a screw and bashed it with a hammer until it took a dome shape. Then I took the other side and dimpled it, creating a concave—an inverted dome, really. I carefully balanced that bat-

tered dome on top of the electrode of the new plug that I had filed to accommodate it, and then I put a half a ring over it for the negative electrode, again holding all that together with toothpicks. And when it started firing, the amount of energy coming off the plug was just crazy, and I said to myself, 'I've really got something here!'

"But I was inspired to do this because I just knew there had to be a better way. That's why spark plug companies hate me. They've got millions and millions of dollars tied up in research departments and I was able to come up with the FireStorm prototype in my basement in just under two hours."

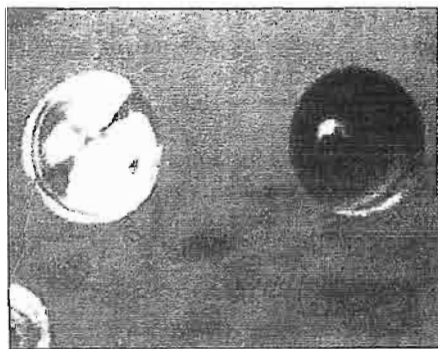


Figure 3: The FireStorm is being fired next to a standard plug in a working test.

Performance and Testing

When I asked Krupa if there were any other advantages to using FireStorm spark plugs, he explained: "If there is a vehicle that requires premium fuel and they install FireStorm plugs and perform the modifications I suggest...they could run regular fuel in the engine and it won't detonate, hesitate, ping or misfire. The only reason you need higher octane fuel is for higher compression engines. And if an engine is pulling a heavy load, it has a tendency to go into detonation with a regular spark plug."

This all seemed too good to be true, but there was more good news.

According to Krupa: "I know it sounds like smoke and mirrors. But this has all been documented. When I was doing some of the early testing on this, I hooked up an emissions analyser to the car and I had equipment in the car while changing air/fuel ratios and idle speeds. I was doing this at an automotive aftermarket speed shop. The guys were coming over to see what I was doing. I had the test vehicle running at 250 rpm! Engines do not like to idle at 250 rpm. You can't do that with a regular spark plug. But you can do it with the FireStorm plug."

I had never heard of anyone doing this before, and wondered what the engine would run like at that ultra-low idle—another major fuel-saving measure.

Krupa told me: "It just loped along really smooth, but it was constant. No hesitation; no misfires. And when I did that test on a T-bird and got a 44% increase in fuel economy, I was using the air conditioner at the time! And nobody uses the air conditioner when they test for fuel mileage. But, I was doing real-world testing. In fact, the EPA is thinking about revising their air/fuel testing so that it reflects real-world driving conditions. And even with the increased fuel mileage, I got 33 more horsepower out of a big-block Chevy just by adding FireStorm spark plugs and adjusting the tuning of the engine.

"The other amazing thing I discovered while testing the FireStorm plug was that an engine can run further out in the rpm range. In other words, when they reach extremely high speeds the power curve starts falling off. Just by using FireStorm plugs, I can operate from 600 to 800 rpm faster past red-line with the power curve still heading up rather than down.

"Bottom line, I can pull more rpm and power out of an engine and still deliver better fuel economy because even at extremely high speeds of operation the FireStorm plugs still produce plasma that burns all the fuel in the combustion chamber. A regular plug, with its itty-bitty little spark, can never fire well in a combustion chamber that's running at high speed. That size spark can't keep up with the increased speed flow of air/fuel mixture."

Krupa showed me an amazing video of the FireStorm spark plugs running in real time on a test rig. I noticed that the powerful plasma field coming from his spark plug filled the combustion chamber, but there was something else. It appeared that the plasma was swirling around like a small whirling tornado.

When asked about this, Krupa explained: "I have coined the term *residual ionisation* to describe the effect of the firing of the FireStorm spark plug. When a generic spark plug fires in a pressure chamber or your vehicle, it will fire six to eight times and then misfire once. The misfire is caused by the residual ionisation left around the plug proper. When the charge comes down the centre electrode, it sees a high impedance and cannot jump the gap, hence a misfire.

[11] Patent Number: 5,936,332

[45] Date of Patent: Aug. 10, 1999

Primary Examiner—Ashok Patel
Attorney, Agent, or Firm—Gifford, Krass, Groh, Sprinkle
Anderson & Citkowski, P.C.

[57] ABSTRACT

A very unique universal bi-directional firing spark plug for any spark-ignited internal combustion engine is described. This spark plug eliminates misfire and improves gas mileage, peaks engine performance, horsepower, and increases the RPM range. This unique spark plug is made of an elongated or non-elongated body with an electrical connector at one end. An absolute aerodynamic semispherical dome or sphere electrode is secured to the other end of the body. At least one absolute aerodynamic semicircular electrode is also secured to the body adjacent to the dome or sphere electrode such that the semicircular electrode has its inner surface equidistantly spaced from the dome or sphere electrode's surface. The electrodes can be fabricated from various metals, alloys, and/or precious metals and can also be coated with various metals, alloys, and/or precious metals. Alternate embodiments of the invention include two, three or four or more semicircular electrodes, all of which have a surface equidistantly spaced from the aerodynamic semispherical dome or sphere electrode along its complete arc length.

"There is also residual ionisation left over in a FireStorm spark plug. However, because of the huge surface area in the configuration of the domed centre electrode and the triaxial ground system, when the residual ionisation rears its ugly head the charge coming down the centre electrode sees it and moves to the next area under the triaxial ground system that is residual ionisation free. That's why the plasma appears to move around the dome in a circular motion."

Acclaim and Potential

Krupa's new FireStorm spark plug is in a league all of its own. It has received rave reviews from a major spark plug company. Krupa explained: "Bosch conducted an eight-week-long durability test of my FireStorm plugs against their best, and they said that the FireStorm plugs produced zero per cent gap growth. And they predicted that [the plugs] will never wear out."

That might be one reason spark plug companies are not interested in manufacturing the FireStorm. Another big reason is that the currently used standard design of spark plugs would rapidly become obsolete. However, the main reason no spark plug manufacturer is willing to make the FireStorm is that there is no way anyone can create a knock-off that gets around Krupa's worldwide patents on his designs.

According to Krupa: "What we did was sit down and decide what the best configuration was for firing. Then we set that aside and for the next seven months we

designed knock-offs and incorporated every one of them into the patent."

A final important factor to consider is financial. Most spark plug manufacturing plants are over 100 years old. They would need to invest vast amounts of money to retool before producing the FireStorm design because standard centre electrodes in generic plugs are manufactured in three parts. The FireStorm spark plug's centre electrode is only made of one part. Because of this, Krupa's company, CDI Limited, has decided it will have to manufacture the FireStorm plugs on its own. This is a massive undertaking that Krupa and his team did not initially plan for, but it has created a once-in-a-lifetime opportunity for venture capitalists and investors to get on board early.

Consider this: annually, there are over six billion spark plugs made and sold worldwide. Krupa's team at CDI Limited estimates that the FireStorm spark plug will cost US\$1.50 per unit initially to manufacture. The team also estimates that once FireStorm spark plugs become available, they will quickly capture 80% of the market share—even if they cost \$10.00 or more per plug. That equals a lot of money.

Moreover, an enormous amount of money will be saved by consumers when they fill up their gas tanks—even as fuel prices continue to rise. This will have a positive impact on the world's economy. And it couldn't come at a better time. In a recent report, Bill Powers, the editor of an investment newsletter called *Canadian Energy Viewpoint*, predicts that the price of crude oil will reach US\$80 per barrel in the next 24 months! (See web page <http://www.financialsense.com/editorials/powers/2004/1104.html>.)

When asked if there were any conditions he required of future business partners, Krupa stated: "Well, we would have to sit down and talk about the details and see what they want and work out a deal that everyone agrees on. And no matter who's going to be involved, I would like to be in charge of the quality control end of the manufacturing. Because if you don't make it right, then it's like shooting yourself in the foot before a race."

Much like Edison, who refused to rest until he'd invented a better light bulb, Robert Krupa was inspired and determined to invent a better spark plug. In so doing, he has given the internal combustion engine and our environment a brighter future.

When asked about the legacy of his life's work, he proudly said: "I tell people I took the lowly spark plug from the Stone Age to the Space Age."

About the Inventor

Inventor Robert Krupa is an accomplished engineer and scientist who specialises in electrical and mechanical media. He's travelled around the world four times and has been featured on TV, radio and in magazines. He has also written many articles for the "hot-rod" world. Robert Krupa can be emailed at flamefromwater@yahoo.com. Visit the FireStorm web page at <http://www.robertstanley.biz/firestorm.htm>.

About the Author

Robert M. Stanley is a writer and researcher specialising in technology trends. His last article for NEXUS was an interview with space technology consultant David Adams (see 9/05). His article on Robert Krupa is copyright © 29 October 2004, UNICUS, 1147 Manhattan Avenue #43, Manhattan Beach, CA 90266, USA. Robert Stanley can be emailed at rstanley@socal.rr.com.

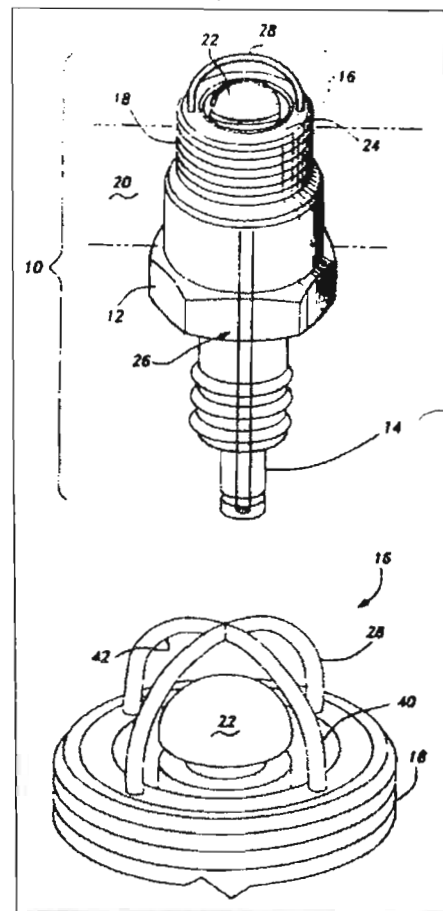


Figure 4 (top left): FireStorm patent abstract. Figure 5 (above): Patent design.

The Morris Car Club (Vic) Inc. Presents :

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CARNIVAL 2004.
SUNDAY NOVEMBER
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At the Willows Historic Homestead
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*The carnival is held in conjunction with
the Djerriwarrh festival .(Meltons Annual
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CAMBER AND CASTER FOR THE AUSTIN 1800

By Herb Simpfordorfer

Camber

Camber is used to describe the inward or outward lean of the front wheels when viewed from in front of the vehicle.

Here are a few illustrations to describe camber. You may know that Tom Kruse had a mail run in the outback, between Maree and Birdsville. There was a documentary made about his work, called Back of Beyond, and in it, there was a view taken of the front of his truck, a Leyland Badger, with the front wheels at a very big lean because the king pins and bushes were quite worn. The weight of the truck caused the wheels to lean inwards at the top. This is an example of what is known as negative camber. Tom would have had considerable difficulty steering this old truck.

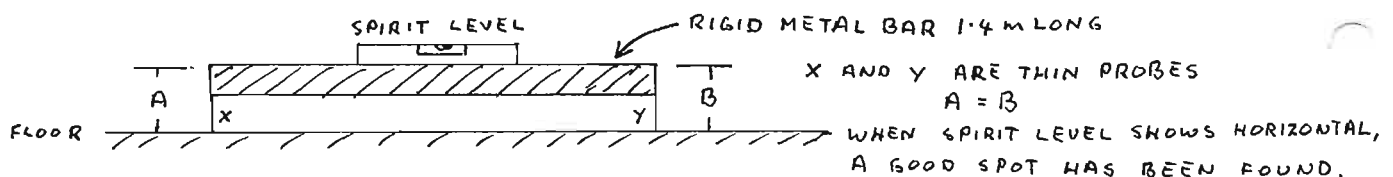
In contrast, there were vehicles in the early days of motoring that specialised in hill climbs. I remember a photo of one of these climbing a steep hill somewhere, and the front wheels had a noticeable lean outwards at the top. This is called positive camber. This must have been an asset in doing this kind of driving.

Camber is measured in degrees. For the Austin 1800, all models, the book says that camber is to be positive, $1\frac{1}{2}$ degrees, plus or minus $\frac{3}{4}$ degrees. So it can be anywhere between $\frac{3}{4}$ degrees and $2\frac{1}{4}$ degrees leaning outwards at the top.

I think camber affects the ease with which the front wheels can be turned from straight ahead, while going along, so it is good to have it pretty right. I imagine it does not affect the rate of tyre wear.

It is not difficult to measure the camber of the front wheels of your 1800, and I'll show you how to do it. First, it is important to have a very accurate small spirit level. There are aluminium ones on the market, under a foot long, which are quite accurate. Mine is made in the U.S. and is not adjustable. Spirit levels are manufactured to measure horizontal, vertical and also 45 degrees. To measure camber, you need the first two only. I'll assume you do not need to be told how to check a spirit level for accuracy.

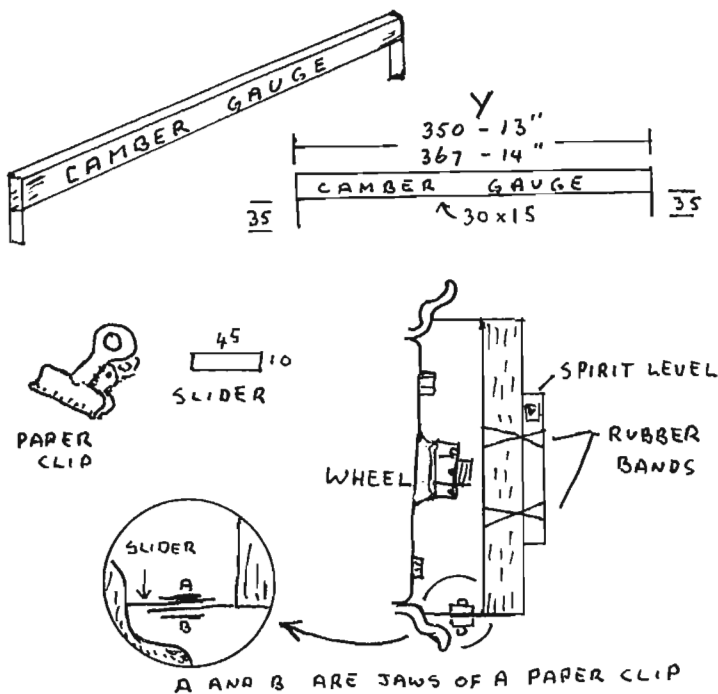
Next, it is important to find a place in your workshop where the floor is perfectly level, so that at that position, the bottoms of the front wheels are the same distance from the centre of the earth. To find this good spot, a simple checking device can be made up as shown in the diagram.



To remember where this good spot is, a spot of paint can be used to mark the two points.

The car can now be moved so that the front wheels are on these spots. It is important that the centre of the front wheels are exactly horizontal, and this can be assumed true if the centres of the axles are the same distance from the floor.

Take off the hub caps. Measuring will be done on the rims, and since the big nut on the front wheel is in the way, a measuring gauge must be made. This is a simple device and can be made in a few minutes. I used a scrap piece of light gauge rectangular tube steel, cut and bent to the measurements shown in the diagram. It is very important that the distances A and B are precisely the same. Use a vernier calipers. Use a rubber band to attach the spirit level onto the gauge as shown. Attach a piece of flat metal onto one of the arms and hold it there with a small hinged paper clip. This is the slider.



Now use the gauge on one of the rims. Place the gauge so that it goes right over the centre of the axle nut. The first thing you will see is that the rim is not vertical, indeed, the bottom tip of the gauge has to be moved a considerable distance away from the rim to make the spirit level move to vertical. This is as it should be. Use the slider to find this exact distance. Measure the distance the slider protrudes from the arm of the gauge when the spirit level shows vertical. This is Distance X. The table below can be used to determine the exact angle of camber for both 13 inch and 14 inch rims. I have worked it all out for you, just in case you have forgotten all about *arc tan* from your days in High School Mathematics classes.

13 inch rim Y = 350 mm		14 inch rim Y = 370 mm	
Distance X (mm)	Camber (degrees)	Distance X (mm)	Camber (degrees)
1	0.16	1	0.15
2	0.32	2	0.31
3	0.49	3	0.45
4	0.65	4	0.61
5	0.82	5	0.76
6	0.98	6	0.91
7	1.14	7	1.06
8	1.31	8	1.22
9	1.47	9	1.37
10	1.64	10	1.53
11	1.80	11	1.68
12	1.96	12	1.83
13	2.13	13	1.98
14	2.29	14	2.13
15	2.45	15	2.20
16	2.62	16	2.44

So, for a 13 inch rim, the distance X can be from 5 to 14 mm, and for 14 inch rims, the distance X can be from 5 to 15 mm.

This great variation of acceptable camber angles tells us that some, but not too much, camber angle is important.

Just to show you how it could work out on your car(s), the camber angles on the three cars that I measured were between 0.15 and 0.93 degrees, all positive. So it is unlikely that yours would be much different, unless you have been doing a lot of scrub clearing with your car, or kerb thumping, or things like that.

Hopefully your camber angles are within limits, as it would be very difficult to change. To increase the angle, spacers could be used, and I cannot think of an easy way of decreasing the angle. In cases like this, the workshop manual advises something like **Keep replacing parts until camber is correct.** This

kind of advice was OK when there were Austin agencies in every town, and N. Prescott was sitting in an office in the Sydney BMC headquarters ready to send out any needed part. Also, some better advice could have been given for the likes of us who have good workshops and are able to weld, file, bend, drill, and in the case of our more illustrious members, mill and do lathe operations.

Caster (also spelled Castor in some books)

Caster is the tilt of the front wheel suspension pivot points when viewed from the side of the vehicle. Consider the king pin as fitted to an older vehicle. Viewed from the side, it can be vertical, leaning to the front at the top, (negative caster) or leaning to the back at the top (positive caster).

Caster is measured in degrees. According to the book, caster angles for Australian production are:

Mark I - $1\frac{1}{4}$ degrees positive plus or minus 1 degree. So it can be between $\frac{3}{4}$ degrees negative and $1\frac{1}{4}$ degrees positive.

Mark II up to YAHS 4927 - 3 degrees negative plus or minus 1 degree

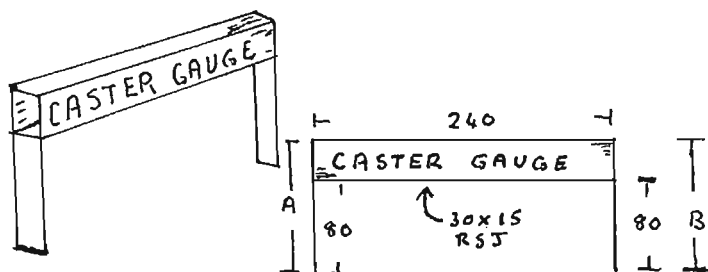
Mark I after YAHS 4927 - $1\frac{1}{2}$ degrees positive plus or minus 1 degree

So what? Is it of any use to know the caster angles? Well, yes, if it can be measured in the workshop, then it is a useful exercise. In one book, I read

Getting the proper front wheel alignment is an exacting process, one in which complicated and expensive machines are necessary to perform the job properly

This is fine, and probably is generally regarded as fact, but the question arises whether the 1800 owner can quickly and easily determine the approximate (even exact) angle of caster of his vehicle. The answer is yes, and I'll show you how to do it.

To find a method, I had to lie down on the floor for a goodly time, looking at the front wheels of one of my cars. I thought of this and that possible way of measuring caster, some quite complicated, but then a good idea came to me. It is so simple, and seems to be quite accurate. Cost is zero if you have a small accurate spirit level to measure vertical and horizontal, a small hinged paper clip, a few rubber bands and a bit of light hollow rectangular steel.



First you have to make a **caster measuring gauge**. Light rectangular steel is used, the lighter the better. It is important that the distances A and B are exactly the same.

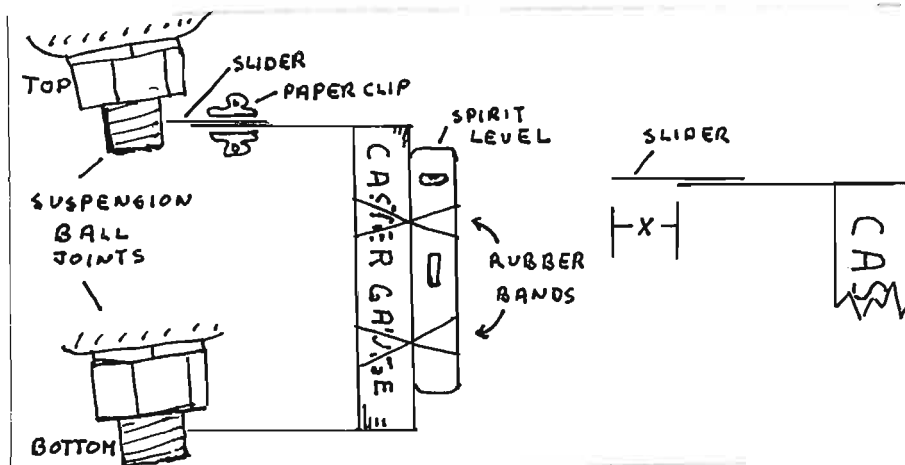
Step 1: Make sure the vehicle is horizontal. This is best done by using a spirit level on the horizontal part of the body under the doors. Take whatever measures are necessary to make the vehicle horizontal, e.g. putting a weight in the boot, or jacking up the back a bit. Also check that the distance between the centre of the wheel and the top of the arch is about 15 inches.

Step 2. Now, use a strong rubber band to attach a small accurate spirit level to the gauge as shown.

Step 3. Put a nice piece of carpet on the floor, because you have to lie on it and do measuring work on the inside of the wheels.

Step 4. Choose to measure the right side wheel first. Turn the steering wheel to hard right to give increased access to the inside of the wheel. The amount of turning does not matter, as this does not change the caster.

Step 5. Lie on the floor. Place the gauge onto the two points as shown in the diagram. Have the slider on the top arm. Look at the vertical bubble. (A mirror may help). The slider will move inwards on the gauge as you tap the top of the gauge onto the thread. Continue until the bubble shows vertical. Carefully remove the gauge and take it to the bench.



Step 6. Using a vernier calipers, measure distance x. Use the table below to determine the caster angle. Write it down.

Step 7. Repeat for the left wheel after turning the steering wheel to hard left.

Distance x (mm)	Caster (degrees)	Distance x (mm)	Caster (degrees)
1	0.24	6	1.43
2	0.47	7	1.67
3	0.72	8	1.90
4	0.95	9	2.12
5	1.19	10	2.39

Note: This method assumes that the points where caster is measured with this gauge are parallel with the the pivot points of the wheel, and they certainly are, as you will agree when you think about it for a while. My three cars had caster angles between 0.3 and 2.2 degrees, all positive. The wheel that had 2.2 degrees was considerably more than the others, and needs to be checked, as something is a bit out there. That car was a paddock basher for a while, so could have sustained some damage at that time.

Further Note: There is a much easier method to see if your caster angle is fairly right. Just look at the distance between the rear of the front tyres and the bodywork right behind it. Compare the distances for both wheels, but be sure that the wheels are pointing dead ahead, and that the diameters of the tyres are exactly the same, because only then can the tyre to bodywork distances be compared meaningfully. Tyre diameters can be measured with a giant pair of calipers, measuring from front to back (not top to bottom). It is not hard to make up a giant pair of calipers with bits of curved metal and a clamp. If the distances from back of tyre to bodywork are the same, assuming tyres are the same diameter, then the caster angles must be the same. If the distances are not the same, you'd better have a good look around to see if anything is bent or worn. It could be that the rubber pads at the rear end of the tie rod are worn out

To end on a personal note, I certainly plan to be at AOA at Warwick Qld at Easter and driving one of my black 1800s, and when I see who is there, maybe work out who is best able to write a report for our Landcrab Club members. Apparently a record number of participants will be there, but this would refer mainly to the A30 and A40 contingents. Hopefully there will be about ten 1800s there, so we can have good information sharing, as usual. There is a chance of a good 1800 roll-up, as Queensland has always been good Austin 1800 territory.

Soon after that I hope to go for a third 14,000 km fun run in my green 1966 1800 around Australia, and may well have some interesting stories to tell you after I get back. And, if you see my much travelled 1800 pulled up in front of your house in May or June, do not be alarmed, as it will probably be me, as I will be taking along the member list, and call on fellow members wherever possible. Last time, three years ago, I found not one solitary member between Brisbane and Perth. In that Austin 1800 starved stretch, a common comment by locals on seeing my green 1800 was, "I haven't seen one of those in years." That is not likely to be much different this time, so I'd better take along enough spares to get me out of trouble if something goes wrong.

Books of Bible Puzzle

There are 30 books of the Bible in this paragraph. Can you find them? This is a most remarkable puzzle. It was found by a gentleman in an airplane seat pocket, on a flight from Los Angeles to Honolulu, keeping him occupied for hours. He enjoyed it so much, he passed it on to some friends. One friend from Illinois worked on this while fishing from his john boat. Another friend studied it while playing his banjo. Elaine Taylor, a columnist friend, was so intrigued by it she mentioned it in her weekly newspaper column. Another friend judges the job of solving this puzzle so involving, she brews a cup of tea to help her nerves. There will be some names that are really easy to spot. That's a fact. Some people, however, will soon find themselves in a jam, especially since the book names are not necessarily capitalized. Truthfully, from answers we get, we are forced to admit it usually takes a minister or a scholar to see some of them at the worst. Research has shown that something in our genes is responsible for the difficulty we have in seeing the books in this paragraph. During a recent fund raising event, which featured this puzzle, the Alpha Delta Phi lemonade booth set a new record. The local paper, the Chronicle, surveyed over 200 patrons who reported that this puzzle was one of the most difficult they had ever seen. As Daniel Humana humbly puts it, "The books are all right here in plain view hidden from sight." Those able to find all of them will hear great lamentations from those who have to be shown. One revelation that may help is that books like Timothy and Samuel may occur without their numbers. Also, keep in mind, that punctuation and spaces in the middle are normal. A chipper attitude will help you compete really well against those who claim to know the answers. Remember, there is no need for a mad exodus, there really are 30 books of the Bible lurking somewhere in this paragraph waiting to be found. God Bless.

10

Used cars going cheap

ANYONE PLANNING TO BUY NEEDS TO HAVE THEIR FINANCE ARRANGED BEFORE THEY GO SHOPPING

A new-car boom means a flood of trade-ins, writes **GRAHAM SMITH**



Nearly new: one-year-old cars such as this late-series AU Falcon are among the best buys.

PRICES for used cars are diving as the effects of the new-car sales boom hit the secondhand scene.

Three years of record new-car sales are depressing the value of used cars, according to Tony Robinson, chief executive of national fleet risk management company Sure Plan Australia.

But he says there has never been a better time to buy.

Cars sold new in the boom times of 2003 and 2004 are flooding the used-car market and creating a glut that far exceeds demand.

"It's not rocket science," Robinson says. "It's pure supply and demand."

"The supply of good-quality cars is exceeding demand at the moment and the consequence is that values have fallen."

Robinson says evidence of a slump in demand for used cars can be seen in the low clearance rates at auctions before Christmas.

He says the price falls are creating bargain buys across all market segments.

"It's right across the board," he says. "It's even affecting the value

of prestige cars. These were artificially protected in the past because of the small numbers of new prestige cars sold.

"But we're starting to see values that suggest prestige cars are also starting to suffer."

There is no sign that secondhand values have bottomed and Robinson predicts the over-supply of used cars will continue for the rest of 2005 and

even into 2006, given the continuing strength of new car-sales.

"Fleet cars have an average life cycle of about three years so we're now seeing the cars sold in 2002 coming on the market."

"That means there'll be no let-up through the next two to three years when those cars delivered through the boom years of 2003 and 2004 hit the used-car yards."

Buyers are spoiled, Robinson says, because there is a greater choice of makes and models and the slowing demand means there are deals to be done.

"My recommendation is to look at a near-new car, something that is one or two years old," he says.

"That's where the better buys are. They've copped a fair slug of depreciation and values are down."

The best buys, Robinson says, are in the large-car segment where late series AU Falcons and the equivalent VX Commodores are struggling to sell and going for bargain-basement prices.

Magna values have been affected because of the continuing doubts about the future of Mitsubishi. One-year-old Magnas can be found for less than \$20,000.

But Robinson warns people must be prepared for a shock when they trade in their current set of wheels.

"It's better to sell your car privately if you can," he says.

Robinson also says it's important to know what you can afford and have your finance in place.

"Anyone planning to buy needs to have their finance arranged before they go shopping. That way they have greater power to bargain with dealers," he says.

Sports star, Page 30

LANDCRAB SHINES AMONGST THE GLITTER

You may think it unusual for a standard Austin 1800 to be seen amongst the muscle cars and hot rods of a custom car club.

No so in the tropical North Queensland city of Townsville. The Cyclones Rod and Custom Club exhibits the typical friendliness expected of folk in the north and opens their annual Show and Shine to all local car clubs.

With life membership of the Queensland Mini Car Club, members of the Landcrab Club and the Austin Motor Vehicle Club, Kerry & Jo Guinea accepted again this year the invitation to join in the show.

Whilst the majority of vehicles on display would use more fuel in their chrome laden vehicles backing out of a garage than the Minis or Austin would in a week of daily running, we were there proudly flying the flag.

After two years participation and a growing number of British and other European makes joining in, the organising club offered trophies for this category of vehicles.

I think the judges thought that a vehicle that costs over \$100,000 must be better than any vehicle that cost only a few thousand dollars. Well that what I reckon the judges must have thought, otherwise they would not have given the Lamborghini first place – its engine bay was not even detailed!

Oh well, we were very proud of the second place trophy.

Kerry Guinea



First and second place winners at the 2004 Cyclones Custom and Rod Club Inc. Show and Shine – Townsville North Queensland.



Dennis Smith with his 1910 Hupmobile
NK197063



MG enthusiast Ken Page of Wulguru
NK197090

Wheels results

MORE than 1000 people admired about 150 entries in Shannons NQ Wheels at Rollingstone at the weekend.

The Shannons NQ Wheels Champions Trophy was awarded to Bill Bunt for his Austin Sheerline Princess.

Other results were:
Best Club Display — North Queensland Machinery Preservation Society

Best-Dressed Club — Military Historic Vehicle Club

Best Modified — owner Scott Fuller, 1975 Monaro

Best Classic — owner Ken Cavanagh, 1971 Corvette Convertible

Best Wheels Other Than Car or Motorbike — Owner Mark Jones, Human Powered Vehicle Group

Best Military — Owner Col Feather, 1940s Harley Davidson and sidecar complete with real Tommy Gun

Best Vintage or Veteran — Owner Wilf Hardy, 1947 MG

Best Motorcycle — owner Bruce Fowler, 1998 Harley Davidson Road King Anniversary model

Best Original — Owner Kerry Guinea, Austin 1800



Minis on parade

NK197083

Note the winner of the best original. A Landcrab does it again!



The extremely well restored mk 11 of Eddie Board. The restoration took 12 months an consumed many hours of spare time !

THE WIND BAGS

PRESIDENT

Vacant Ability to read and write
Helpful but not necessary
Applicants invited

DATA REGISTRAR

Peter Jones
4 Yarandin Court
Worongary QLD 4211
07 5574 8293
landcrab@tpg.com.au

PUBLIC OFFICER

Peter Collingwood
18 Lighthorse Cres
Narre Warren Vic 3804
03 9704 1822

SPARES CO ORDINATOR TREASURER LIBRARIAN

Patrick Farrell
4 Wayne Avenue
Boronia Vic 3155
03 9762 4457
farwar@ozemail.com.au

EDITOR / SECRETARY

Daryl Stephens
22 Davison Street
Mitcham Vic 3132
03 9873 3038
stephensdaryl@hotmail.com

SOCIAL CONVENORS

Brisbane Peter Jones
Melbourne Nil
Sydney Nil

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Understanding Batteries
Issue #2 - How heat affects batteries
Battery performance issues under Australia's unique conditions.

(Information from Web site www.batteryworld.com.au- discovered by Graham Anderson)

High temperatures can have a devastating effect on the life of lead-acid batteries and Australia has one of the hottest and harshest climates on earth. While more batteries experience end-of-life failures in the colder months, the real damage is done when the batteries are operating at elevated temperatures. The damaging heat is generated from two primary sources: -

- a. the ambient or environmental temperature, and
- b. the under bonnet temperatures of the vehicle

Modern vehicle manufacturers have within the past decade increased engine operating temperatures in an endeavour to reduce harmful exhaust emissions. The result of these changes, combined with high environmental temperatures, are accelerating the damaging effects on battery life as outlined below.

The key point of temperature measurement is how hot the electrolyte (battery fluid) becomes due to the above primary sources of heat. High temperatures can cause the following potentially damaging effects:

- 1. increased gassing and resultant water loss
- 2. increased grid corrosion / oxidation
- 3. overcharging, and potential plate failure
- 4. increased battery discharge capacity
- 5. increased self discharge rate

The operation of a lead-acid battery is a chemical process, and like all chemical processes, battery performance is temperature dependent. The available capacity and maximum discharge current available, both fall at lower temperatures and increase at higher temperatures. Capacity and discharge current at -20°C is approximately half that obtained at +20°C.

Continued next page.....

....from previous page

3. Increased gassing and resultant water loss:

As battery temperatures increase, the rate of gassing and water loss in a battery is increased exponentially. The lead alloy used in the plate grid construction also influences the rate of gassing of a battery. As gassing continues over time, the electrolyte level drops below the top of the busbar and the top of the plate groups become exposed. This leads to major grid corrosion and reduced battery life, which will be discussed in more detail shortly. Because of gassing, batteries need to be topped up with water and topped up more regularly under extreme operating conditions.

The key point here is that the greater the available volume of electrolyte above the busbars in a battery, the longer the probable battery service life before the risk of exposure of the plates. This is a very important design issue for battery manufacturers in Australia.

2. Increased grid corrosion / oxidation:

The operation of batteries at elevated temperatures will result in increased positive plate grid corrosion (oxidation), and in extreme cases can bring about oxidation of the busbars in the battery. Positive grid corrosion is a normal 'end-of-life' failure mode of batteries which is greatly accelerated at elevated operating temperatures.

As mentioned previously, the failure of plate grids and busbars is further increased if the electrolyte level drops below the top of the busbar and the top of the plate groups due to gassing (water) losses. In extreme cases, plate grids can expand and break at the top of the plate group, causing battery failure due to short circuits.

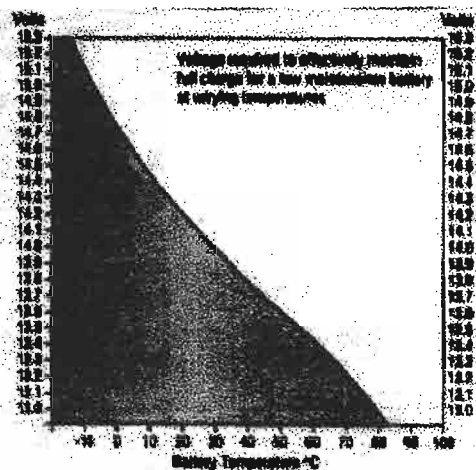
The volume (reservoir) of electrolyte above the plate group and busbar in a battery can provide improved operating life at high temperature as more electrolyte is available to cover gassing losses before the risk of exposure of the busbar.

3. Overcharging and potential plate failure:

As the battery operating temperature increases, battery internal resistance decreases and the charge rate acceptance of the battery increases accordingly. That is, as temperature increases, the charging voltage applied by the alternator to a battery must be reduced to avoid overcharging. The following curve indicates

....from previous page

the variation of voltage with temperature that should be applied to a lead-acid battery to adequate and correct charging.

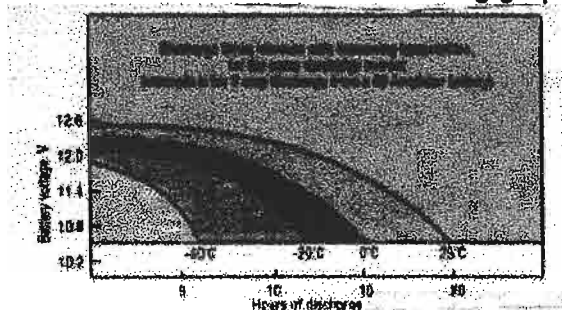


At elevated under-bonnet temperatures, charging voltage control can be difficult and inadequate, resulting in extended overcharging and reduced battery life due to positive plate material degradation and loss, often accompanied by softening of the negative plate material.

Different rates of air ventilation and the position of the battery in the engine bay can lead to an internal material difference in alternator and electrolyte temperatures which increases the rate of overcharging the battery receives and the subsequent gassing.

4. Increased battery discharge capacity:

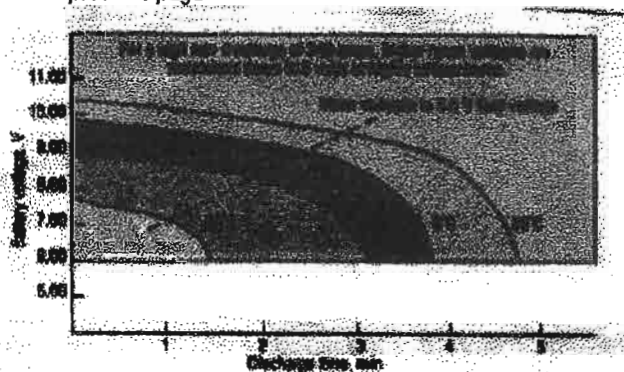
At elevated temperatures, the **discharge capacity** of a battery is increased, and the ability to deliver higher cranking current is increased - as shown in the following graphs.



In practical terms, this is of no real advantage, except in the case of a worn or reduced capacity battery, which may still function adequately due to the elevated temperatures.

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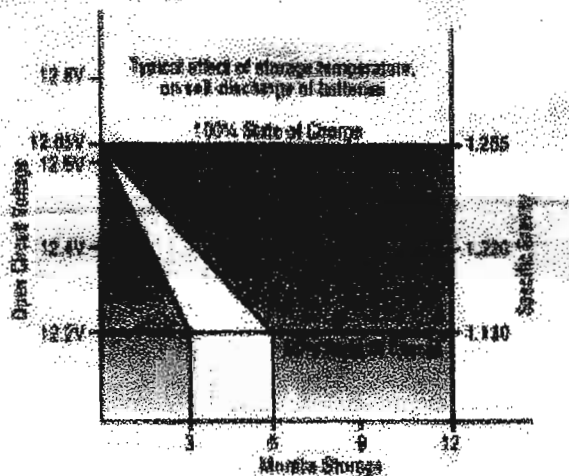
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This masks the fact the battery is nearing its end-of-life and when the temperatures become colder and the engine requires higher cranking amps to turn over due to the engine oil becoming viscous, the battery ultimately fails suddenly.

5. Increased self discharge rate:

All automotive lead-acid batteries slowly lose charge when not in service. This is known as self-discharge. The rate of **self-discharge** increases with increasing temperature. The time batteries can be allowed to stand without recharging is reduced with increasing temperature of storage. Batteries should be recharged when the Open Circuit Voltage (OCV) drops to 12.4 volts.





From : Steve McPhail <smcphail@dodo.com.au>
Sent : Saturday, 26 February 2005 9:23:27 PM
To : <stephensdaryl@hotmail.com>, <farwar@ozemail.com.au>
Subject : expanding the club

Dear Pat and Daryl,

Pleased that the Landcrab Club are thinking of re-admitting 1100's, 1300's and 1500's: afterall they seemed to be welcome when I joined the club some years ago.

Looking at it in engineering terms they all float on fluid and have wheels at each corner of the body. So in one definition they are all landcrabs. There are many other similarities. For example, the 1500 engines are cut down versions of the sixes of Kimberlies and Tasmans which are welcome in the club. 1500 Manual gear changes are by cable just as in all other club cars. And with BMC badge engineering what's the difference between an Austin and a Morris anyway? The club seems to admit Wolseley 18/85's.

Furthermore no Morris club is really interested in 11's, 13's or 15's of this era. But they have so much in common with 1800/2200's it's not funny. Hence I am strongly of the view that all Hydrolasticly suspended BMC/Leyland vehicles should be allowed in the club (except Minis which are more than adequately catered for otherwise).

Personally I first drove/owned an 1800 in 1969, my first experience with 1500/Nomads was more than 20 years ago. Apart from Austins I currently own 2 Nomads, one of which represented the marque at the 25th anniversary of the closure of the Zetland plant. I can see no downsides of allowing these vehicles into the club. Indeed if this were the case I might consider taking on the role of President (particularly if someone could tell me what it involved and whether living in NSW, when the majority of other club members are in Victoria, would be a disadvantage).

Cheers in BMC fraternity

Steve McPhail

For Sale

1965 mk 1 no reg needs paint, clutch and brakes BRG/ beige good seats \$1,400
 Hawthorn Vic 65,000 miles Mrs Millross 03 9818 1940

Wanted

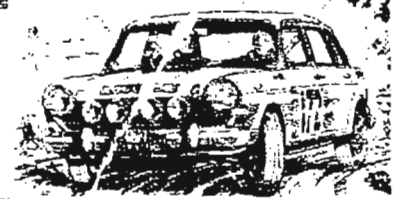
Club member Leo Goodfellow, the proud owner of a Wolseley 18/85 S is looking for a set of Aeon rear bump rubbers. He can be found at the other end of 02 6654 1283

Being poor is no disgrace,
 But it is most inconvenient

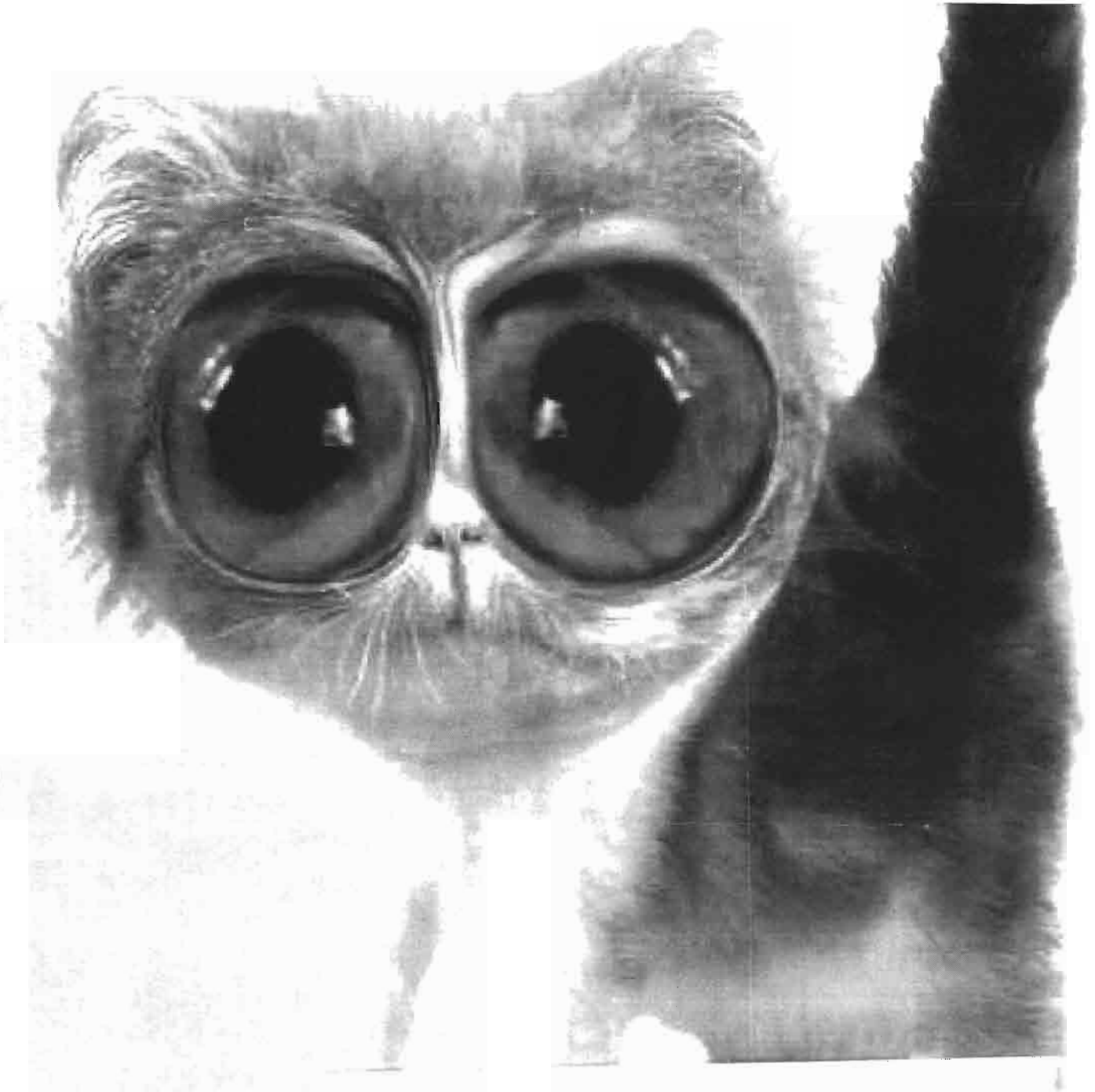


LANDCRAB

CLUB OF AUSTRALASIA INC.



Welcome to Newsletter number 123 for June and July, 2005



I've gotta cut back on the caffeine

AUTO AFFAIR

Austin powers forgave youthful error



Ready for business: Daryl Stephens with his Austin 1800

Picture: David Crosling

Robert Wilson

WHEN BMC Australia launched the Austin 1800 sedan in 1965 it boasted of having "the strongest body of any mass-produced motor car."

Three years later a teenaged Daryl Stephens put that claim to the test. "My parents had always owned Austins," he says. "And on new year's eve 1968 I got my own Austin 1800 as a 17-year-old. A few weeks later I drove it into the side of a truck. But I was able to open the door and walk away. The engine and gearbox went under the passenger compartment, as they were meant to do, and the steering column swung away as it was designed to. Although the car was crushed to the front doors I was able to get out."

Thirty-six years later Daryl is by his own admission a more sedate driver, but he still drives the type of car that he says saved his life. A restored Austin 1800 is his daily transport - and the vehicle for his business as a suburban window cleaner. "When people see the old car you can almost see them thinking 'this fellow's a peasant', but when they see how it's been restored they don't know which basket to put me in," he says.

He bought his current 1800 16 years ago from the widow of its first owner. "She didn't want much but she didn't want to give the car to her grandchildren. She had a suspicion they would just thrash it."

The Austin found a kind owner in Daryl who has had it resprayed, reconditioned the simple but unusual hydrostatic suspension, overhauled the engine and ha-

converted to run on unleaded petrol. "It runs better now on unleaded than it ever did on Super. There hasn't been any problem," he says. "It's 100 per cent reliable, if not I wouldn't be using it for business."

The Austin 1800 was a transverse engined 1.8-litre front-wheel drive medium sized sedan, built between 1964 and 1974 by Britain's nationalised BMC. It was designed by Alec Issigonis, the creator of the original Mini, and like that car it exploited the compactness of front-wheel drive to produce impressive interior space.

The 1800 sold poorly in Britain, achieving only 20 per cent of its production target. But it was a success in Australia, in some months becoming the country's fourth best-selling model on the local market. It began local production in 1965 and ended in 1970.

Contemporary opinions were glowing. "The outstanding characteristics of this car are the spaciousness of its cabin, the good ride it affords over rough going and its general robustness," wrote one reviewer in 1968.

But memory has been unkind, with the 1800 now remembered by its nickname of Landcrab, a reference to its supposedly symmetrical appearance of bonnet and boot when viewed side-on.

"BMC was brilliant at engineering but they didn't have a clue when it came to marketing," is Daryl's explanation. "They really forgot to blow their own trumpet."

The amount of room inside an 1800 is extraordinary, he says. "I take people in the car and they're dumbfounded. It also has really nice handling, like a Mini."



THE WIND BAGS

PRESIDENT

Vacant Ability to read and write
Helpful but not necessary
Applicants invited

SPARES CO ORDINATOR TREASURER LIBRARIAN

Patrick Farrell
4 Wayne Avenue
Boronia Vic 3155
03 9762 4457
farwar@ozemail.com.au

DATA REGISTRAR

Peter Jones
4 Yarandin Court
Worongary QLD 4211
07 5574 8293
landcrab@tpg.com.au

EDITOR / SECRETARY

Daryl Stephens
22 Davison Street
Mitcham Vic 3132
03 9873 3038
stephensdaryl@hotmail.com

PUBLIC OFFICER

Peter Collingwood
18 Lighthorse Cres
Narre Warren Vic 3804
03 9704 1822

SOCIAL CONVENORS

Brisbane Peter Jones
Melbourne Nil
Sydney Nil

Opinions expressed within are not necessarily shared by the Editor or Officers of the Club While great care is taken to ensure that the technical information and advice offered in these pages is correct, the Editor and Officers of the Club cannot be held responsible for any problems that may ensue from acting on such advice and information



New members

Peter Hocking

18 Arenga Court,
Mount Claremont W.A

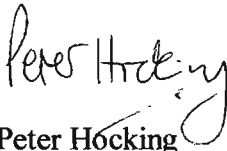
08 9385 0692

Austin 3 Litre

In your email, you asked for details of my Austin 3 Litre. It was built in November 1970 but not registered until August 1971 in Colchester, England. It had been bought, apparently, by a very elderly chap who didn't drive the car much. Consequently, after his death, it sat unused for some years until it was traded against some building work. The builder did nothing with it until he traded it against some engineering advice. The engineer rectified what had dilapidated over the years and I eventually bought it in the UK in 1999 with about 40,000 miles on the clock. I was working in the UK at the time, had always wanted an A3L since I saw one at the London Motor Show in 1967 or 68 as a school boy, so I bought it (only the 8th one I've seen since 1968 – one of which had been in Perth, though all trace has now disappeared), brought it back to WA in 2002, since when it has been in almost constant use, though I have to admit that in the last 6 months or so, my 1949 2½ litre Riley has taken over as the daily hack. This has been because the front discs on the Austin have worn to such an extent that braking has become very uncomfortable, so I've laid it up until I can find some replacement disc rotors. Perth Brakes assure me they are looking into it!

Despite the brakes, it is a beautifully elegant car, incredibly quiet and attracts enormous amounts of attention wherever it goes. Not the driver's car that the Riley is, but slightly more sophisticated!

Kind regards,



Peter Hocking

Michal Loveday

11 French Street,
Artarmon NSW 2064

Mk 1 & 11

Larry Pulbrook

"Gemari" 507 Dripstone Road,
Dripstone NSW 2820

02 28467628

Anthony Woodcock

601 Chum Creek Road
Healsville Vic 3777

03 5962 2467

mk 1

J E Fiechtner	12 Vulture Steet West End, Brisbane 4101	07 3844 0147	mk 11
Liam Dwyer	4 Wuru Street Semphore S.A. 5019	05 8242 5998	mk 11
Ian Batty	96 Brewster Road Ararat Vic 3377		Mk 1

My Austin 1800 Mk1 Sedan The People, Times and Places

Chassis: Â Â Â Â YAHS2 20905
Eng. No: Â Â Â Â 18YE/RC/H5858 (originally 18Y/TA/H7162S)
Reg. No: Â Â Â Â ETN-217 (originally JWM-436)

4 Oct 1967 Â Â Â Â Purchased by James George Gillespie (L.S.) from A.F. Hollins Pty Ltd 694 High Street East Prahran. James George was a retired Licenced Surveyor of the old school, sometime President of the Institution of Surveyors Victoria and the person for whom the Gillespie wing was named at RMIT. He was also the grandfather of 2 close friends of mine.

10 Aug 1979 Â Â Â Â I bought the car from him for \$900 with 45835 Miles on odometer. At the time I was working as a chainman (surveyors assistant) on the Thomson River Project, and needed something a bit more upmarket than the '51 Ford Prefect, Chev Blitz Signals Van, and Morris Major (Series II) that I was driving at the time. Remember petrol at 26 c/l ?

For the next few years (1979 - 1981), it was a pleasure to drive the Princes Highway between Melbourne and Moe. Except for the time Jan, my fiancée, was driving us home from a two week camping holiday at Pambula and cracked the head near Cabbage Tree because coolant had leaked out. It was my fault for not telling her to watch the temperature gauge. (Jan's mother was aghast that we would go camping together, but was shocked when the camping store rang her to say the double lilo had arrived and was ready to be picked up.) The Austin was towed to Orbost for a reco head - which took 5 days and \$288. That night we stayed in a motel which I can't forget because I missed the episode of The Sullivans when the Chev Blitz, cunningly disguised as a German Personnel carrier, was blown up by Crawford Productions. We caught the bus and train home, and I returned a few days later to collect the car. It could have been worse - it could have been Cann River.

The rear seat is still a tangle of seatbelts because friends of ours at the Thomson Project had two sets of twins aged 4 and 5, so, Jan having a big heart, decided that they needed respite and made me fit extra lapbelts to take the children away.

Jan and I were married in January 1981, and lived in Mitcham, Ferntree Gully and then move to Ashwood in 1983.

In September 1985 Â Â Â Â (remember petrol at 51 c/l), at 85806 miles, the Austin was de-registered, and the car sat in the driveway at our Ashwood home for the next 6 1/2 years, slowly decaying, while I commuted to the city. The car was re-registered in February 1992, after a bit of work (seized brake calipers) to get it roadworthy, so I could go to weekend schools at Monash Uni, Gippsland (Bachelor of Computing by distance education).

In June/July 1994 at 110790 miles, the engine was rebuilt with a secondhand block â€” sort of like the axes they don't make anymore. Couldn't use my original block because two of the cylinders had been sleeved in production. (Maybe that's why the old engine number had the suffix â€œSâ€”). That cost about \$3000. New parts are getting too expensive.

July 1997 Â Â Â Â We moved to Ararat and I now have one of the more recognisable cars on the road. A bit of rust in the doors and boot floor, interior trim and seats torn and saggy, carpet shrunk, accelerator pedal broken, duco very sad, an engine with a Â mystery vibration, sagging backend, noisy exhaust and transmission. In the past 7 years both Cvs and drive shaft universals replaced, had some dents repaired but not painted, fuel pump reconditioned and a replacement fuel pump push rod (courtesy Brad Parker). For all the cost over 26 years, I reckon depreciation is zero and I must be in front when compared with the other car that has cost \$25000 just in depreciation over 12 years.



THE FELLOWSHIP OF THE AUSTIN

AUSTINS OVER AUSTRALIA 2005

This Easter (25 to 28 March 2005) AOA was held at Warwick in Queensland with beautiful warm weather prevailing during the entire rally. The rally was a credit to the AMVC of Queensland with its excellent organisation and was also a significant event because it was part of the centenary celebration of Austin vehicles (1905 to 2005).

There were over 220 entries at the rally ranging in seniority from Bruce and Kathleen Kinnear's venerable and very handsome 1912 Austin 12 Tourer from NSW to Nairn Hindhaugh's 1974 Austin Maxi from Queensland which he uses for daily transport.

All decades, particularly from 1920 were well represented. Notable vehicles from the 1920s in addition to Austin 7s included a 1920 Austin 20/4 Sports replica built by Wally and Denise Nye from Victoria and driven to the rally; two Austin 20 Tourers; two Austin 12/4 Tourers; a beautiful 1926 Austin Windsor Sedan; and a 1929 Austin 12/4 Roadster. There was also a 1919 Austin 20/4 Tourer visiting from New Zealand.

As expected, there was a good range of Austin 7s; a large selection of A40s from 1948 to 1954, and even a 1956 A40 Countryman; a good selection of A90 Atlantics; the range comprising A50s through to an A105 Westminster; Lancers; Freeways; a Healey or two; Vanden Plas Austins; three spectacular A125 Sheerlines; and about 15 Landcrabs (1800s, a Tasman and a Kimberley).

AOA 2005 followed the general and enjoyable format of vehicle displays, tours of the district, rocker cover races, an Easter Bonnet competition and the Official Dinner – all well organised with ample time to catch up with old friends and to meet new Austin enthusiasts.

The two 1800s which were driven to Warwick from Melbourne were part of a travelling group organised by the Austin A40 Car Club of Australia. There is an outline below of the 1800s which participated in AOA, but the two 1800s from Victoria ran without fault, the drivers and passengers travelling comfortably, as expected.

The major display of rally vehicles was at Victoria Park, Warwick on a gently sloping area with tree cover where particular models were grouped in circles facing inwards. Within the 1800 category there was also displayed a 1974 Austin 1100 Mk II Sedan and the Austin Maxi which was previously mentioned.

The following "1800" group of cars was on display at the rally#:

- **1965 Austin 1800 Mk I Sedan** (blue) from Townsville, Qld (Kerry and Josie Guinea's 1800 is an immaculate low mileage vehicle with original accessories; they demonstrated the fold down seats showing how you could sleep in comfort).

- **1965 Austin 1800 Mk I Sedan** (white) from Seven Hills, NSW (Norman Peck has owned his 1800 since new and it is the oldest 1800 in the AMVC of NSW. Known as *Granny*, it has given 40 years of reliable service over 200,000 miles and has attended many AOAs).
- **1966 Austin 1800 Mk I Sedan** (black) from Walla Walla, NSW (Herb Simpfendorfer came in one of his genuine black vehicles – Herb's reports on his travels and commentary on 1800s will be well known to Landcrab Club members via his articles in the newsletter).
- **1967 Austin 1800 Mk I Sedan** (light green) from Pakenham, Victoria (Barry and Joan Willmott have owned their low mileage 1800 since 2001 and are its second owners. It has been repainted and looks immaculate – it has many period accessories, including wire wheel hubcaps. Barry was enthusiastic about the comfortable ride to the rally).
- **1968 Austin 1800 Mk I Utility** (light green) from Wallendbeen, NSW (Malcolm and Lin Chaplin have owned their very presentable utility since 2001 and in 2003 completed a return trip to Alice Springs with a group of motoring enthusiasts).
- **1969 Austin 1800 Mk II Sedan** (red) from Ballina, NSW (John and Wynniss Harding have owned their metallic red 1800 since late 2002, it is used for family transport and is known as *Ruby* because of its colour and family knowledge of early Austins).
- **1969 Austin 1800 Mk II Utility** (blue) from Goonellabah, NSW (Eric and Helen Davison have owned their bright blue utility for about three years, it goes well and attended AOA at Ballarat in 2003).
- **1970 Austin 1800 Mk II Sedan** (buff) from Coorparoo, Qld (Nairn Hindhaugh's very well presented and original car has been in his family since it was 10 months old. The car has attended many AOAs, is Nairn's favourite car of all time and has been the subject of stories on 1800s in Australian Classic Car Monthly and Unique Cars and was exhibited at the 2000 Brisbane International Motor Show as one of the significant cars of the 20th Century).
- **1970 Austin 1800 Mk II Sedan** (white) from March, NSW (David and Maria Huck have a beautifully detailed model with about 83,000 miles on the clock which they have owned since 1992. The car was restored by Ken Lyle from Perth in 1997 for regular use. It is standard except for halogen lights and two speed wipers).
- **1970 Austin 1800 Mk II Sedan** (light blue) from Slacks Creek, Qld (Colin and Colleen Johnson have owned this very low mileage (26,000) vehicle for about five years. It runs very well and is very original).
- **1970 Austin 1800 Mk II Sedan** (in rally livery) from Forster, NSW (Brian Rees has been the second owner since 2002. The car had been stored in less than ideal conditions in the past and Brian has changed the vehicle to rally car livery: red, white roof, alloy wheels, lights – rally cars certainly look pretty exciting to my eye!).
- **1970 Austin 1800 Mk II Sedan** (white) from Queensland (a very smart example, I think it was a substitute for the owner's A40 which did not attend the rally).

- **1970 Austin 1800 Mark II Utility** (white) from Heidelberg Heights, Victoria (Jim and Liz Taylor's utility has been used every day for transport by its current owners since 2002. Previously a wreck, refurbished to roadworthy, the help of Landcrab members in providing advice, information and parts has been greatly appreciated by Jim).
- **1971 Austin Tasman Sedan** from Grantville, NSW (Ronald and Nancy Egan-Lee are the second owners of this fine low mileage example. It has Kimberley bucket seats and the head has been done up for ULP, otherwise it is original).
- **1972 Austin Kimberley Mk II** from Sandgate, Qld (Bob and Pauline Mackellar are the second owners (since 1980) of a very attractive and well presented vehicle).

This year's AOA was important because it coincided with the centenary of Austin motor vehicles, but in line with past AOAs was simply a great opportunity to meet or catch up with others from across Australia, New Zealand and the UK who have similar interests and enjoy the use of their Austins. The 1800/Tasman/Kimberley entrants at AOA provided an excellent and representative cross section of the final Austin models built in Australia and from an historical and centenary celebration perspective were, from my point of view, a valuable part of the event.

In summary, AOA 2005 was a memorable and enjoyable event and many of the people I spoke to at the rally are now awaiting the next one in 2007.

Note by the author

AOAs are great events to attend for anyone interested in Austins and are promoted via the Club's newsletter. I knew very little about Austins in general until Patrick Farrell encouraged me to attend AOA 2003 in Ballarat and possibly catch up with the A40 Club in Melbourne. I still don't know all that much about Austins, but they made so many different models there is something for almost everyone's motoring interests and bringing the vehicles together at an AOA is quite spectacular.

For anyone who has not attended an AOA, it is worth thinking about and planning for the next one which will be run by the AMVC of NSW in 2007. I once thought a trip to another State was too far for "an old Austin", but AOA rally entrants drove from Northern Queensland and WA in the likes of A40s, or from Adelaide in an Austin 7 and a fair group of vintage Austins drove up from Melbourne (as did many from the A40 Club) – if your Austin is sorted, you understand it and drive within its limits it should be able to travel great distances with a high degree of reliability.

Jim Taylor

[Well used 1970 Austin 1800 Mk II Utility]

The background information about the vehicles at the rally is based in large part on details provided in the AOA 2005 Rally Book which was prepared and distributed by the AMVC of Queensland.

AOA 2005

By Herb Simpfendorfer

Three things to remember for two years:

Austins Over Australia.

Easter 2005

Warwick, Qld.

So, where exactly is this place called Warwick? A look at the road atlas showed it is just across the Queensland border, in the area where the border is a wiggly curve, not a straight line and somewhat inland from Brisbane. So it could be sort of hilly and maybe cold at nights. Warwick was printed in rather large letters, so it could be a sizable town.

Newsletters soon came from the organising committee, encouraging us to register and attend to accommodation. More newsletters came telling us that everything was highly organised for the five days of the rally, and it would definitely be the place to be, as it was the 100th anniversary of the production of the first Austin vehicle. It should be a lavish and memorable affair. So we selected a photo of the vehicle we were going to take, wrote out the text for the bit that was going to be in the booklet of entries, and sent it all off. Then came the long wait for Easter 2005 to arrive. It was to be my third AOA experience.

I come from near Albury, and a decision that had to be made was whether to drive to Warwick along the coast or on an inland road. I did the trip solo in one of my black 1966 Austin 1800 sedans, and chose the latter road to go up, and the former to come back. The only problem on the whole trip (roadwise) was that horrendous hill somewhere near Armidale, where the road goes up and up to well over 1000 m altitude. My radiator water temperature went a bit high near the top, so I stopped for a cuppa. Nice view.



After 1371 km of motoring, this was a pleasant sight.

Thursday was the first day of the rally for us early ones, who could collect our rally packs in the afternoon at the rally headquarters at the Queens Park sports ground, home to some rugby team. We then went to our accommodation spots and unpacked. The rest booked in on Friday morning. There were about 223 vehicles in the book of entrants, but I feel a few more registered after the deadline for book publication. All proudly bearing the name Austin. On Friday afternoon, our cars were put into a static display according to club groups, with the Landcrab group having but one car, mine. Others who had registered under the Landcrab Club name were unable to attend: Chris and Sue Lewis, and Katherine and Keith Lewis. The other Landcrab Club members who were there had registered under the name of another club to which they belonged. That was when we started making contact with others and having a good look around. There were loads of Austin 7s, A30s, and A40s, as expected, and fourteen 1800s, up on our total two years ago in Ballarat.

There were also Austin 8s, 10s, 16s, 20s, A70s, A90s, A95s, a A105, and even one A99 (whatever that is!), a Maxi, a Kimberley, three Tasmans, a Marina, three Vanden Plas Princesses, and some

what were so unusual that a name seemed inadequate. The oldest was a 1912 Austin 12 tourer from Wollongong, NSW, and the most unusual was a 1919 Austin 20/4 tourer that was brought over from New Zealand. They were all Austins. There must have been a time when the Austin factory tried to make the smallest possible vehicle, as some of the 7s look so tiny! Conspicuous by their absence were military type vehicles. Pity! A P76 and a Force 7 would also have been special too, although they would not have had the Austin badge on them, but they were produced in the Zetland plant, just like the other Aussie Austins.



Some of the display vehicles on Friday

I went around the town a few times, and there was a remarkable sight at each motel, hotel and caravan park. At all of these, about half of the vehicles in the car spaces were Austins. Nice. Probably many ordinary people missed out on their planned Warwick Easter holiday because they left their booking too late, and found all accommodation places completely booked out months before Easter.

On Friday evening we met for nibbles and the official opening at the RSL hall. We had speeches, of course, and the Lord Mayor of Warwick did his best to impress us with the important aspects of his area. The chairman of the organising committee, Kev Airton, told us what was important for the next few days. He and his helpers (I suspect Kev's wife Paula was one of the most important) did a magnificent job to have everything ready to go when required. The booklet of entrants was well produced, and all other planning seemed spot on. The beautiful weather helped of course

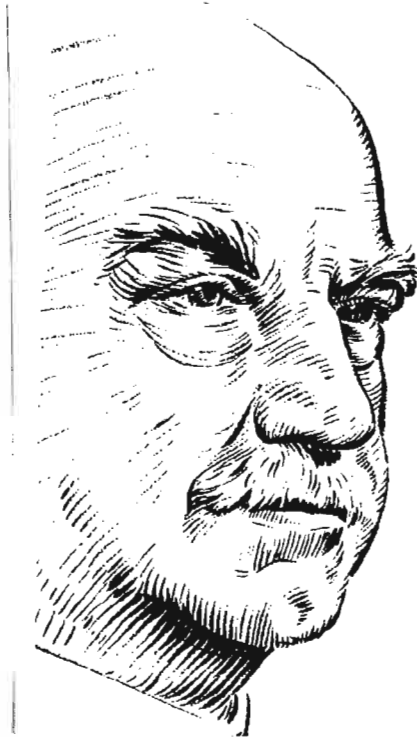


The colourful rally badge was a work of art with colours lemon, sky blue and moroon. Shown here about half size

On Saturday, we had runs, where we took off in very long lines to see local scenery and important spots. I went to the Queen Mary Falls, which may be notable in normal times, but because of the severe lack of rain in recent times, it was more like the Queen Mary Dribbles. We had a real thrill on the way there, when we actually reached 60 km/hr while in convoy. But it only lasted for a few hundred metres

In the evening we had a BBQ at the rally headquarters, and there were people everywhere, but nobody went hungry.

On Sunday, we had another static display, this time in marque groups. So all the 1800s were in a circle, noses inwards. A pretty sight. We were in a nice shady spot, so our paintwork did not suffer at all. Much looking under bonnets and animated conversation about all kinds of things mechanical. Stalls sold the usual food and goods, and, important for me, one guy had a variety of car parts. For those musically inclined, a brass band played for some hours especially for us. I heard that the conductor was a restored car buff, just like the rest of us.



Sir Herbert Austin (1866 - 1941)

This image of Herbert Austin comes from the medallion produced by artist Jean Beddow for the 50th anniversary of the Austin Motor Company in 1955

In the evening we had the official dinner at the RSL, a grand occasion, with many people dressing up in period costume. We had excellent food, the usual run of speeches, a slide show of early Austins in Australia, the awarding of prizes, much talking and much happiness. The main speech was an overview of the life of Herbert Austin, rather appropriate. (As an aside, I met up with a nice lady whose surname was Austin. If she and I would have stood together on the stage, Kev could have said that ***Herbert Austin is on the stage!*** The real Herbert Austin died in 1941, of course). Of particular interest to me was the Hard Luck prize. One guy from Bendigo with an A40 panel van had a bad run on the way to Warwick, first a boiling radiator which had to be cleaned out, then brake failure requiring considerable repairs, then distributor failure, which needed a rebuild, then a fuel tank leak, which had to be repaired, then brake failure again. The vehicle was finally taken the rest of the way on a trailer. And, believe it or not, that bloke was smiling when he went up to receive his prize. Maybe someone, sometime can tell us about his trip home. In contrast, the 1800s went much better, with the only problem known to me was to my vehicle, which I will tell you about in a separate section below.

On Monday, there was another planned morning of runs, then lunch at the RSL, and saying goodbyes. After that, we put Warwick behind our rear bumpers, hoping for a good run to our homes. I did a bit of a loop, going through Toowoomba to the Sunshine Coast to see relatives and 1800 devotees. Peter Jones at Worongary in Qld was not at home, but Eddie Board in Newcastle was, and we had a nice chat for an hour or so. Then I went through Sydney, to eventually get home to Walla Walla on Saturday afternoon, ever so thankful that both the car and I were in good shape, and that nothing unfortunate has occurred to either of us..

We meet again in 2007 somewhere in or near the ACT, maybe at Jindabyne, maybe somewhere close by. It has yet to be determined for sure, the organisers said, but it will be at Easter again as usual. See you there.

Rubber Parts

While I was motoring through Sydney on the way back from AOA, I called in at the factory of Spectrum Rubber and Panels, Pty Ltd. Not easy to find for a country bumpkin like me, but I felt it my duty to do this and give a report to Landcrab Club members. I had a copy of the Spectrum catalogue dated 2000, which is still current, they told me. A new one is being printed this year.

The staff members were most helpful, and I had the feeling that they could supply any, yes, any rubber part and many other parts that deteriorate with age that we may need for restoration purposes. I tested them with bailey channels for the 1800. These are the soft channels that are attached to the door frame, and touch the glass above the sill. They start to come apart when the car is left in the weather for some time. Two guys came to my car and did measurements, and said, Yes, they could supply this part. It is \$29.17 a metre, and is cut off a roll. The weather strips that are on the window sill are \$24.95 a metre (Mark 1), and come in 2.4 metre lengths. Both these can be sent in the mail, the former is rolled up, and the latter is cut into lengths specified by you to make packing and posting easier. Part numbers are 350.321 for bailey channel and 350.088 for weather strip. They gave me short samples to take away, and I could post them to you if you want to see them. To the above prices, GST and P & P has to be added, of course.

Ordering is done by mail using the Order Form which is on another page, which can be photocopied. Other contact methods: Email: sales@spectrumrubber.com.au Phone: 02 9623 5333 Fax: 02 9833 1041. Address: 4/4 Appin Place, Duneved, NSW 2760. The total prices are all sorted out and money sent before parts are posted.

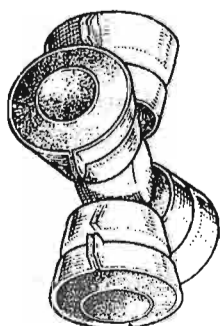
I bought some of those tiny plastic clips that hold the jewellery (For the Mark 1: Austin, 1800, bonnet badge) to the metal in our cars. 60 cents each. Not cheap, but rather necessary for a good restoration as the old clips can fall apart

I also asked them if they re-rubber 1800 engine mounts, and yes, they do. The old mounts are sent to them, and the prices are front \$128 for a pair, and rear \$121 for a pair. So that is an option for you guys that prefer rubber to neoprene. Of course, I have no idea how good they are, but I have the feeling that they would re-do the job if it was not satisfactory. I could have asked them about rubber universals, but it was close to 5 o'clock, and I was very keen on getting out of the Sydney rat race as soon as possible, and I was no longer interested in them anyway.

I should have asked them what the **and Panels** in their name means. Perhaps someone else has investigated this and could write in and tell us.

So there it is. You certainly don't have to put up with any worn bits in your car. You may well have a bloke just around the corner from you who can supply all these things, but, if not, give Spectrum a try. They seem to be a good crowd.

My Rubber Universal Problem.



I was checking out my vehicle at the furthestmost point in my trip to AOA, at Redcliffe, Qld, well over one thousand km from home, and noticed the near side rubber universal (called COUPLING-DRIVE in the parts book) in the drive train was collapsing. From the outside, it looked quite good, but rocking the car backwards and forwards while in first gear with hand brake off, and watching the universal from above, there was considerable movement of one part of the universal before the other section started moving. Not good.

The Rubber Universal

What a nasty situation: miles from home, no workshop to use, little chance of getting home without fitting a replacement, and possible disaster if it is not replaced.

Rubber universal joints are a contentious issue among 1800 owners. They were standard issue in all manual sedans, but in utes and auto sedans, metal universals were fitted. In England, I'm told,

owners like them and keep driving with them installed, and they do not understand why many Aussies don't trust them, and change to metal universals as soon as possible. In the manual sedan I drove to Warwick, I left the drive train as original, just to see if these rubber universals collapse with the careful driving I do. I found out, but not as I had planned. Normally this car is very close to home, and would limp home if disabled in this way, but being so far from home makes things much different and rather difficult. It is noteworthy that I had not detected any abnormality while driving along, and this particular fault may well have been developing for many kilometres prior to my arrival at Redcliffe.

I did have a spare rubber universal in the boot, taken off one of my wrecks, and hopefully enough tools to do the job on the side of the road. So, after seeing the problem, I walked around for a while, considering all options, and decided to stop dilly dallying around and get on with it. I have replaced these before, but always in my workshop. At home, I lift up the car, undo the lower ball joint of the wheel, and that makes it easy to take out the old and put in the new. But at Redcliffe, I wondered if the replacement could be done without undoing the ball joint, which is not an easy job on the side of the road. I was going to give it a go. The reason why I thought it may be possible is that the half shaft is spring loaded, and I knew I could compress this spring, but I had no idea if this would be enough to replace the universal.

First I parked the car on a very quiet street, with the near side wheels up on the curb. This gave me room to lie under the car. Fortunately, it was not raining, and the street was clean and dry. I undid all the nuts of the four U bolts, and pushed the U bolts out, using a good sized jemmy bar to compress the spring inside the half shaft. There was just enough room to get the old universal out. I could see that the metal and rubber had separated in two places, so the universal came out in four bits. Then came the hard part, putting the "new" part into place. First I bolted the new part onto the end of the shaft that goes into the differential, and slid it back into place with the outer section of the half shaft pushed aside. Then came much grunting, pushing and levering. Finally, I had the new universal in the right place. There was just enough room, and I mean just. I pushed in the last two U bolts, did up the four nuts and cleaned up. The whole job took a bit over an hour. Total cost to the taxpayer and to me combined: Nil. I was a bit apprehensive as this "new" universal was nearly 40 years old, and 40 years is a long time for the glue to remain good and the rubber to still be capable of flexing rapidly without falling apart. But nothing went wrong on the way home. Careful inspections on the way showed it was doing the right thing.

So what about rubber universals? Are they reliable? If they start to come apart, how much further can one drive before bits fly off and big damage occurs? I've had one years ago where the nuts came off, and that was bad news for all parts in the area that the now unattached half shaft could reach. Things like pipes for suspension, fuel and brakes. I've seen one universal that had rubber completely severed from metal, and some of the rubber gone, but with the nuts still holding, and have reason to believe that the driver could have driven further. Former Landcrab Club member David Huck told me that when his sedan was restored by Ken Lyle in Perth, a universal was fitted that has the best of both worlds. It seems that somewhere in that type of universal, there are needle bearings. This would dramatically reduce the need for the rubber to flex, and thereby reduce the shear forces on the rubber. No problems for David in the years since then.

Landcrab Club member Daryl Stephens told us about his disasters with imported rubber universals, and others tell how any but the genuine articles are not worth fitting. So what is the best way to go? Rubber universals were fitted for a reason, and I think it would have been for a smoother ride, as the rubber would absorb any sudden jerks in the engine from getting to the road wheels, and vice versa. Auto cars have in-built smooth riding, because of the fluid in the system. Aussie designers of the ute obviously had a distrust of rubber in the drive train.

But for me, I've had enough. Metals on all cars from now on. I have already fitted metal universals many years ago on the car I use daily and for long trips. No problems ever. Changing to metals is

easy, if you have a wreck around that is auto, or a ute. I'm not sure about Kimberleys and Tasmans, but I suspect they have the same system. Some of the drive train needs to be changed too, of course.

Petrol fumes in the car: Maybe someone out there has had my present problem, and knows the solution. In one of my Austin 1800 cars, I open the driver's window when going along, and smell petrol fumes. No smell if the window is left closed. The petrol tank is sound, the pipe and hoses between tank and engine are good, It is a Mark 1, and the electric petrol pump shows no sign of a leak.

There are two other spots where fumes could come from.

1. Through the breather at the top of the carby bowl. I have carefully adjusted the height of the float, and checked the gasket at the top of the bowl. The breather hole needs to be there, otherwise the carby cannot work properly, so could let fumes go past.
2. Past the seal of the petrol filler cap. This seal has to let fumes and air go past, to ensure that air can get into the tank as petrol is used up, and to relieve pressure inside the tank on a hot day. I do not know how to check this seal. It looks OK.

Later note: I have tried to make a better seal on the inside out outside of that very big grommet which is between the petrol filler pipe and the body. I used silicone, so it won't be real easy to take apart in the future. The theory is that the petrol fumes that must escape past the seal between the cap and the top of the filler pipe can then go into the boot past the poor seal around the grommet if the seal here is not good, and then through to the passenger areas. I'm not sure if cars in the factory were given paper seals across holes between the cavity that the petrol filler pipe goes through, and the interior of the boot. Probably not. My plastering of silicone may have solved the problem. Scientists tell us that our noses are indeed highly sensitive detectors of odours. Just a few parts per million is enough for an odour to be detected. So there needs only be the tiniest bit of petrol vapour coming into the car to be noticed

Another problem. When I travel at 92 km/hr in one of my 1800 cars, a roaring noise starts and continues at higher speeds. It is present when in acceleration and deceleration, but not at the point between these two when there is neither acceleration or deceleration. The noise is quite loud. I have driven with this noise for many kilometres, and nothing has fallen off, so I suspect it is not a noise indicating an imminent breakdown. I could start to change components from other cars until the noise disappears: exhaust system, complete engine and drive train, various damping devices, but it would be a lot easier for me if someone else knows exactly what causes this noise.

Worst Possible Driving Conditions

I was driving alone a while ago in a strange city at night while there was a steady drizzle, looking for a certain number on a letter box. It was not a good situation. But it gave me food for thought. I was certainly not very cheerful. But it could have been worse. So, what are the worst possible driving conditions for ordinary people like you and me?

Take for a start what I had above. Alone, at night, in a strange place, a drizzle, looking for a house number, and probably in the wrong street. To those, we could add defective windscreen wiper blades because you did not get around to renewing them last week. Add a funny intermittent noise coming from the engine that you cannot identify. What about adding a big semi-trailer tailgating you. Busting to go to the toilet. Headache. Had very little sleep last night. Had a run in with the boss at work yesterday. A warning light coming on now and then. A tyre going flat. Cars coming towards you that do not dip their lights and with fog lights on. Things are bad, bad, bad. The mobile phone battery has gone flat too. There would have to come a time when a human can stand no more. What do we do then?

For the 1800 driver, the answer is easy. Pull over in a quiet side street, turn off the engine and lights, lay back the passenger seat, lock the doors, lie down and have a nice sleep. Things will be ever so much better when the sun comes up.

A bit of trivia

Take a walk around your 1800 sedan with all doors shut, and count the number of heads of screws or hexagon bolt heads and nuts on the outside of the car that you see while walking around once. Just walk around, don't stoop low to look under the vehicle. Ignore anything connected with the number plates. For the Mark 1 sedan, there are four on the headlight surrounds, six on the front indicator lenses, two on the front indicator repeater lenses, and that's about it. None at the back or sides. Total -12. Maybe you would also like count the two nuts that hold on the windscreen wiper bases, making total of 14. . On the Mark 2, there are two more, found on the larger front indicator lenses. Everything else is held on by hidden clips and other tricky devices. Is this important? Well, it is interesting that the 1800 is in the transition stage between the time when there was no shame attached to having exposed screw heads and nuts, and the present day trend when anything like this to be visible is anathema. It is interesting that the rear tail light lenses of the 1800 are held in place with clips, and the front ones with screws.

To see what I am getting at, walk around your modern car, and also have a look around inside, and you will see what I mean. You will be amazed how few exposed heads of anything are to be seen. There are hidden clips made of plastic, totally flimsy, designed to break off when disturbed once the car is a few years old, and also designed not to unclip before something breaks off.



HAVE A LAUGH AT THE PIES

THERE are some oldies but there are also some goldies.

With Collingwood firmly at the bottom of the AFL ladder, footy fans are having a field day with the Magpies jokes.

Here's a selection of the jokes doing the rounds on the office emails.



Why couldn't the Collingwood fan write the No. 11?

Because he didn't know which 1 came first.

Why did the Collingwood fan get badly injured while drinking milk?

The cow trod on him.



Collingwood are bringing out a new bra. Plenty of support, soft and no cup.

Whats the difference between a drawing pin and Collingwood Football Club?

There's a point to a drawing pin.

What do you see when you look into a Collingwood fan's eyes?

The back of his head.

How do you get a one-armed Collingwood fan out of a tree?

Wave to him.

What do Collingwood fans use for birth control?

Their personalities.

What is black and brown and looks good on a Collingwood fan?

A doberman.

What's the difference between Collingwood and an arsonist?

An arsonist wouldn't waste 22 matches.

What do you do for a drowning Collingwood player?

Nothing. You could drag him to the top, but he'll choke anyway.

How many Collingwood fans does it take to change a light bulb?

Seven - one to change it, live to moan about it and make excuses and Mick Malthouse to say that if the umpire had done his job in the first place the light bulb would never have gone out.

Did you hear about the politician found dead in a Collingwood jersey?

Police dressed him up in women's underwear in order to save his family embarrassment.

Santa Claus, the tooth fairy, an intelligent Collingwood fan and an old drunk are walking down the street together when they simultaneously spot a \$100 note. Who gets it?

The drunk, of course; the other three are mythical creatures.

You're trapped in a room with a wild tiger, a rattlesnake and a Collingwood fan. You have a gun with two bullets. Who do you shoot?

The Collingwood fan - twice.

If you see a Collingwood fan on a bicycle, why should you never swerve to hit him?

It's probably your bicycle.

What is the difference between a Collingwood fan and a trampoline?

You take off your shoes to jump on a trampoline.

How can you tell that a fax has been sent by a Collingwood fan?

It's got a stamp on it.

FAX



A Collingwood fan dies and goes to heaven in his Collingwood jumper. He knocks on the pearly gates and out walks St Peter in a St Kilda scarf. "Hello, mate," says St Peter, "I'm sorry, no Collingwood fans in heaven." "But, but, but I've been a good man," replies the Collingwood supporter. "Oh, really?" says St Peter. "What have you done then?" "Well," says the guy, "three weeks ago I gave \$20 to starving children in Africa."

"Oh," says St Peter. "Anything else?" "Well, two weeks ago, I gave \$20 to the homeless."

"Hmmm. Anything else?"

"Yeah. Last week I gave \$20 to the Albanian orphans."

"Ok, says St Peter, wait here a minute while I have a word with the governor." Ten minutes pass before St Peter returns. He looks the bloke in the eye and says: "Here's your \$60 back, now piss off."

Why do Collingwood fans have little holes all over their faces?

From eating with forks!

What's the difference between a female Collingwood fan and a pitbull?

Lipstick.

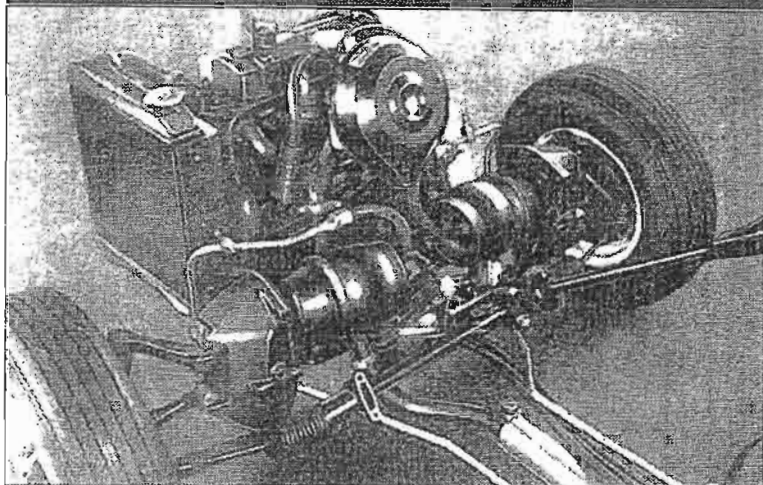
What do you call a good-looking woman with a Collingwood fan?

A hostage.

Did you hear that the post office has had to recall their latest stamps? They had pictures of Collingwood players on them. People couldn't figure out which side to spit on.



POWER ASSISTED STEERING



which way the steering wheel is turned. The sliding member in turn operates the valve mounted on the steering rack casing.

'As soon as the valve operates, power is applied to the appropriate side of the ram housed in the rack-tube which itself forms the cylinder. Immediately this power has been

In keeping with the tradition of luxury and elegance which for more than 60 years has been associated with the Wolseley name, every possible refinement has been incorporated in the new Wolseley 18/85.

One of these refinements is power-assisted steering and as there was no existing device for incorporation in the transverse arrangement, BMC engineers designed and developed a system which was capable of meeting the high standards of controllability associated with the Corporation's front-wheel-drive cars.

The following note on this system has been contributed by A. A. Issigonis, Technical Director of BMC.

'Power-assisted steering on the Wolseley 18/85 is not an adaptation of an existing system, and is very simple.

'We had to design a special pump for it because available pumps for power steering were far too big. The only part on the steering which in not new is the valve mechanism. To avoid excessive development work it was found very easy to adopt this particular valve to our system.

'The novel feature of this design is that the pinion which operates the rack is mounted on a sliding member on the rack tube.

'When the steering-wheel is turned, torque is applied to the pinion. This causes the sliding member to move in either direction, depending upon

applied, the system centralises itself and turns off the power, unless you go on applying load to the steering wheel.

'In this simple way we have obtained the required servo mechanism.

'The ram that provides the power assistance is not a separate attachment, as is very often the case on other cars, but is integral with the rack itself.

'Special attention has been given to servicing. It is easy to dismantle and reassemble.

'The power steering system on the Wolseley 18/85 incorporates an oil pump that embodies a new principle.

'A rotor annulus oil pump, adapted to produce pressures of 850-1,000 psi, has sealing vanes inserted into slots at the tips of the inner driving rotor, which maintain sealing contact with the outer driven annulus.

'Pressurised oil is directed to the inner ends of these vanes to force them into contact with the annulus. With this arrangement the vanes will adjust themselves for both pressure and wear ensuring long life for the pump.

'The pump is an entirely self-contained unit housed in its own oil reservoir with an oil filter, flow control and pressure relief valves. The whole assembly fits onto the rear of the dynamo shaft and is driven through the dynamo shaft by the fan belt in the usual manner.'

For Sale

1965 mk 1 no reg needs paint, clutch and brakes BRG/ beige good seats \$400
Hawthorn Vic 65,000 miles Mrs Millross 03 9818 1940

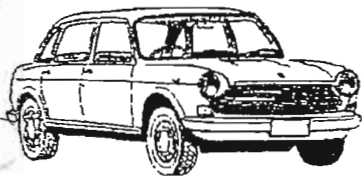
Mk 11 ute \$1,000 minor rust manual blown head gasket b/h 07 3267 6066

From : Rick Perceval <rickp@allsuburbs.com>
Sent : Friday, 27 May 2005 12:09:57 AM
To : "Daryl Stephens" <stephensdaryl@hotmail.com>
Subject : austin 1800

Hi
Saw a very original mkII 1800 auto yesterday
Apparently one owner from new until purchased from a deceased estate
For sale at about \$3500 in dandenong
Owner is Ian (Ian the wrecker) in Dandenong 9794 9009
Enjoy
Rick

Club Fees are due 30/ 6 Please remit \$33
to The Landcrab Club 22 Davison Street,
Mitcham Vic 3132

Proverbs 21 v 9 "Better to live on a corner
of the roof than share a house with a
quarrelsome wife"



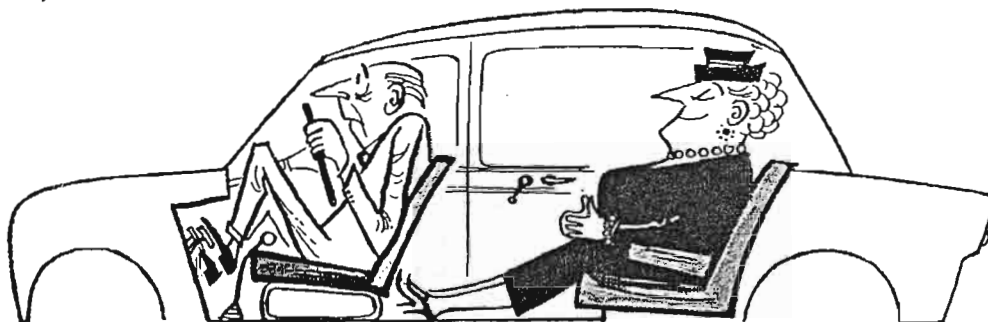
LANDCRAB

CLUB OF AUSTRALASIA INC.

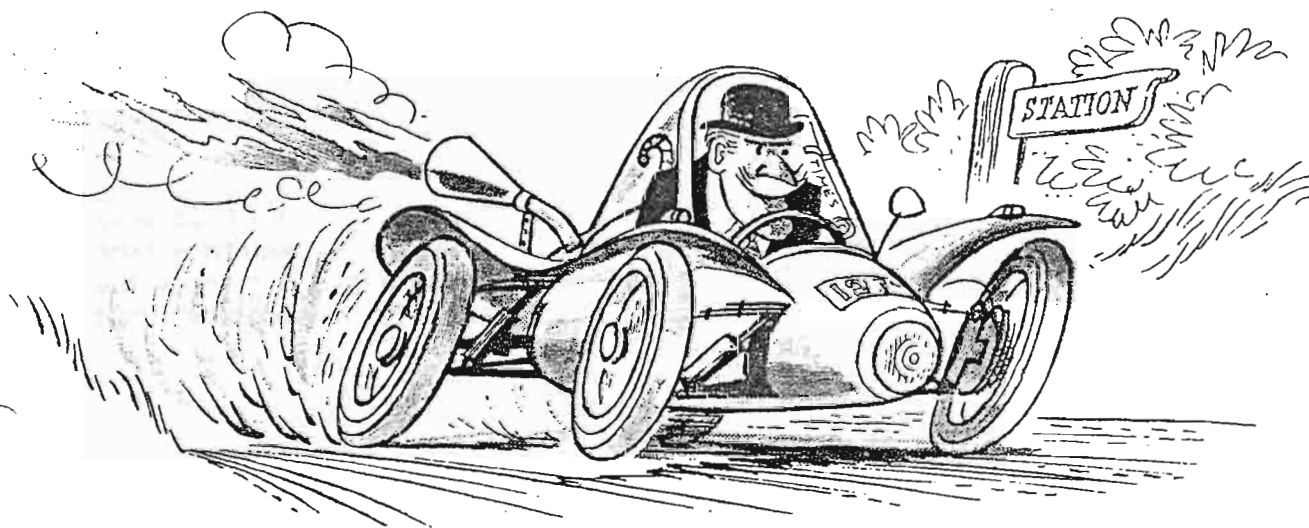


Welcome to newsletter number number 124 for June and July, 2005

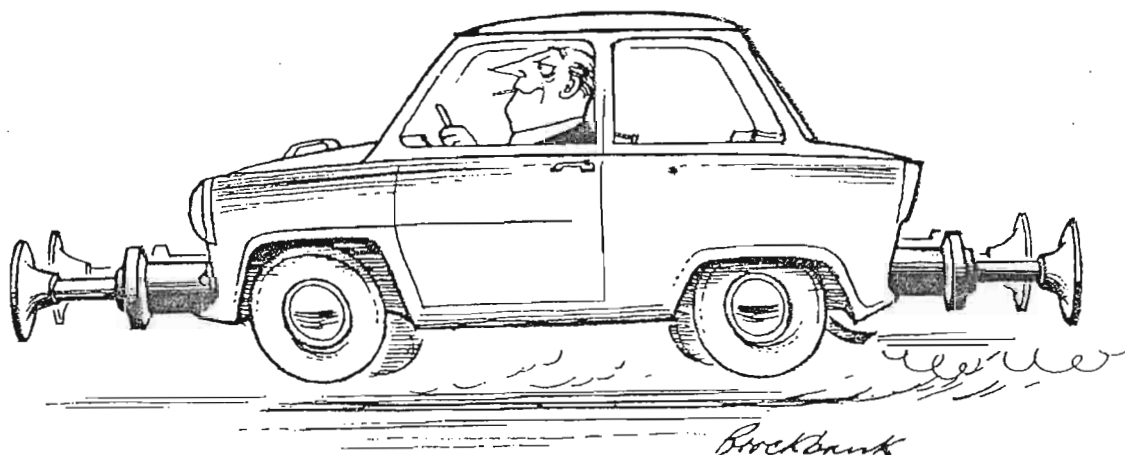
Technical Developments in the Motor Industry No. 1—



Full Consideration for rear passengers



For the City Gent with tendency to miss the 8.40



Built-in Retardation Confidence-inspirer

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Peter Jones
4 Yarandin Court
Worongary QLD 4211
07 5574 8293
landcrab@tpg.com.au

EDITOR / SECRETARY

Daryl Stephens
22 Davison Street
Mitcham Vic 3132
03 9873 3038

stephensdaryl@hotmail.com

PUBLIC OFFICER

Peter Collingwood
18 Lighthorse Cres
Narre Warren Vic 3804
03 9704 1822

SOCIAL CONVENORS

Brisbane Peter Jones
Melbourne Nil
Sydney Nil

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A married couple in their early 60s were out celebrating their 35th wedding anniversary in a quiet, romantic little restaurant. Suddenly, a tiny yet beautiful fairy appeared on their table and said, "For being such an exemplary married couple and for being faithful to each other for all this time, I will grant you each a wish."

"Oooh, I want to travel around the world with my darling husband," said the wife.

The fairy moved her magic stick and abracadabra! ... two tickets for the new QM2 luxury liner appeared in her hands.

Now it was the husband's turn. He thought for a moment and said: "Well ... this is all very romantic, but an opportunity like this only occurs once in a lifetime ... so, I'm sorry my love, but my wish is to have a wife 30 years younger than me."

The wife, and the fairy, were deeply disappointed ...but a wish is a wish. So the fairy made a circle with her magic stick and abracadabra!----- the husband became 92 years old.

The moral of this story:
Men might be ungrateful idiots, but fairies are.....
FEMALE



11 Lakeview Road
Kilaben Bay
NSW

Phone: + 61 2 4950 4656

Fax: + 61 2 49505 221

Email: eddib@ozemail.com.au

Daryl

Enclosed fees for the next twelve months. I have added an extra \$3 just in case there was to be an increase, if not I'm sure the clubs funds won't mind. Without the Club, and especially the bulletin board, life would have been that much more difficult when it came to restoring.

The Ute is next in line for restoration so more help will be needed. Already I have made contact with 2 others who have gone through, or are going through the process.

The pics don't look to bad but the rust is far worse than these photos show.



cheers

Eddie



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From : Eddie <eddieb@ozemail.com.au>
 Sent : Thursday, 9 June 2005 2:31:33 PM
 To : "Daryl Stephens" <stephensdaryl@hotmail.com>
 Subject : up date my records

Attachment : (0.06 MB), (0.09 MB)

Daryl

I just couldn't help myself.

Last Saturday I received a phone asking if I was interested in an 1800? (silly question really)

On Monday I went to inspect, later that day I help conference with "er" indoors and a consensus was arrived at.

The car has been in storage since 1992 and is in particularly good condition. A check of the water, oil, air and the installation of a battery the car started first time and was driven some 15 ks to the place where I first saw it.

Some minor problems. The water pump needs replacing. There is a water leak into the cab. The back brake is locking on. There is a small amount of rust in the doors. At some time the car has had an accident because the front drivers side mudguard has bee replaced. Most things seem to work, lights, horn, wipers etc.

Having said all that I'm sure this is an excellent acquisition.

Next was to negotiate a fair price, naturally I went way below what I was prepared to pay but there was no need for further discussion and now I'm the owner of a 1968/69 (no compliance plate so I'm not sure of exact date) Mk2 Automatic.

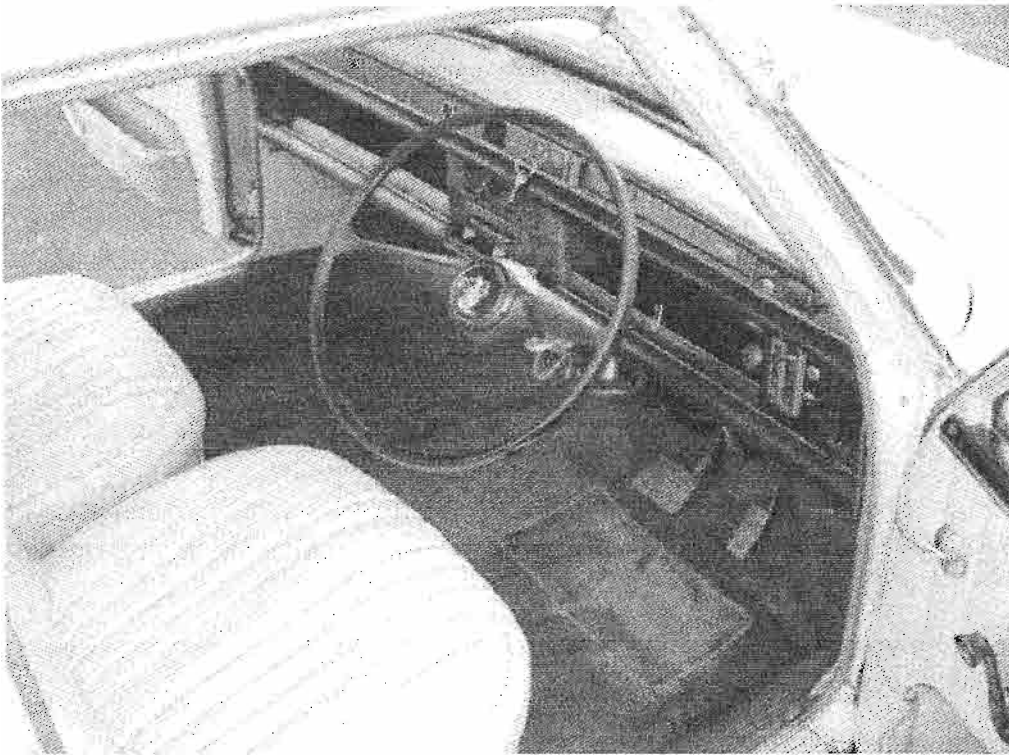
So my records need to show, listed in order of arrival


1970	Mk2 Manual
1968	Mk1 Ute (the '66 Manual will be a doner)
1966	Mk1 Manual (will be used for spares)
1968/69	Mk2 Automatic

Outgoing mail is certified Virus Free.

Checked by AVG anti-virus system ().

Version: 6.0.859 / Virus Database: 585 - Release Date: 14/02/2005



Notice: Attachments are automatically scanned for viruses using  TREND MICRO

<http://by102fd.bay102.hotmail.msn.com/cgi-bin/getmsg?msg=745F5EF5-0330-4543-8E4...> 6/15/2005

Tow Bars

Herb Simpfordorfer

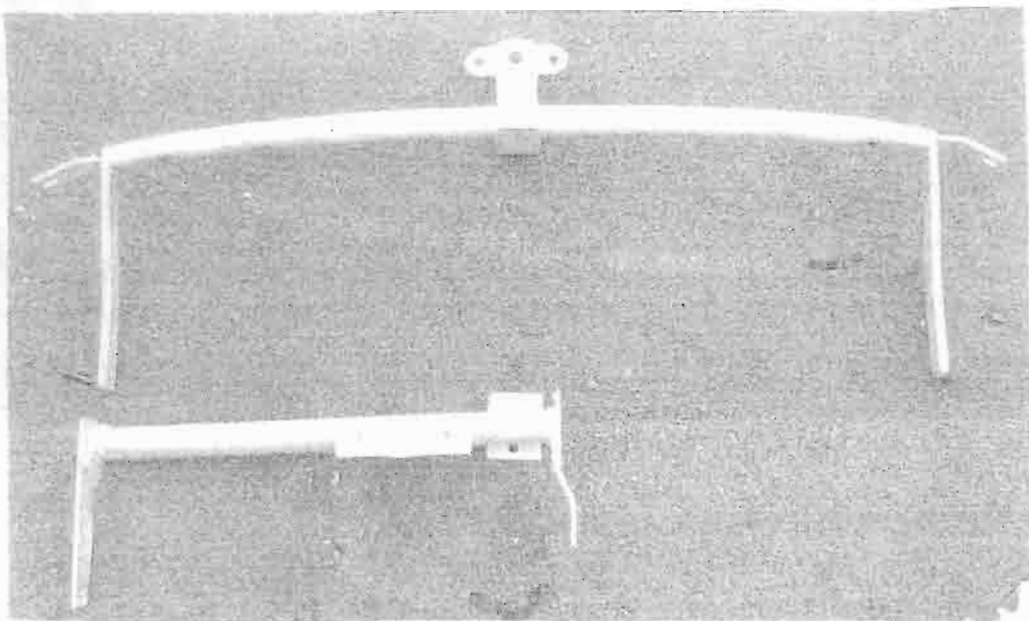
Tow bars were fitted to many Austin 1800s, both sedans and utes. A good reason for this is that it is part of the Aussie way of life to tow things behind a vehicle, or it could be that the Austin 1800 turned out to be a very good towing vehicle. Whatever the reason, there are a lot of tow bars out there. What I do not know is if tow bars were a factory fitted option. I looked at the brochures that were produced for people interested in buying an 1800, and there was no mention of a tow bar as an accessory in the very fine print, but, there again, no other common accessories like sun visors, radios and stone guards for headlights are listed either. Also, there is no mention of tow bars in the manuals or in the Parts List. If it was an factory fitted accessory, it would be interesting to know which of the various designs came from Zetland.

Normally the tow bar has eight points of attachment to the body. Four of these share the 9/16" bolts that are used by the curved Y shaped bars that attach the bumper bar to the body. Two more attach it to the floor of the boot, and two more attach to the body panel behind the centre of the bumper bar. Sometimes the last two of these are missed out. A heavy round tube fits neatly inside the curve of the bumper bar, and the tongue of the tow bar comes out from under the bumper bar.

The many variations that are found leads to the likelihood that tow bars were manufactured in many places, and each of these used their own technique.

I found an unusual one the other day, which led me to write on this topic. It was what would normally be half a tow bar, yet it seemed to be quite strong. I've seen two of these, both on Mark II sedans. They have the usual start on the drivers side sharing the two 9/16" bolts described above. Two more bolts attached to the floor of the boot, and the last two go to that hollow rectangular member at the rear of the car that is used by the spare wheel wind up/down mechanism, and also for support of the petrol tank. There was no other section of the tow bar on the petrol tank side of the car. All of the tow bar is inside the body panels. So the tow bar length is just over half the width of the car. So that the ball is at the centre line of the car, the thick bar that holds the ball is angled slightly. This tow bar was much lighter than the normal type, eliminated the need for a bulky tube next to the bumper bar, and looked neat, but the question is whether it could be used tow as much as the normal tow bar?

And the last question is whether this in fact was the Zetland factory way of doing the job? Norm Prescott, the then Service Manager, could tell us, if he is still around.



This photo shows the two types of tow bars mentioned in this article.

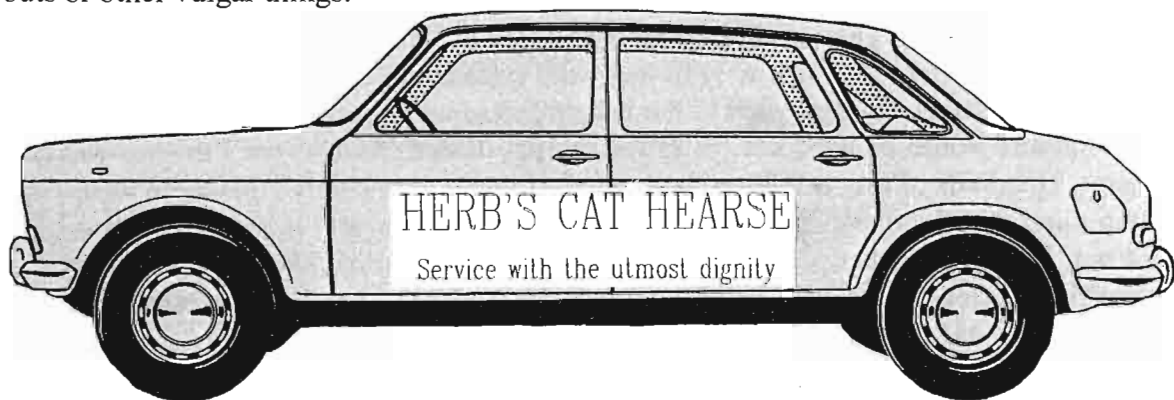
Walla Walla, Cat Hearses and Gelignite Jack Murray

Herb Simpfendorfer

I live in the township of Walla Walla. Our illustrious editor, Daryl Stevens, and his family have been here to say G'day, so he knows what it looks like. So also have Patrick Farrell, and Ken Patience and his wife Gwen. It could be said that I have been checked out by the top people in the club. Walla Walla is not a big town like Birmingham in England, and one could best describe it using the words *village, sleepy, fully asleep, hamlet, one horse, don't blink or you'll miss it*, and so on. The question is whether an original thought can come from a place like Walla Walla. Highly unlikely, I hear you say, but I will keep writing a bit now and then, hoping that something new comes up, however unlikely that may be.

A few days ago, I was carrying the right side of the drive train of an 1800 sedan, including calipers, everything except the wheel, and thought "Surely this does not have to be so heavy!" That was my thought for the day, and led to the story below:

I went into the Austin factory at Zetland in 1965 and said I wanted 500 identical black Austin 1800 sedans, which would be used exclusively as cat hearses. Cat lovers are looking for this service. so that their darling pets can be given a fitting funeral in specially gazetted cat cemeteries. My special vehicles would take the deceased cats in appropriate dignity from their residence to these special places. I would be establishing a franchise, which would operate all over Australia and New Zealand. The vehicles would never be driven over 80 km/hr, usually a lot less, only in daytime, would never be off bitumen roads, always garaged, all be driven by well dressed gentlemen 5 foot 10 inches tall, no passengers would ever be carried, and the heaviest load ever to be carried would be a driver and a cat coffin, a maximum total of 85 kg. Also appropriate is the condition that the cars would be crushed after doing this special duty for 20 years, so that a cat lover, who may still be in mourning, would never see the hearse that carried his or her beloved cat to the cemetery doing burn outs or other vulgar things.



On the same day, just after I left the office, in came Evan Green and said he wanted to order an Austin 1800 sedan for an outback trip through the centre of Australia, you know, across the Gibson Desert, along the Birdsville Track, and then along the Gunbarrel Highway and along part of the Canning Stock Route, and so on.

The main driver would be Gelignite Jack Murray, and he will not be slowing down for jump ups or washaways. Fast speeds would be of the essence. Also there will be a roof rack. with a big load, and the back seat area and boot would be crammed full of fuel cans, spare parts and camping gear, including three complete spare wheels. There would be little time to make any modifications. There would only be time to fit an oil pressure gauge and a roof rack



If you are still reading this, you may have worked out what I am getting at. This scenario is a bit artificial in that I have chosen to describe the absolute opposite ends of the spectrum of possible uses of the vehicle. (Just maybe I could have gone a step further and said someone wanted an 1800 for use in Antarctica, and even gone a step further in the other direction and had the vehicle on permanent display in the Herbert Austin Memorial Room which adjoins the Zetland Aged Community Centre). Yet the people who design the car have to think of both the cat hearse and the bush basher when working out the features to be incorporated in the design of the vehicle.

When the Austin 1800 first hit the Australian market in 1965, Wheels magazine got hold of one, not modified in any way, and drove it full pelt on a road with a big hump in it, causing the car to be completely airborne. This was done a number of times with the cameraman moving around a bit after each "flight", so that he would get a picture good enough for the front page. Can you imagine the stresses on many parts of the car when it landed? The pressure build up in the hydrolastic system would have been immense. I can imagine how the designers shuddered when they heard about this, as a car straight off the production line may or may not have had enough built in strength to allow the car to survive intact in such a situation. In fact, the car did survive without any bits falling off or breaking, and the report was that the car was, with some reservations, a pretty good one. Apparently they found the steering wheel was at an uncomfortable angle, the steering a bit heavy, and things like that.

Back to my order of cat hearses. When the run of these 500 special vehicles is being built, all kinds of changes can be made and the cars can still fulfil their function admirably. The interior of the car and the exterior have to look absolutely pristine, of course, but what the eye cannot see could be changed significantly. For example, the suspension and displacer units could be much simpler. All seats except the driver's seat could have no padding or springs, and the front seats could be non-adjustable. All window winding mechanisms except for the driver's door could be left out. Forget about the lock up petrol filler, lock up boot, ash trays in the back, doorpull handles, cant rail grab handles, interior light, pockets and arm rests and door opening mechanisms in some doors. A three speed box would be adequate. Rotodipping could be missed out. Less paint could be used. Tin bumper bars would do nicely. They could be held onto the body with a few self tapping screws. The day/night relay and reducing valve assembly in the brake system could be scrapped. What about the brake servo unit? The shock absorber next to the battery? Radiator overflow tank? Leave them out. Three engine mounts would be adequate, as in the original design. And so on. I'm sure you could add more items. Hundreds of bits would not be needed. If you do not believe that there would be so many, bear in mind that the reducing valve alone has about 20 parts, and if the brake servo unit is also missed out, there go another 35 parts. I could go on. For a run of 500 identical vehicles, the company would be sure to negotiate a good deal with me, and would make suggestions that I had not thought of, maybe even doing a run of wheels that use thinner metal, or suggest leaving out the heater and the ventilation tubes.

So it seems from the logic used here, that our cars have inbuilt strength and features that we never use. We pay for components that are much stronger than they need to be for pottering around in suburban streets at 60 km/hr. We may even have paid for components that we have never used once, like the lower bump stops in the suspension. Put up your hand if you have ever had need of that awfully strong bumper bar.

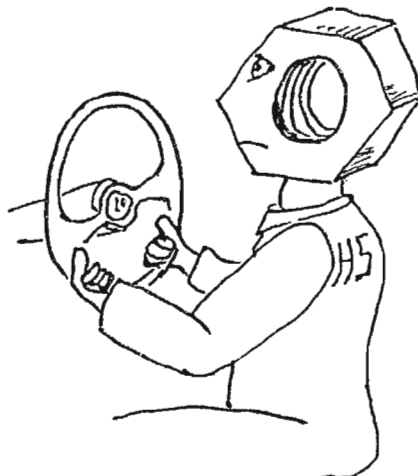
So, if you ever see see one of my Austin 1800 cat hearses, be jealous, because the driver got the best of both worlds. The cars look very nice indeed, do their job perfectly, and cost a heap less than your car.

Clunk, Clunk

The other day, I was motoring along to join a Club for a Rally which was likely to be a very enjoyable day. Then, at my normal speed of 85 km/hr, there was a faint clunk, clunk which gradually got louder and louder. It was on the passenger's side. So I slowed down and found that at 5 km/hr it disappeared. So I could get home again in an hour or so. Diagnosis from the driver's

seat: It had to be in the drive train, so could be gearbox, diff, half shaft, universal, constant velocity joint, large 1 ½ inch nut at the wheel. It was none of these. It turned out to be the fault of the nut behind the wheel. I was dressed up a bit, it was a fairly cold morning, and I did not have a full tool kit with me, but I thought I should have a close look. So I jacked up the wheel, put a mat on the ground, and looked for something that would clunk once per wheel revolution. Turning the wheel produced not the slightest clunk. Everything looked tight and good. Anyway, being frustrated a bit, I gave the tyre a thump with my fist, and heard an unusual sound, a bit like a clunk. The penny dropped. Problem rectified in one minute flat.

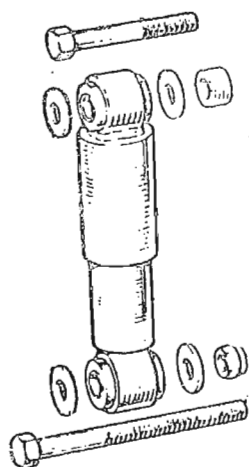
The wheel nuts were loose. Never happened to me before. So you can see it was the fault of *the nut behind the wheel*, as I did not do the nuts up properly last time I had the wheel off.



The rally was a lot of fun. It was a Mighty Morrie Muster. A number of Morris Minors had problems during the day, but the 1800 sailed serenely on without missing a beat.

Engine Shock Absorber

There is one shock absorber attached to the engine of an 1800. It is next to the battery and this one resists sudden vertical motion of the engine. A valid question is whether this shock absorber is used in the motoring I do, or does it only perform an important function in racing, rallying and stunt driving? If the answer is yes, then we can take it off and live happily ever after.



This shock absorber (curiously also called SHOCK ABSORBER in the BMC Parts List, and not some peculiar name, like *Device - movement deadening*) has much more obscure functions, as the engine very rarely moves in the vertical plane. I have asked people who know more about the Austin 1800s than most, and the answer they have given to my question about the purpose of this part is either vague or in stilted technical words. So what do we do when we take an engine out and put it back again. Of course, we would test this part to see if it is still working OK, by moving the top part out and in, then put it back again where it was, without thinking a lot about it. But what if someone was real brave one day, and thought it could be left out. What would happen? Would the engine fall out? No. Would anything else unusual or unexpected happen? I doubt it.

There is a real advantage if this shock absorber is not in the engine bay. A "normal sized" common battery then fits into the battery space. So a larger sized battery can be used all the time, or in an emergency, as long as the rods which go to the fixing bar are lengthened, and this can easily be done in a number of ways. The fixing bar does very little work, except when the car is in the hands of a Peter Brock and others of his ilk, so it can easily be left off in an emergency anyway. Also a different tray needs to be found on which the battery stands, but this does not have to be fancy. Part of an empty plastic oil container will do nicely.

We are on dangerous ground doing this, as the purists would cry "Shame". But it seems that even the purest purists change from the original if it happens to suit them and if it is easier on their pockets. So, not to worry.

As an afterthought, the battery supplied by NRMA (or equivalent) has done a very good job for a very long time for me. As a second afterthought, why don't we all put the battery in the boot. We all know that it will then last a lot longer, since it has been found that nearby high temperatures are a big factor in the earlier demise of a battery. This has been done, of course, but not often. I have seen it only once in an 1800 sedan, at the Ballarat AOA. The engine bay sure looks funny without the battery in its usual place. Maybe a tool kit could be put there, having the same size and shape as a battery.

Scratches on the Windscreen

Our cars are well over 30 years old. Maybe some like mine still have the original windscreen. In 30+ years, there is considerable "sand blasting" and small scratches from dirt being dragged across the glass by the wipers. You find out all about this problem when driving directly into the sun at sundown. The windscreen may be perfectly OK except for these defects.

What to do? Well, a new one can be installed, of course, but surely that is the easy way out. A much better and more satisfying way to go is to use a bit of elbow grease and remove the defects. But how? There is a way of doing this, because a mate of mine had a new windscreen installed at one of those windscreen places, and noticed a tiny scratch on the new glass. No problem, said the guy working there, come back in a couple of hours and it will be gone. It was too. How did he do it?

It would have to be a very mild abrasive. Toothpaste, cut and paste compound, and jewellers rouge have been mentioned in dispatches. Has anyone had any success using these or something else?

ECCLESIAS-TICKLES

God's servants work in mysterious ways, as evidenced by the following bloopers from church bulletins and the pulpit:

Bertha Belch, a missionary from Africa, will be speaking tonight at Calvary Methodist. Come hear Bertha Belch all the way from Africa.

The eighth-graders will be presenting Shakespeare's *Hamlet* in the Church basement Friday at 7 p.m. The congregation is invited to attend this tragedy.

Barbara remains in hospital. She is having trouble sleeping and requests tapes of Pastor Jack's sermons.

The ladies of the church have cast off clothing of every kind. They may be seen in the basement on Friday afternoon.

Eight new choir robes are currently needed due to the addition of several new members and to the deterioration of some older ones.

Irving Benson and Jessie Carter were married on October 24 in the church. So ends a friendship that began in their school days.

PHIL PROCTOR, Planet Proctor

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12 June 2004

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Use: PRIVATE

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DOB of Youngest Driver: 02/01/1948**

Excess: \$350

Age Excess: 16-19yrs \$1650; 20-21yrs \$1450; 22-24yrs \$1250

Sum Insured: \$3,000 or Market Value whichever is the lesser

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(If any of the above information is incorrect please contact us)

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From : Ken Green <kengreen@landcrab2.freemove.co.uk>
Sent : Monday, 6 June 2005 8:33:53 AM
To : "Daryl Stephens" <stephensdaryl@hotmail.com>
CC : "Herb Simpfendorfer" <HM.SIMPENDORFER@bigpond.com>
Subject : LOCI Newsletter

 Attachment : (0.22 MB)

Hi Daryl

These are the couplings that Herb talked about in his article
These are for the Mini but Quinton Hazell also made sets for the
1800 as QL 6000.

They replace the rubber couplings and have a nylon outer shell
with needle roller bearings in the middle just like the Automatic
shafts so you can convert to needle roller bearings without
changing the shafts as they are a direct replacement for the
rubber doughnut.

In the UK we don't have the endemic failure of the rubber joints -
perhaps because the ambient temperature is lower, however
both my cars have Automatic shafts mainly because they are
cheaper to fix as they use the same repair kits for the needle
rollers as a series 2 Landrover.

You can find the QH 6000 sets from time to time, prices are
about £15-20 Sterling each side but they should last a lot longer
than the Indian rubber mountings !! I have a couple of sets in
stock that I bought before I got the auto bits.

Incidentally I have never had a rubber joint go on a 1800 my old
1100 yes as it was tuned up.

Ken

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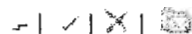




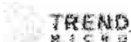
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Singles work on sex drive

SINGLES stuck in a traffic jam can now use their mobiles to send flirty text messages to strangers in nearby cars.

Known as jam texting, singles register their number plate and mobile details with the service provider and are given a number they can send their message to.

It is forwarded to the mobile phone of the object of their desire — if that person

is also a member. If they are not a member, the message is stored and revealed to them later if they join.

Jam texting started in the US, and despite the protests of road safety groups is now being considered in Australia. Jam texting is one of a burgeoning number of mobile dating systems.

— Liam Houlihan

Ian Davy
11 Oxley Cres
GOULBURN NSW 2580

28th June 2005

The Landcrab Owners Club of Australasia
22 Davison Street
MITCHAM VIC 3132

Hi Daryl,

Just sending in my club fees... another year already, where did it go?

I'm about as far away as ever from getting my old girl back on the road.
I wonder if she know what I'm trying to do and finds a new thing to sort out.

The past year has seen me stripping the motor down, new rings and bearings.
Putting the whole thing back together.

Finding out that SU carbs run better when you minimise air leaks... silly me.

Getting the electrics in order.

Trying to find a way to have the fuel pump stop when if the motor stops (Bosch do a relay I might have to invest in if I need it for rego).

I have even given my crab a bath for the first time since I painted it all those years ago. But being in the shed she wasn't too dirty anyway. I had forgotten that I had done a reasonable job.

I don't know how many times I've pulled the dash out to get something or other sorted. I reckon I could just about do it blind folded.

Have you ever noticed that regardless of how many times you do something you always forget something when putting it all back together? Maybe it's just old age.

Anyway I've rambled on enough for now, I'm planning on documenting my whole adventure in crab restoration one day soon so I'll send you a copy, who knows you might even stick it in a newsletter sometime.

Long live the Landcrab.

Ian

Dear Daryl

Complements on your continued enthusiasm for the land crab, and your ability to constantly find new information on the development and maintenance of this 40 year old concept – the December January issue was an outright classic and our education and entertainment is allays assured with light hearted lessons from the Stephens family misadventures

Your teenage attempts to move a truck laterally [how did the truck fare?]reminds me of a precedent here 30 years ago where a young lass lost her 1800 on loose gravel and moved a 10 foot square granite rock 3 feet. I then [like you] opened the door and stepped out – primary safety and progressive crumple being way ahead of its time.

Appreciation is also due to Herb Simpfendorfer for his prolific contribution to the newsletter where his unilateral lateral thinking keeps us thinking, and gets him out of trouble in remote areas – who else would change a rubber drive coupling on the roadside in an hour without removing anything else – and I am thinking would that work for any early mk 1 with solid drive shafts?

While most enthusiastic drivers have long gone to needle roller couplings, some have returned to rubber because of induced harshness, while regular lubrication with oily grease is required in hot dry conditions.

Herb thought that all 1800 Ute had needle rollers, but all manual Utes had rubber – and he wondered about the X6 2200 which had progressed to a plunging universal joint- whereas in England the concurrent Mk 111 Austin, Morris and Wolseley 1800 and 2200 manuals all continued with the original rubber couplings as sourced from 5 suppliers

Moprod, MDC 102
Equip Auto, JMC 4
Quinton Hazel, QL 80000
Supra, STR 201A
Transmission UK, UK 20

We tried Supra[yellow box] with mixed results, then Moprod [red box] which went 80,000 miles + miles in our easy environment – so get stocked up from Moprod Melchett Road, Birmingham B 30 3, HP England, Tel 021 4594 131[but that's 20 years ago]

There are stories of Indian rubber couplings only doing 1000 miles and I suspect that BMC Australia fitted increasingly inferior rubbers as compared by our various Mk 1 and Mk 11 wrecks

Another declining quality aspect was windscreen wipers where the older the vehicle the better they functioned, in spite of turning the spindles 180 degrees and greasing and turning the rack and I suspected the faster mk 11 motor for "impact destruction" – but when I pulled the whole assembly from a low mileage '70 mk 11 wreck the little bolts holding the wheel boxes to the outer casing were loose, causing flexing and reduced wiper arc – so at full stretch with a 3/8" set of spanners under the dash, the stuck wipers were soon like new again obviating the expected tricky overhaul, but indicating that Zetland became increasingly limp wrested over the years.

While Herb and I have previously compared methods and techniques[like sighting along the outside of the front tyres to a distant object to check toe in, I'll briefly comment on his current queries here for club consideration.

Spectrum Rubber and panels probable means mass replacement of metal sections

Bailey channel- Mk 11 felt type is far superior to Mk 1 fabric over metal type

Fuel tank vent – is past the pin and spring holding the cap to the flap, which is a poor set up allowing water entry[particularly when the flap drain holes block up] which is why 1800 tanks rust out and are better replaced with an X6 tank with a proper cap

Petrol fumes – one possible source - a crack in the electric fuel pumps plastic outlet [which would be smelt in the boot with the pump running]

Roaring at 92 KPH – 1800 sedans reach "sympathetic harmony" {noisy} at 55-60 mph, above which the roar declines again, but if only one of the cars is guilty, it could be a differential lash which is noticeable [as Herb indicates [on acceleration/ deceleration, increasing as the oil warms –or power unit / body contact like dirt in the sump guard- or even exhaust resonance.

Peter Hocking's Austin3 litre interest may be assisted by one that resided at the Lake Preston Roadhouse[South of Mandurah WA} and that car belonged to local Lui Buseti until sold to Albert Luccini of Kaloorup [9755 4802] when its complex self levelling hydrolastic suspension needed restoration

Isn't it ironic that the old Land crab, frequently criticized for being unstylish, is quite at home among today's trendies?

Engine out? Load of crab

IN RECENT months I have read two different magazine buyers guides on BMC 1800/2200 Landcrabs. Both have said that to replace the clutch on the four-cylinder cars is an engine-out job. No doubt people believing (and being quoted for) this has sent many of these fine cars to the scrapyard.

It can, however, be done without removing the engine and I achieved it. Basically it involves placing the car on stout stands, removing the offside engine mounting

shock absorber assembly, the offside front tie bar bracket. Then drop the clutch end of the engine, to enable the housing and clutch to be replaced from below.

Allow about one day to do the job and keep an eye on the engine mounts as it puts quite a strain on them.

It's quicker, cheaper and easier than trying to hoist out the very heavy power units.

David Hems, Worcester Park, Surrey

Thanks for the tip, although we should point out that the buyer's guides weren't in Practical Classics — DL

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From : David <mayforce1@dodo.com.au>
Reply-To : "David" <mayforce1@dodo.com.au>
Sent : Friday, 8 July 2005 10:28:14 PM
To : <stephensdaryl@hotmail.com>
Subject : Membership

hi Daryl

To avoid possible redtape delays with my application for QLD special interest vehicle rego, can you show on my membership receipt the Marina's details which I have included on the form you sent me.

In regards to the 2600 Kimberley we started with a P76 block and used part of the X6 manual crank and part of the P76 crank. The P76 crankshaft was parted just after the last main bearing and the end of the X6 crankshaft was machined with a step to achieve a interference fit into the end of the P76 unit which was then welded, and machined smooth. The timing marks on the X6 manual car are on the flywheel. This had to be allowed for in the mating of the two pieces so the ignition timing can still be set in the normal way.

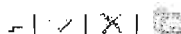
It is said that a 2200 is just a 1500 with two extra cylinders, and a 2600 is a 1750 with two extra cylinders. This is more true for the latter than the former. All E series engines have the same size main bearings except the 2200. The tunnel bore in the block which hoses the main bearings on the 2200 measures 60.83 mm. All other E series are 64.008 mm therefore we used the P76 engine complete with the following modifications.

1. All the sump to sumprail bolt holes are in the same location, but the P76 has 1/4 inch bolts so I simply drilled and retaped the sumprails to 3/8 for the engine to gearbox mounting.
2. The inside of the X6 gearbox had to be notched to clear the throw of the conrods mostly just along the flang of the gearbox and a small amount of material from the gearbox centre bearing support was also removed.
3. The oil pickup's are on opposing sides of the two engine's but the casting on the P76 block still carried the X6 pickup, but was not bored for use. So I had to marked the position for the hole using a X6 gearbox to sumprail gasket and then measured the inclined angle of the oil pickup boring from a X6 engine. A 1/2 inch hole was then bored from the sumprail down about 3 inches into the oil gallery so oil could be transfered from the oil pickup in the gearbox to the engine. The P76 oil pick was sealed of at the block using a suitable plug, a plate was then bolted over it to ensure it could not be dislodged.

This was essentially a P76 motor modified to fit a X6 installation. And although it is possible to tunnel bore a X6 block to accept a P76 crank it would only be reliable if the bigger P76 crank thrust washers are made to fit. Boring out the X6 thrust washers would shorten their effective life.

Maximum power is now achieved @ 4500 rpm against 5500 rpm.

Regards David



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From : Rick Perceval <rickp@allsuburbs.com>
Sent : Monday, 20 June 2005 10:02:18 PM
To : "Daryl Stephens" <stephensdaryl@hotmail.com>
Subject : forum

Hi all

I have started a experimental forum for all Leyland Australia products

<http://www.allsuburbs.com/Forum/leyland/index.php>

You can view posts (none as yet) without registering but you should need to register to post on the forum

There is no charge to join - nor any advertising as I am hosting this myself

Any comments are gratefully accepted - post them

be kind to it - its only a baby and I am only learning about forum admin

Enjoy

Rick

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For Sale

1800 Ute rust free unleaded head 49,000 miles \$6,990 02 6656 1059

Mk 11 1969 33,000 miles *probably genuine* manual Trioyn Dunn Park Orchards
Vic 03 9876 1608 \$1,000

Short motor fully re built & assembled but never used \$500 0407 712 811 Lower
Templestowe Vic

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From : Matt Elliston <mpe@air.net.au>
Sent : Tuesday, 31 May 2005 9:24:17 PM
To : stephensdaryl@hotmail.com
CC : "Dad @ air" <dme@air.net.au>
Subject : Ads for next 1800 newsletter

| | | |

Hi Daryl,

I hope that these two ads might grace the pages of the next issue of the 1800 newsletter..

(My dad and I are paid up members - Matt and Dave Elliston.)

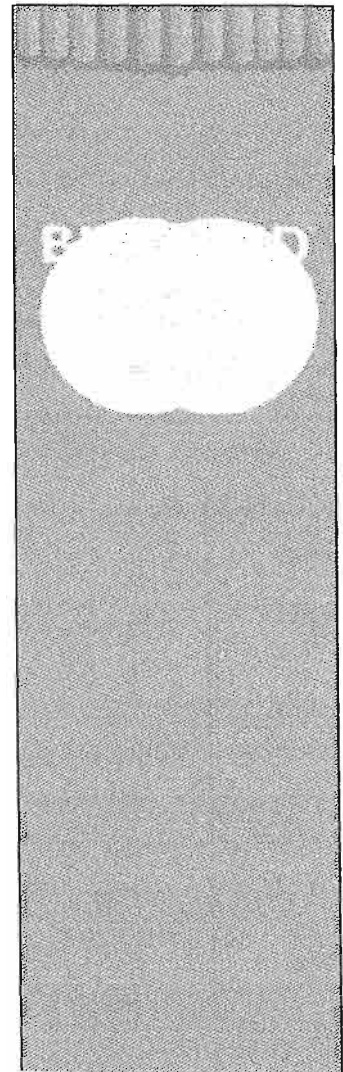
Ad 1:

1970 MkII, manual, crystal white, maroon interior. Just converted from automatic. Not too good to use daily and a very responsive engine.

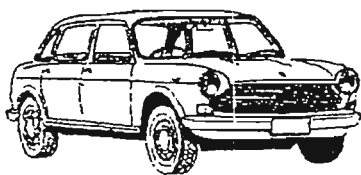
70000 MILES. Brand new clutch, passed ACT roadworthy with flying colours on 31/3/05. Brakes are superb, and very slick between gears. Two minor trim repairs to do - parcel shelf and dash liner. A rust hole in driver's door the size of a 50c piece. Price includes six months rego. The price drops (pro rata) as rego drops. Happy to answer any questions and test drives welcome. More photos available on request. Also see the ad for this car at www.carsales.com.au. Call Matt 02 6259 1489 or 0411438839 or email

Ad 2:

Various spare parts from two wrecked cars. Starters, alternators, radiators, gearbox, CVs, calipers, hubs, drums, seats, trim, doors, boots, bonnets, carby, switches, bumpers, hinges, etc. etc. If you need it, please get in touch because I might just have it. All parts stored undercover. Call Matt 02 6259 1489 or 0411438839 or email



**Club fees became due 30/6; Please remit with all haste to The
landcrab Club 22 Davison Sttreet, Mitcham Vic 3132**



LANDCRAB

CLUB OF AUSTRALASIA INC.



Daryl Stephens 22 Davison Street Mitcham, Victoria, Australia, 3132 Ph: (03) 9873 3038

Austin

ONE HUNDRED YEARS

1905 - 2005



An Austin Rally &
Vehicle Display
celebrating
100 Years
of
Austin Motor
Vehicles

Hosted by the Australian
Austin A30 Car Club Inc.

Sunday
20th November
2005 10 am - 4 pm

Scienceworks
Booker Street
Spotswood Melways 56 B1



Enjoy Scienceworks and see a range of famous
Austin vehicles. Visitors & Austin display vehicles are
welcome. See inside for details and Rally Entry Form.

ENTRANT INFORMATION

AUSTIN - ONE HUNDRED YEARS

**An Austin Rally and Vehicle Display
hosted by the Australian Austin A30 Car Club Inc.
at Scienceworks, Melbourne on Sunday, 20th November 2005**

ENTRY TO SCIENCEWORKS:

Rally Vehicles

Please bring your display vehicle to the South Gate of the Scienceworks site (Craig St.) no later than 9.45 am. Each display vehicle will have a pre-allocated display space and the Club's Marshals will provide each vehicle with the details on entry to the arena.

- All drivers must observe the 5 km/hr speed limit when at Scienceworks.
- No vehicle can be moved without the permission of the Scienceworks Marshal.
- Rally vehicles are to arrive before 10 am and stay for the afternoon, until 4.00 pm.
- All drivers will be provided with a copy of Scienceworks Operating Procedures for Engine, Vehicle and Machinery Exhibits before entering the arena.
- Drivers are encouraged to discuss their vehicles with interested visitors.

Drivers, passengers and families

Scienceworks offers free admission to:

- the driver of each display vehicle.
- all passengers in display vehicles.
- Club members & their immediate families unable to display a vehicle, who should enter through the main entrance at Booker Street and produce a current Club Membership Card, Certificate of Membership or a recent Club Newsletter.

NOMINAL RALLY FEE:

The nominal Rally Fee of \$5.00 will assist the Australian Austin A30 Car Club Inc. to defray its incidental expenses in staging the Rally.

COMMEMORATIVE RALLY BADGE:

A unique commemorative Rally Badge has been commissioned and will be available for collection from the Club tent on the day.

FOOD OPTIONS:

- Free gas BBQs are available.
- Foodworks Café sells a variety of hot and cold foods.
- Bring a picnic lunch.
- No alcohol is permitted on the Scienceworks site.

HAVING FUN AT SCIENCEWORKS:

There are plenty of attractions at Scienceworks to keep the whole family entertained, interested and involved for the day. See website www.scienceworks.museum.vic.gov.au

ENQUIRIES / FURTHER INFORMATION:

JOHN FREEMAN (Rally Organiser) Phone: (03) 9801 1813 Mobile: 0413 801 813

RALLY ENTRY FORM

AUSTIN - ONE HUNDRED YEARS

CELEBRATING 100 YEARS OF AUSTIN MOTOR VEHICLES 1905 - 2005

at Scienceworks, Melbourne on Sunday, 20th November 2005

Entrant's Name:		
Postal Address:		
		Post Code:
Phone:	Mobile:	E-mail

Club Membership

I am a member of the	Club.
----------------------	-------

Austin Vehicle Details

Type: (Sedan, Taxi, Fire Engine, etc.)		
Model:	Year:	Colour:
Reg. No.	Permit No.	State:

Commercial and Military vehicle entrants please complete

Height:	Length:	Width:	Weight:
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Rally Fee

		Nominal Rally Fee	\$ 5 . 00
Qty.	Austin - 100 years Commemorative Badges @ \$20.00 each		

Total _____

Please make your cheque payable to Australian Austin A30 Car Club Inc.

Entries close on 14th October 2005 and are conditional on availability of display space on the Scienceworks Arena.



Please post your cheque and Entry Form to:
John Freeman
13 Wondalea Crescent
Wantirna VIC 3152



Enquiries to: **John Freeman (Rally Organiser)**
Phone: **(03) 9801 1813 (AH)**
Mobile: **0413 801 813**
E-mail: **jan-john@bigpond.com**

First Name		Last Name	Address	City	State
Geoffrey	6	Abrahams	14 Princess Street	Rosebay	NSW
Bruce	7	Austin	15 Bicklet Avenue	Thomastown	Vic
Joe		Barling	125 The Ridgeway	Ching	LONDON
Francis	6	Barnes	224 Cooriengah Heights		Engadine
Ian	7	Batty	95 Brewster Street	Ararat	Vic
Walter	6	Berry	12 Elkin Ave	Heatherbrae	NSW
Eddie	6	Boards	11 Lakeview Road	Kilaben Bay	NSW
Rudi	6	Boudaire	436 Maitland Bar Rd	Mudgee	NSW
Douglas	6	Bright	26 Bayton st	Kingston	TAS
Brian	6	Cassidy	57 St Catherines Road	Harrogate	England
Peter	6	Collingwood	18 Lighorse Cres	Narren Warren	Vic
Geoffrey	6	Cooper	10 Tonks St	Moorooka	QLD
Terrance	6	Copeland	11 Winsor St	Margate	QLD
Andrew	6	Cox	22 Heversham Dve	Seaford	VIC
Michael	7	Davey	MC 6123	Woolongong	NSW
Gary	6	Davey	40 Indra Road	Blackburn	Vic
Ian	6	Davey	11 Oxley Cres	Goulbourn	NSW
Eric	6	Davison	3 Clifford Place	Coonellabah	
Colin	6	Day	14 Mitchell St	Kerang	VIC
Keith	6	Douglas	50 Mackelroy Street	Plenty	VIC
Liam	7	Dwyer	4 Wurd Street	Semphore	S.A.
David	6	Elliston	180 Drake Brockman Drive	Holt	ACT
Albert	6	English	454 Quarry Rd	Bunderburg	QLD
Patrick	6	Farrell	4 Wayne Av	Boronia	VIC
J	7	Fiechtner	12 Vulture Street, West End	Brisbane	QLD
Don	6	Florey	419 Windermere St	Ballarat	VIC
Graham	6	Fordyce	20 Wynnum North Rd	Wynnum	QLD
David	6	Frey	39 Hillside Crescent	Teracba	NSW
David	7	Fry	15 Orcades Street	Sunrise Beach	QLD
Authony	6	George	188 Kent Street	Rockingham	W.A.
Phil	7	Gibbs	8 Coronation Avenue	Peakhurst	NSW
Leo	6	Goodfellow	1 Panarama Pde,	safety Beach	NSW
Ken	6	Green	23 Becon Rd	Kindstanding	Birmingham
Russell	6	Greenwood	25 Queen Street	Colac	VIC
John	6	Griffiths	93 Wills St	Kew	VIC
Kerry	6	Guinea	Box 45	Wulguru	QLD
Keith	6	Haines	511 Douglas Road	Critjurk	Vic
John	6	Harding	6 Acacia Place	Ballina	NSW
Nathan	6	Harris	4 Mackennal Street	Lynham	ACT
Gerald	6	Hiles	16 Lawrence Avenue	Gawler	S.A.
Peter	7	Hocking	18 Arenga Crt	Mnt Claremont	W.A.
Allan	6	Hogg	22 Huntingdale Av	Miranda	NSW
David	6	Howell	17 Gulley Cres	Belgrave	Vic
John	6	Hurdman	66 Duke Street	Clarence Town	NSW
Peter	6	Jones	4 Yarandin Ct	Worongary	QLD
Mike	7	Jordan	34 Shana Ave, Keighley	West Yorkshire	England

Postal Code	Country	Home Phone	cars
2029			2 Utes
3074		(03) 9465 5447	mk 11 ute
	ENGLAND		3 wolsleys
2233		(02) 9520 7351	mk 11
3377			mk 1
2324	Australia	(02) 4987 1680	mk1 1800
2283			mk 1 ute
2850	Australia		mk 11 1800
7050	Australia	(03) 6229 2665	Mk11 1800
			Ute
3805		(03) 9704 1822	mk 1
4105	Australia	(07) 3277 2717	Mk11 1800
4019	Australia	(07) 3284 8876	Mk11 1800
3198	Australia	(03) 9782 4995	Mk 11 ute
2500	Australia		many
3130		(03) 9898 7700	2 Mk 11s
2580			Mk 1 1800
2480		(02) 6624 4537	mk 11 Ute
3579	Australia	(03) 5450 4090	Mk 1 1800
3090	Australia	(03) 9432 2820	Mk 11 1800 x 3
5019		(08) 8242 5998	mk 11
2615		(02) 6255 2448	2 x Mk 11
4670	Australia	(07) 4157 8191	Mk 1 1800
3155	Australia	(03) 9762 4457	LOTS
4101		(07) 3844 0147	
3350	Australia		Wolsley
4178	Australia	(07) 3396 8201	1800 Ute
2284		(02) 4958 2780	mk 1
4567			Marina
6168		(08) 9592 4842	Mk 11 ute
2210			mk 11
2456			18/ 85 S
	UK		Mk 11 1800
3250	Australia	(03) 5229 7780	Mk 11 1800
3101	Australia	(03) 9853 8251	Mk 1 1800
4811	Australia	(07) 4778 3379	mk l ute 2 Kim
3315			Mk 11 Ute
2478		(02) 6686 8482	Mk 11 1800
2605			Mk 1
5118		(08) 8522 2160	mk 11
6910		(08) 9385 0692	3 Litre
2088	Australia	(02) 9522 6184	Kimberly
3160			Kimberely
2321			mk 11
4213	Australia	(07) 5574 8293	Mk 11 1800
			Replicia

First Name		Last Name	Address	City	State
Tim	6	Kennon	727 Drummond St	Carlton	VIC
Peter	6	Laursen	Praestemarksvej 30 DK 2300	Copenhagen	Denmark
A	7	Lawman	1 Sophia Grove	Parkdale	Vic
Adrian	6	Leighton	20 Clarinda Av	Faulconbridge	NSW
Ed	6	Lenny	51 Prince St	Goulbourn	NSW
David	7	Loomes	6 Marina Place	Belfrost	NSW
Michael	7	Loveday	11 French Street	Artarmann	NSW
Ken		Lyle	5 /45 Munt Stree	Bayswater	WA
Robert	6	Mackellar	33 Third Avenue	Sandgate	QLD
Bob	6	Mann	324 Elizabeth St	Sunbury	VIC
Clyde	6	Marshall	25 Phillip Street	Coochemudlo Islan	QLD
Stephen	6	Mc Phail	Dun lolair Tugalong Road	Canyonleigh	NSW
Ian	6	McIntyre	18 Yondell Av	Springwood	VIC
Robert	6	Medlen	2 Grassdale Rise	Alberfoyle Park	SA
Neil	10	Melville	C/O Post office	Cowaramup	WA
Ferdinando	6	Mignanelli	34 Harold Street	Bulleen	Vic
Bill	6	Mitchell	Box 128	Beaufort	VIC
Bruce	7	Norman	31 Thorne Street	Wagga Wagga	NSW
Ken	6	Patience	149 Brees Rd	Keilor East	VIC
Larry	7	Pilbrook	Gemari, 507 Dripstone Road	Dripstone	NSW
Ian	6	Powell	7 Acacia St	Elsternwick	VIC
Bill	6	Randell	P.O>Box 2378	Nerang	QLD
Brian	6	Rees	15 Fourwinds 1- 5 North St	Tuncurry	NSW
Ian	6	Ripley	334 Farm Street	North Rockhampto	QLD
John	6	Roach	28 Harford Way	Girrawheen	W.A.
Jim	7	Robertson	4 Sylvan Court M/S 2223	Glenville	QLD
Ric	7	Scott	35 Fraser Street	Airport west	
Wayne	6	Scully	Box 1749	Geraldton	W.A
Bruce	6	Sheidow	3/5 Parkview Road	Fairlight	NSW
Herb	6	Simfendorfer	21 Stitt St	Walla Walla	NSW
Eriks	6	Skinkis	73 Hill Road	Birrong	NSW
Franklin	6	Smallcombe	30 Illawarra Dr, Kin Kora	Gladstone	QLD
Richard	6	Snedden	36 Claremont Av	Malvern	VIC
Daryl	6	Stephens	22 Davison St	Mitcham	VIC
Basil	6	Strelinikov	256 Walsh St	Mareeba	QLD
Bruce	6	Summerell	Verona Rd, Quaama	Via Bega	NSW
Peter	6	Tadman	Box 283	Nundah	QLD
Jim	6	Taylor	Box 232 The Mall P.O.	Heidelberg	VIC
John	6	VanGroningen	1385 Rockford Road	Hanging Rock	Vic
John	6	Watson	10 Eastcote Lane	Welling	KENT
Rob	6	Williams	33 Portside Place	Shoal Bay	QLD
Ian	6	Wilshire	37 Old Borough Dv	Onkaparanga Hills	SA
Jonathon	6	Winwood	158Prince Charles Avenue	Kurnell	NSW
Tony	6	Wood	31 All Hallows Rd	Blackpool	England
Anthony	7	Woodcock	601 Chum Creek Road	Healsville	Vic
Aaron	6	Young	Box 608	Williamstown	S,A,

Postal Code	Country	Home Phone	cars
3053	Australia	(03) 9347 7457	Mk 1 1800
		(45) 3251 7336	1800
3195		(03) 9580 1199	mk 11
2776	Australia	(02) 4751 6926	Mk 1 & 11 180
2580	Australia		Mk 1 1800
2085			mk 11
2064			Mk 1 and 11
5053	Australia	(08) 9272 8186	Lots
4017	Australia	(07) 3869 0834	Kimberly mk11
3429	Australia	(03) 9744 3956	Mk 1 1800
4184		(04) 0769 7197	Ute & Sed
2577	Australia	(02) 9645 2190	Mk 11 1800
2227	Australia	(02) 4751 4338	Mk 1 1800
5159	Australia	(08) 9370 7794	Restored mk 1
6284	Australia	(08) 9755 5332	Mk 1 1800 ute
3105		(03) 9850 7775	Mk 11
3373	Australia	(03) 5349 2720	1800 Ute
2650		(02) 6921 2393	mk 11
3033	Australia	(03) 9337 4661	Mk 11 1800 Ut
2820		(02) 6846 7628	
3183	Australia	(03) 9523 7097	Mk 11 1800
4211	Australia	(07) 5497 5823	LOTS
2428		(02) 6556 3751	Mk 11
4701		(07) 4928 5286	Mk 11 ute
6064			MK 1 1800
4350		(07) 4634 2418	Morris 1800
3042		(03) 9324 5502	mk 11 ute
6531			
2094			MK 1
2659	Australia	(02) 6029 2224	Mk 1 1800
2143		(02) 9644 5530	mk 1
4680	Australia		UTE
3144	Australia	(03) 9509 0110	3 x Wlosley 6s
3132	Australia	(03) 9873 3038	Mk 1 1800
4880	Australia	(070) 82 1535	Mk 1 1800`
2550	Australia	(02) 6492 9575	Mk 11 1800
4012	Australai	(07) 3266 4537	Mk 11 1800
3081	Australia	(03) 9457 7808	1800 Ute
3442		(03) 5427 0388	mk 11
	UK		
4750		(07) 4954 7676	2 utes
5163	Australia	(08) 8325 0109	Mk 11 1800
2231		(02) 9668 8406	Mk 1 1800
3777		(03) 5962 2447	mk 1
5351		(08) 8524 7094	mk 1

SMO Sagas

The plan was to get SMO 227G to three major events this year. The Austin centenary at Longbridge, The BMC Competition Anniversary at Silverstone and BMC Day at Peterborough.

Mike Jordan had been arm twisted to drive SMO to Cofton Park Longbridge as I wanted to take my other 1800 (YED) with the caravan but I had a disaster two weeks before when driving on to a caravan site I ripped open the roof of the van on a overhanging branch – exit one caravan !!!

SMO had not been anywhere this year and on heavy braking was locking its rear wheels and the pedal felt dead having the rear brake bias may be

good for Australian Dirt roads and rallies but not for UK Tarmac, anyway we set of for Longbridge only 20 minutes or so drive from my home.

SMO had also developed slight a misfire and Mike suggested we adjust the Tappets, this we did at Cofton Park but noticed that one valve had a chewed up face to one of the tappets so this had to be investigated when we got home.



Jim Barratt and SMO at Silverstone

Bright and early on the Monday after the show I removed the rocker cover and investigated, in fact one of the valves was loose in its guide and I had to remove the head, The head fitted to SMO is a Downton modified MGB / 1800 Mk1 head and I did not have one to hand so fitted a head from a late model MGB was fitted, the engine immediately sounded better and the miss-fire was gone.

I now decided to get the brakes sorted I checked the front callipers and pads they were OK, bled the system checked and adjusted the back

brakes all to no avail, as SMO is fitted with a split circuit braking system using two Imp master cylinders with a balance bar, I decided to investigate that.

Screwing the balance bar all the way over to the left made some minor improvement but the bar now hit the clutch pedal making gear changing "Interesting" !!

I removed and changed the Servo not an easy job as it is hidden under the dashboard however this made no difference at all, Next thing was to completely remove, strip down and check the balance system then the penny dropped looking at the balance bar I noticed that it was offset – one side about an inch longer than the other.

The long end was towards the front and the short to the rear what I can remember from sitting in lectures at college with levers its Force X distance so a long lever in this instance means less effort to the master cylinder. I reversed the bar put it all back together and Voila good brakes better than they have ever been.

Next event was Silverstone and my Australian friend Jim Barratt had come over we took SMO out for a drive round had a fiddle with the timing and set up the carbs and now had a flying machine with 90mph + available on my private test track (not chasing Ex Works Mini Coopers on the A5 honest Officer !!)

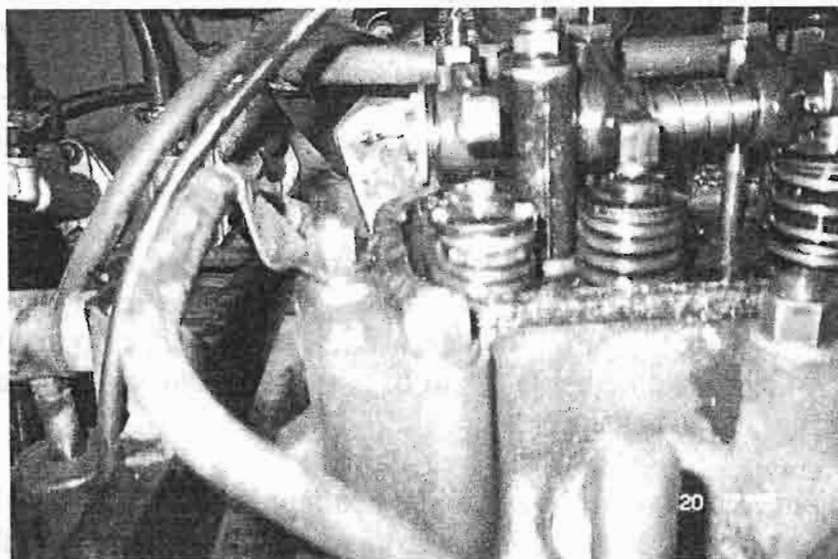
The Saturday at Silverstone was wonderful, more Ex Works cars than you could shake a stick at Mike Jordan, Reg Cook John Watson and Clive Serrell putting on a small display of Landcrabs next to the Special Tuning Area and hundreds of MG's both static and racing on the track.

The Sunday was WET !! as wet as only Silverstone can be on the way into the circuit SMO had the missfire return so as we were due to do a Parade lap we blagged a set of Plugs from Reg and set off we did the 4 laps of the International Circuit Ok with Jim driving and decided to change the plug leads, we did this and started up the engine.

There was an almighty BANG the Exhaust blew out and the car was running as rough as bears backside !! we tried to fix it but ended up going home via the RAC

Monday again saw the rocker cover removed and a scene of disaster came into site the number 8 valve spring had broken and the valve dropped so off with the head again !!

Fortunately the valve had not hit the piston I have since found out that late MGB s (and 1800Mk3) head had only single valve springs and were limited to 5200 RPM where as the red line on SMO was 6500 and I was using 5500 so it was my fault – but who in their right mind would fit a MGB with such a head !!!!!



Broken Valve Spring

Anyway I fixed the Exhaust ground in all the valves, fitted a new set of Valve springs and put it all back together AGAIN.

At the same time as I had the head off I took the opportunity to clean out all the water ways in the block and got a load of sediment out of the drain hole and found that some of the passages were completely blocked – this is a fault of old B Series engines.

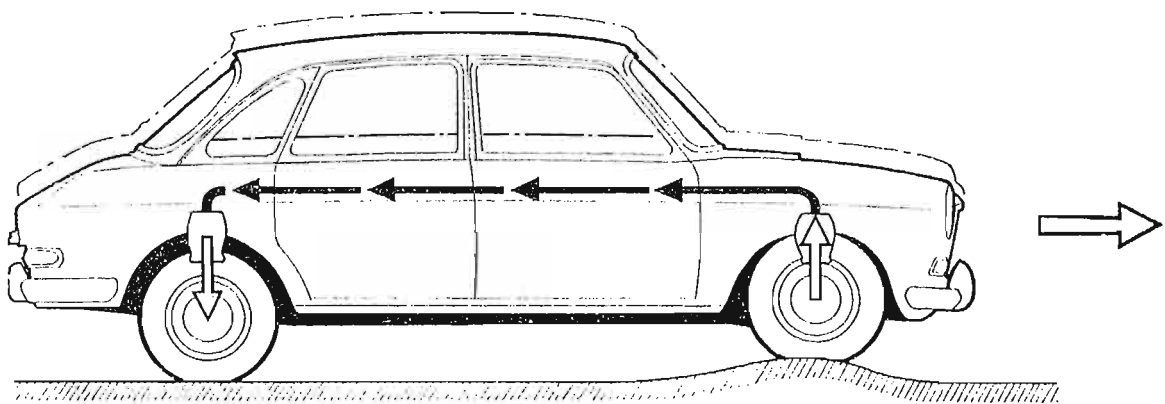
Since re-fitting the head I have done a 200 mile round trip to BMC Day - keeping a weather eye on the rev counter - with no trouble I am now in the process of trying to get the original head sorted for unleaded fuel or if as I think the head is to worn, modify a similar head to the same specification.

The Suspension System in the 1800.

Herb Simpfordorfer

The suspension system in the Austin 1800 would be well known to all readers. There is a rubber bag (correctly called displacer unit) at each wheel, and the front and back bags of each side are connected by a tube, giving two completely independent systems. The system is filled with a mixture of water, alcohol and some additives. Adding or removing fluid is done through valves in the engine bay. It is important that as little air as possible is in the system. The pressure in each system is about 250 p.s.i. The correct amount of pressure is determined by measuring the distance between centre of front wheel and the underside of the body panel directly above it, measured when the car is lightly loaded. It should be 15 ½ inches. It is possible for any practical owner to make his own pump and evacuation system at minimal expense, and also to make the necessary fluid using easy to find liquids. Alternatively, fluid can be bought as manufactured by Penrite. See other editions of this magazine for details.

In this article, I will closely look at what happens in this hydrolastic system when the vehicle is moving along, and especially when it comes to a bump. It could be that we have been given information that is a little to one side of the truth. Considering the right hand side only, the theory is that the pipe connection between front and back is desirable if the front wheel comes to a bump. When the centre of the front wheel then goes up, say one cm. relative to the body of the vehicle, we are told that fluid moves very quickly to the back wheel, and this makes the back wheel go down at the same time by the same distance. At the same time, the body on this side rises by a small distance. The reverse wheel motion occurs when the back wheel comes to this same bump. So, in theory, the body of the car remains horizontal when the car comes to bumps. This concept was given much publicity when the 1800 was built, as it was obviously thought to be a worthwhile sales pitch. I have often wondered if this actually happens in practice. Newton's first law of motion must be considered. Common sense also helps.



This diagram comes from the red BMC Austin 1800 Workshop Manual. Similar diagrams are to be found in BMC brochures and other literature. The diagram shows how the back wheel goes down when the front wheel rises as it goes over a bump. According to the diagram, the whole body rises a bit, but there is no pitch, i.e. Nose rising while tail goes down. Note that the back wheel goes down (relative to the body) exactly the same distance that the front wheel rises. The diagram shows the front bag to be larger than the one at the back, which is correct, and both to have vertical orientation, which was not the case in any 1800 sedans. This is probably a case of artistic licence, desirable to show the concept being explained. In fact, the axes of both bags are horizontal.

Is the diagram correct? Logic would tell us that if fluid moves from the front to the back, the body should not lift one bit because there is no vertical force acting on the body. So that is a bit misleading from the start. But what if the off side does rise a bit when this side comes to a bump, then there would be some sway, as the other side would keep its original level. The possibility of sway is not mentioned anywhere, but the diagram clearly implies that there will be some sway. The other question is whether the fluid can move fast enough from front to back to keep the body horizontal. I have a big question mark about that actually happening.

The Rolls Royce and most other fancy cars did not find it necessary or desirable to fit this kind of system to their vehicles. (One notable exception was the 1955-75 Citroen DS which had a fancy system, using hydraulic struts and gas). Yet the Rolls Royce is known as a very stable car in bumpy conditions. In fact, I once read that a movie maker in the early days of movies used a Rolls Royce as a platform for his cameras when doing tracking shots, that is, when the camera is moving. He stripped off the body and put a platform on the chassis. The camera was put on this platform. He found this system adequate for his purpose. Would he have used the Austin 1800 for the same work if it had been available? And another question is that if the hydrolastic suspension is so good, why did the Rolls Royce people not use this or a similar concept in their vehicles? Obviously they felt that their system was good enough to retain their very high status in the world of vehicle comfort. It is also interesting that the Leyland P76, which was made in the same Zetland factory after the 1800 and Tasman/Kimberley range had run their course, used four coil springs, one at each wheel, with the owners being very happy. The Marina, which came next, was also conventional.

As a passing thought, has anyone changed the fluid system to coil springs in an 1800? It seems possible, and just about anything that is theoretically possible in an 1800 has been tried by someone, somewhere.

Back to Newton's First Law of Motion. A close look at the theory that the fluid in an 1800 system moves along the connecting pipes when the car is in motion and going over a sudden bump does not look good under close scrutiny. It has to do with Newton's first law of motion, which states in part that a body will resist being accelerated. And this resistance increases with the mass of the fluid involved. This explains, for example, why a person falling from a very high place into water hits the water very hard. The water resists being moved. It can be moved, of course, but not at the high acceleration needed to allow the person to avoid injury. Put simply, if the front wheel hits a bump, and rises one cm into the air in 0.01 seconds, this will raise the pressure in the front bag, which will produce a force on the liquid in the system, but this liquid will resist being moved because of its mass. Added to this is the pressure of the liquid in the rear bag, which also resists the flow of more fluid into the bag. My gut feeling is that the liquid will move very little in this case.

The liquid in the hydrolastic system can be considered to be incompressible, (as are all liquids) so the fluid itself cannot play a part in being a cushion. Please note that if air would be used in a system like this, the above reasoning does not apply, as air or any gas has very close to zero mass, and is highly compressible. We all know how quickly gases accelerate and move in and out of the upper cylinder chambers of an engine, and how they can be compressed during the compression stroke.

As an aside, it is theoretically possible to pump up the extant 1800 system with air, but this would not work for long. At every change of temperature, the pressure of the air in the system would change, making the car rise and fall. And on a very hot day, there would be a big bang because the pressure would be more than the system could withstand. However, a system (somewhat complicated) could be designed to have constant pressure in the system, and it would be interesting to see what kind of ride one would get.

Someone told me that rally drivers have cut the pipe joining front to back bags, and then install a separate pump up point for each wheel. This would allow for an infinite combination of pressures for the four separate bags. Makes sense. A bit of pitch or sway would be the least of their worries. The possibility of pitch for small undulations decreases dramatically with increased forward speed, again because of Newton's first law and inertia, and rally drivers have a reputation for going fairly fast! I do not know how they made this change to the system, but a very simple way for us would be to get an extra two pipes from a wreck, one for each side, and then have the pump up points right next to each other at the spot where the one pump up point is now situated. The point where the tubes are terminated would be sealed in some convenient way. (In rally work in tough conditions, this kind of tubing does not go under the car, to make breakages from stones less likely, so changes of this type are simple to do while the car is stripped bare). A good reason for this change would be to cure the tail down (or tail up) situation that can develop when unusual loads are carried. A few minutes with the pump would then bring the car to a horizontal or to any other desirable attitude.

Somebody should try this one day and tell the rest of us if there is any noticeable change to ride characteristics. I did have an interesting situation at Halls Creek, when the rubber tube on a back bag blew. Fortunately, I had the equipment to seal the metal pipe at the back wheel, and pump up the system again, to the normal 15 ½ inches height at the front wheel. The front of the car seemed to be quite normal for the thousands of km until I got home. I certainly did not get carsick because of increased pitch! (To bring the back up, I used a big block of rubber between the upper bump stop and the suspension arm).

So what does happen if the front wheel comes to a sudden rise in the roadway? My gut feeling is that the cushion between the road surface and the body of the car is firstly the flexibility of the rubber in the tyres, and secondly the ability of the bags to increase in volume momentarily. To add a bit of weight to my argument, I ask you to consider what happens when the back of the car is bounced up and down in the shed. This is easily done by grasping the body above the back wheel, which is at a convenient height. How much does the front of the car move up and down? Precious little. So, in this case, there is very little movement of fluid from back to front. There would be much less if the bouncing is far quicker, as on a bumpy road. If you want to try bouncing the front of the car up and down to see what happens, you will find it is a lot harder and does not give nearly as satisfying a result.

As a final point, since the bags have different interior volumes, front compared to back, it seems logical that more fluid would move along the tube to the back bag when the front wheel comes to a rise, than would move forwards when the back wheel comes to the same rise. The BMC diagram above does not show this. If all this is correct, why did the BMC people put the misleading diagrams in the books. Maybe because it looks so nice. Maybe because it is innovative, and we tend to believe that something new is better. Anything that can make a few sales. Floats on Fluid. That sounds nice. No pitch movement when going over bumps. That sounds extra nice.

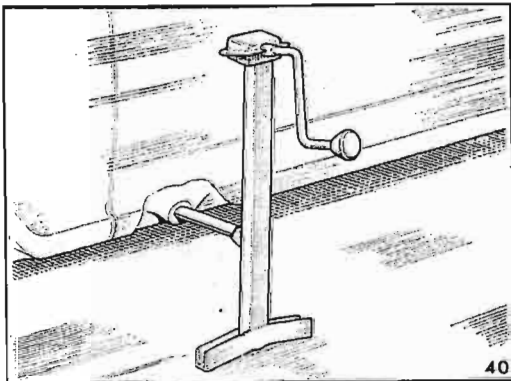
The big advantages of the system is that the ride is very nice indeed, there are few moving parts, the whole system is easily maintained, and it is simple

So, in conclusion, I feel that the publicity department at Zetland went a little into the imagination area when writing about the hyrolastic suspension system of the Austin 1800.

Jacks and Spare Wheels

Herb Simpfendorfer

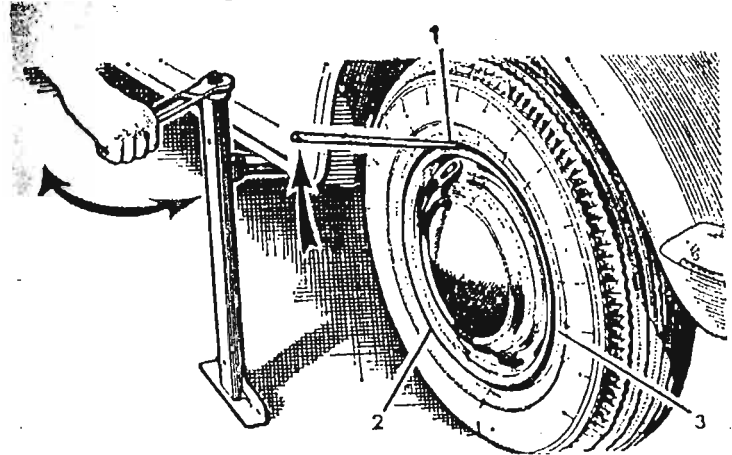
The jack that was in the first Austin 1800 sedans that were sold in Australia had a wind up handle, so that while in use, the hand of the operator moved in a circular motion, in a vertical plane. The very first ones had a piece of wood where the handle was gripped.



The diagram at the left is from the Mark 1 Driver's Handbook shows the very first jack with a wooden grip. It is interesting to note that this diagram appears in all brochures for all Mark 1 vehicles, even though the wooden handle was changed to hard plastic soon after the introduction of the 1800 to Australia. The plastic is cylindrical in shape.

I do not know when this change of handle was done, but a car of YAHS2 Number 2091 had the wooden handle, and YAHS2 Number 3230 had the plastic. This was a very efficient jack, and very easy to use. It may well become a collector's item. There are not many to be found. For example, among all my bits and pieces, I have but two. They are not for sale!

A change was made sometime during the Mark 1 era, when the handle at the side was deleted, and a square put at the top of the jack. A separate bar with enclosed ratchet was then used to operate the jack. The motion of the hand was semi-circular in a horizontal plane.



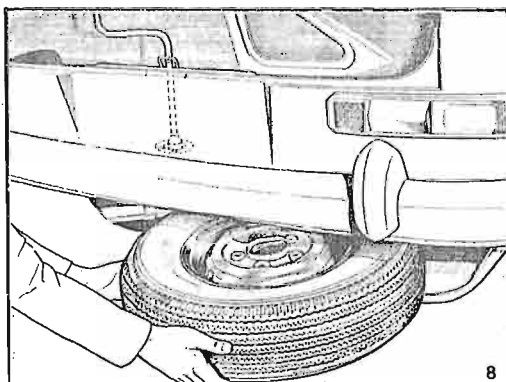
The diagram at the right is taken from the Mark II Driver's Handbook. This is the second type of jack, which came in two parts..

Why change from a very efficient jack to one less efficient? It was probably because the original jack took up slightly more cubic capacity than the second model, which can be stored nearly flat. So we lose efficiency because of the oft asked question in car design, "Can you change it so that it still does the same job, albeit less efficiently, and occupies less space?"

If you think I am being unnecessarily cynical, think of the present debate about the spare wheel in a lot of modern vehicles, where the spare wheel is smaller than the wheels on the car. This change was made because of cubic capacity, and maybe cost had something to do with it too. The idea is to maximise the room in a vehicle for bodies and luggage, and minimise the space for everything else. The next step in this logical progression is for a vehicle to be made that has no spare wheel at all, but has something built into each wheel and/or tyre that allows continuation of travel when there is a flat tyre or blowout, but at a reduced speed. This has already been done on special vehicles, like the U.S. President's Lincoln, which can speed away even if there are many bullet holes in each tyre. Somebody told me that some vehicles sold in Australia now have no spare wheel, but I have yet to see this. If you think about it, the spare wheel has always been a problem in cars. Where to put it? It is bulky, a real nuisance. Various places for the spare wheel have been used are in with the engine in front, on top of the bonnet, in the front luggage area, along the side of the engine, somewhere else on the side of the car, in the boot, under the boot, on top of the boot. It gets worse if more than one wheel needs to be carried. Rally drivers often put them on the roof, and Dakar Rally cars this year had them lined up vertically at the back of the cars. I always think the 1800 has by far the best solution to this problem. The worst I have seen is in a 1973 Lincoln Continental, where the spare wheel was situated horizontally plonk in the middle of the huge boot. Even though the boot is a mile long and nearly as wide, there is great difficulty finding a place for an ordinary suitcase.

Spare wheel

The spare wheel is secured on a tray below the luggage compartment by the bolt in the centre rear edge of the luggage compartment floor.



The spare wheel tray is in the luggage boot floor lowered by turning the bolt using the wheelbrace

This diagram is from the Austin 1800 Driver's Handbook. It shows how the spare wheel is removed from its tray. The system is simple, neat and efficient. No luggage needs to be moved. Disadvantages, compared to other systems, are that the spare wheel gets dirty, and it takes about a minute to check the air pressure. That's a small price to pay for all the advantages. For me it is a complete mystery why most other car makers did not use this system.

Question for the experts: I need to replace the clutch in a sedan one of these days. The necessary new gaskets are becoming hard to find, but not impossible. My question is whether it is theoretically OK to use that FORM-A-GASKET silicone in a tube instead of gaskets and gasket cement between the sections when putting them back together again?

Neil Melville from Western Australia told me the engine shock absorber has an important function when accelerating/decelerating on corrugations, when the equivalent of RWD axle tramp can occur. In these conditions, the vertical movement of the engine relative to the body can exceed 7/16 inch. He also wrote that windscreen people remove light scratches from auto glass using rotary buff and cutting compound. It is a slow process.

HS

For Sale Austin 1800 Mark 1½, beige exterior, red interior, automatic, 109,000 miles. YAHS4 2667. Always garaged. Interior almost as new. Only exterior defects are small rust bubbles on front door, crack in windscreen. Fluid leak in auto gearbox. Not registered. Very little work needed. At Rutherglen in NE Victoria. \$700. Ring Martin on 02 60 328 303.

THE HOSTESS at a party served a guest a cup of punch, warning him it was liberally laced with liquor. Next, she offered some to a minister who said, "I would rather commit adultery than allow liquor to pass my lips!" Hearing this, the first man poured his punch back into the bowl and said, "Sorry, I didn't know we had a choice." 39

END OF THE ROAD FOR THE *ECOTHERM*

By Daryl Stephens

Avid readers of this mag, if there were any, would no doubt remember that I installed an Ecothem into my 1800 some years ago

As everybody knows, this device enables the thermostat to sit in the bottom radiator hose. Basically, a new thermostat housing with a thermostat inside it, sits in the hose. The hose was bisected and a 50mm section removed. A very tight fit because of the close proximity of the engine mount.

The rationale behind this is that the engine is fed hot water, which makes it more efficient than cold water going in the bottom. However, when the engine is cold and the thermostat closes, it cannot re open because directly preceding it is copious quantise of cold water in the radiator. Basically the heat from the head is used to heat the block

Do drawing

Therefore a radiator by pass is used. This takes water from a fitting in the top radiator hose and gives the water a choice of thru the radiator or down the by pass. The by pass feeds hot water into the bottom thermostat housing, thereby controlling the operation of the thermostat.. Part of the installation procedure was to remove the old[top] thermostat, and also to block of the internal water by pass[With the standard arrangement, the water still circulates around the block with the thermostat closed and only goes through the radiator when the thermostat opens]

So far, so good. Then I discovered that the manufacture recommends opening up the innards of the water pump to allow superior flow rates. Another \$100 down the gurgler! Also a smaller pulley on the water pump to spin it faster. Made a lucky discovery here that the autos have a smaller fan / water pump pulley

The down side was that it was a major drama to change thermostats, because the bottom hose had to come off Also, when installed, the temperature gauge went straight to the top of hot! Never worked out why, because the water temperature in the radiator was usually around 82c. Fitted a differently calibrated temperature gauge sender and fixed that problem

Another problem in service was that the when the system needed more water, it had to go into the by pass. This was done by screwing a 300mm rubber hose into the by pass and having a funnel sitting on top. The engine was fast idled for about 10 minutes, while I kept filling the funnel. Quite laborious.

In hindsight, I should have paid the manufacturer to do the installation. However, just to buy it and the water pump mods was about \$500, which I thought was a bit over the top. An excellent idea, but I could not afford the development work to be done.

Probable works very well 'off the shelf' for the common lesser cars.

The device rusted out – at a most in opportune time –and was consigned to the round file which is collected on Tuesdays.

Probably an easier way to gain the efficiency benefits of the head heating the block would be an electric water pump pushing the water the other way[The impellor would need to come of the standard water pump] How the thermostat would work I know not.

Mail box

Robert Medlen

Somewhere around Adelaide

- My Mk 1[December '65 build] is now finished and on the road and really looks terrific in the original Dreamy Blue. It was quite a hit at the S.A. All British Day and the owners of a couple more surfaced out of the woodwork – one of which has just done a clutch rebuild using the clubs article on the steel throw out bearing. I will follow its performance with interest

-You may or may not be aware that Jim Hyland of Warracknabeal does a suburb model of an 1800 Ute. Jim was featured in Restored Cars May/ June. He is doing a special Mk 1 Ute model for me at the moment. The standard one is the Mk 11. He tells me he is going to do an Mk 1 sedan in a couple of months

- My current restoration is a '77 Moke. I decided that as they are very thin on the ground these days, I will save one while I can as they surely will not ever build anything like it again[We all have our quirks]

The thing that depresses the Schrader valve on the master cylinder pump up arrangement, as designed by Ken Patience is the incompressible fluid lusher past the pin. Works like a beaut! I put a larger reservoir on the master cylinder made out of a tin can and cold soldered it on, so that you can get a good quantity of fluid without topping up all the time

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DATA REGISTRAR

Peter Jones
4 Yarandin Court
Worongary QLD 4211
07 5574 8293
landcrab@tpg.com.au

PUBLIC OFFICER

Peter Collingwood
18 Lighthorse Cres
Narre Warren Vic 3804
03 9704 1822

SPARES CO ORDINATOR TREASURER LIBRARIAN

Patrick Farrell
4 Wayne Avenue
Boronia Vic 3155
03 9762 4457
farwar@ozemail.com.au

EDITOR / SECRETARY

Daryl Stephens
22 Davison Street
Mitcham Vic 3132
03 9873 3038

stephensdaryl@hotmail.com

SOCIAL CONVENORS

Brisbane Peter Jones
Melbourne Nil
Sydney Nil

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New members

Bruce Austin	15 Bickley Avenue Thomastown Vic 3074	Mk 11 Ute
Bruce Norman	31 Thorne Street Wagga Wagga NSW 2650	mk 11
Jim Robertson	4 Sylvia Court Glenville QLD 4350	Morris 1800

For sale

Mk 1 1967 Toga White 48,000 miles \$2199 Nik 0402 873 913 Melbourne

1968 1800 Auto Good condition no reg \$500 Jean Parker Toowoomba
QLD 4635 3176

Headless mk 11 engine- also a block minus crank John Van Groegen
0418 341 415

Mk 11 1970 auto Sugar Cane/ red Knox offes 03 9763 1937

1800 mk 11 man no reg brown \$600 Geelong Vic 0417 885 090

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LANDCRAB

CLUB OF AUSTRALASIA INC.



Daryl Stephens 22 Davison Street Mitcham, Victoria, Australia, 3132 Ph: (03) 9873 3038

Welcome to newsletter number 126 for December 2005 and January, 2006



SOD OFF!

I DON'T CARE WHAT YOUR
NAME IS...I WAS HERE FIRST!

Donor Card GT Rally

23rd October 2005

The Donor Card rally is a road rally with a difference, It is run for charity, this year the charity was Cystic Fibrosis where one treatment is a heart Lung transplant hence the Donor Card link.

I decided to do the event in SMO 227G, having had a lot of problems with it this year and now hopefully got it running Ok. I needed a Navigator with rally experience who could de-cipher Tulip diagrams and who would know what a secret control and a code board was. So I got on the phone to Mike Jordan who agreed to have a bash at the navigating but who admitted he was rusty, not having done a road rally for years.

The event started at the Heritage museum Gaydon and we presented the car at the starting area at the required minute, the cars left at one minute intervals, we were car No 30 and were running close to another Ex works car, a Rover 2000 used by Logan Morrison on the Monte Carlo.

LOCI member Dave Wilks - he of the Peking Paris Landcrab arrived - but in a funny Italian contraption and immediately got a lot of stick of the – “You could put that In the boot of the Landcrab as a shopping cart variety”

We were flagged off at the start by Paddy Hopkirk, who on seeing the Landcrab told all and sundry that “It was an amazing car”. Paddy was signing things for a charity donation so I took my copy of “The Longest Drive” the London Sydney rally story that was supposedly written by Paddy but who on presentation for the autograph said that he had never seen a copy, and was interested in the book especially as I had got Gerald Wiffen the mechanic who built Paddy Landcrab to autograph it at Silverstone.

Paddy also signed Mike’s copy of the same book and other items including the rally Plaque that we had to fit to the front of the Landcrab, luckily I had got a permanent marker for the job.

We set off from the Museum at the appointed minute and started the serious business of staying on the correct route. Now rally organisers

are crafty and part of the event was to visit controls that were listed in the route instructions but also were code boards put by the side of the road in odd places, the numbers and letters were to be recorded into a space on the control card, as well as time and signatures at the main control.

One board was off the main road the wrong side of a grass triangle behind a sign post so it wasn't that easy !!! We saw several cars going in different directions when we were headed in quite another, but Mike had got the navigation mostly spot on, the only bit where we went wrong was in my opinion a wrong distance in the road book.

We headed back to the Museum after the first loop handed in our control card and found we had an hour for lunch so we diverted into the cafeteria.

The afternoon was more interesting, there was a route diversion and some secret controls put in (secret controls are not in the route book and you are not told where they will be) we did however find the ones we should have done and collected a few more code boards and signatures on the control card.

On arrival at the finish we signed off and found that we had collected all the code boards correctly and had not missed any controls – more than a lot of people did !! But it was a fun event so no brownie points for doing well, just the satisfaction of doing it right.

After the event there was a evening meal in the Museum included in the entry fee and an award ceremony, we had a nice commemorative plaque to take home.

The event raised a total of £4321 for charity, with more individual sponsor ship to come in.

So if you want to do a fun event with the elements of a real rally then the event is on again next year - same venue and the same format. Could we get a team out next year and do some serious fund raising?? one team raised a whopping £1750
If you are interested in doing the event or if you want to sponsor us next year then contact me at the address in the front of the mag.

Ken Green / Mike Jordan and SMO 227G




Internal Virus Database is out-of-date.

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PRINCESSES AMONG THIEVES

When BL set out to prove the new Princesses' reliability, the RAC observers wished they'd stayed at home. Stuart Bladon unearths the truth

SIR Michael Edwardes, chairman of BL, declared in 1979 that the company was "halfway through" its recovery programme. It was decided to stage a convincing demonstration of the speed, endurance, and fuel economy of the Princess range, which had been relaunched in the previous summer with the new 2-litre O-series OHC engine.

Ambitious sights were set on sustained fast driving for an extended mileage. At that time, the Bedford proving ground at Millbrook was restricted to Vauxhall and Opel cars, and not available to the rival BL organisation. So BL hired the Fiat proving ground at Nardo in southern Italy.

Three Princesses would run, with 1.7- and 2.0-litre engines, plus one of the six-cylinder 2.2-litre models. The objective was to cover 24,000 miles in two weeks at an average speed of 70mph and consumption of 30mpg. It was a tall order, involving sustained driving broken only by minimal service halts, as some 1,700 miles had to be covered every 24-hours.

So that the effort could be authenticated and went well, the RAC was requested to observe the trial. Scrutiny of this kind comes under the Birmingham-based Technical Services division, which was then under Mike Reddaway. He was to be assisted by staff engineer Bob Proctor. After only two months in his new job, Proctor learned that he and his boss were off to Italy.

They flew to Brindisi and hired a Fiat Mirafiori 131 from Hertz. The next day, they made their way to the circuit, and learned that the transporter bringing the cars had not yet arrived. After a long wait, they went away for a meal and returned later in the dark to find that there was now a lot of activity in the big parking ground outside the test circuit. The Princesses were being unloaded from the transporter, and it was time to start getting organised for scrutineering and time-keeping.

Fiat was a four-door car, but it was easy to kneel on the front seats and lean over into the back to sort out papers, stopwatches and so on. The two RAC men were in this unusual attitude – as though

saying their prayers – when there was a tremendous bang and the car hurtled forward, flinging them both against the back seat. With another crunch, and almost as violently, the Fiat came to rest.

Mike Reddaway's leg had been out of the door, and the impact flung the door back heavily against it, almost breaking the leg. Bob Proctor went head-first into the rear seat backrest, smashing his glasses and driving the lens into the upper part of his right eye.

In the darkness and with the sudden disorientation, they initially thought that the handbrake had been off and the car had run backwards until it hit something. But when they emerged, they found that another car had smashed violently into the back of the Mirafiori and forced it forward until it hit the transporter.

The car which had run into the back of the Mirafiori was a Fiat 127. For a while there was confusion, but gradually it turned out that the 127 belonged to the circuit doctor. It had been stolen, which explained why it was being driven away at speed, with no lights on, across the car park – until the Mirafiori stopped it.

Two youths were in the 127, and in the impact their heads smashed the laminated windscreen out of its frame. Realising what had happened, some of the BL technicians tried to apprehend them, but although bleeding profusely from head injuries, the thieves managed to escape. They ran off and were never seen again.

The RAC observers were in no state to oversee a speed trial going on day and


night for a fortnight, and both had to be treated at hospital. Mike Reddaway was in great pain from his injured leg and could only hobble about, and Bob Proctor was also in considerable discomfort and temporarily unable to see out of one eye. It was decided that they would have to return to UK, and call in reserves.

Then Alitalia went on strike.

BL wanted to start their endurance runs – the circuit was booked. Arrangements were made for the reserve team to come out the next day, after the strike, but Reddaway and Proctor would have to do their best to observe the first 24 hours.

With his injured left leg, Mike Reddaway could not drive, so it was a black-eyed Bob Proctor who had to feel his way to Brindisi airport next day to meet the new arrivals. He showed them the way to the hotel, where he handed over the car, gave instructions about how to find the circuit, and retired to rest in a darkened room. The newcomers, with not a word of Italian between them other than the name 'Nardo', totally misunderstood the instructions, and drove for most of the afternoon in the damaged Mirafiori before they eventually located the circuit.

The endurance run continued through several days and nights, but then more things started to go wrong. One of the four-cylinder Princesses blew a cylinder head gasket, and on the other one the constant curvature of the circuit caused the gearbox to run partially dry, so the idler gear failed. The six-cylinder Princess – always an underrated car of the BL range – soldiered on but a lot of time was lost when a jerrican of water was poured into the fuel tank in mistake for petrol at one of the pit stops, where all fuelling was being done from cans. It achieved the required speed, but could not manage the 30mpg fuel consumption target.

The results were *not* the sort of thing to help build a reliability and economy image. It was finally decided to write the operation off in the all-embracing cause of product development, and the planned blaze of publicity based on the results was abandoned. The RAC revealed no details about this jinxed endurance run, and no report was published . . . until now. 



The five-model Princess 2 range which BL sought to publicise with an endurance run

New members

Matteo Giacobello

15 Lincoln Road, East Brunswick Vic

Damien Broderick

94 Prince Street, Annerley QLD 4103

07 3391 1568

Name: Damien Broderick

Address: 94 Prince Street, Annerley, 4103, QLD

Phone: 07 33911568

Email: damienbroderick@optusnet.com.au

146LJO Austin 1800 MKII manual Utility. In 2003 I flew down to Sydney to have a look at the ute and decided to drive back that night with a tray full of spare parts back to Brisbane. Apart from a dodgy electric fuel pump and a lying fuel gauge, I got home in one piece and in high spirits. The engine recently died after a gudgeon pin came loose from the piston and scoured the block. The engine is back from the engineers and is now being rebuilt. It had a hot camshaft, oversized valves, twin SU's and extractors. It went very fast until it stopped. In the interests of longevity, it now has a standard head that runs unleaded and a standard cam grind. I'm keeping the twin SU's and extractor setup as before. I hope to be rolling again soon.

736GPA Austin 1800 MKII manual sedan. I got this one with a manual gearbox and no engine from an MG place. I had an auto with a broken gear box so I did an engine transplant. It's our daily driver and is currently tolerating 500km per week doing the craft market circuit of SEQLD and Northern NSW.

Simon Reis

27 Blanche Street, Elsternwick VIC

George Sturgess

10 Severne Cres Kambah ACT 2902
Mk 1

02 6231 8187

Katrina Baistow

59 Benbow Street, Yarraville Vic
Mk 1

0405 343 253

I purchased "Claus" on 21/12 2004. Claus is a white Austin 1800 auto. Though I've only had Claus for a short time, I really love the car. Third owner, I have all the paper work and services of the car. At first, my car had issues with keeping the rear passenger side hydro bag intact. The front arm was the problem, and now that's fixed, the car is fine. And runs like a dream!

Daryl Stephens

THE WIND BAGS

PRESIDENT

Vacant Ability to read and write
Helpful but not necessary
Applicants invited

DATA REGISTRAR

Peter Jones
4 Yarandin Court
Worongary QLD 4211
07 5574 8293
landcrab@tpg.com.au

PUBLIC OFFICER

Peter Collingwood
18 Lighthorse Cres
Narre Warren Vic 3804
03 9704 1822

SPARES CO ORDINATOR TREASURER LIBRARIAN

Patrick Farrell
4 Wayne Avenue
Boronia Vic 3155
03 9762 4457
farwar@ozemail.com.au

EDITOR / SECRETARY

Daryl Stephens
22 Davison Street
Mitcham Vic 3132
03 9873 3038

stephensdaryl@hotmail.com

SOCIAL CONVENORS

Brisbane Peter Jones
Melbourne Nil
Sydney Nil

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Vehicles selected will be notified prior to the event, photos may be collected on the day.

Please POST ENTRY to Austin Motor Vehicle Club
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Auto Trader enquiries most welcome at this display day, entry forms available

Peter (02) 4572 5621

Steve 0411 022 321

The Defender

Editorial

Or when things go belly up
Or even pear shaped !

Writing off ones car is always a little inconvenient. When it is ones Mk 1 1800, which had been restored to its former glory, it is extremely inconvenient Quite simple, really. A slight concentration break, and into the back of a stopped Ford Laser at 70 ks Exit both cars.

8

The 1800 would have been repaired, except that the front had twisted about 5mm sideways. The 2 year old laser was a mess. No doors would open and the roof was bowed.

Since I use the 1800 for my non profit business, I needed another car quick!! Daughter Naomi has a red mk 11 which I have performed a full mechanical restoration, and while I prefer mk 1's, this one needs nothing doing, and has given 5 years reliable service- with no breakdowns. I found myself offering her \$3,000. Even worse, I found her accepting my kind and generous offer. Everybody has their price!

The car is called Lazarus, because like its name sake, it has come back from the dead. Some 5 ½ years ago, some people up the road from here offered us the car as "you are the people with all the funny old Austin's." At that stage, there was my mk 1, a foster girls [who lived here for 4 years] mk 1, any one of the 4 1800's that Naomi has had, and son Adams mk 11. Plus occasionally an Mk 1 that I share with my Olds. I am glad that she did not say you are the funny people!

The car had been sitting in a garage for about 15 years. To shift it, I put on 4 new tyres, and pumped up the flat Hydrolastics. The back brakes were seized on and broke free when a 3.8 litre V6 gave everything it had. They went off like a gun shot. We dragged it out backwards, and to amusement of the neighbourhood, continued home that way!

A couple of days prior to this, Naomi's third 1800 had been demolished while parked in the middle of the road. I mean parked parallel to and not more that 100mm from the kerb. Being the Worlds Worst Father, I refused to lend her anymore of the folding stuff till she learned the meaning of debt repayment. Thus we initially thought this car, being a freebie, could be for her.

Fist impressions were not good. It has been stacked and both passenger side guards were repairable but damaged. Both passenger side doors were totaled. The bonnet was wrecked because a chain saw fell off a shelf and crash landed on it and. crow bar had taken out the boot! Also, the smell of the rats nest was even worse than the foster girl's bedroom

"You must be kidding" said Naomi!!

As luck would have it, the only good panels on her demolished mk 11, were what Lazarus needed. A week later, the car looked like new. The black interior was not cleaned. I had an as new complete Mk 11 beige interior lying around, including carpet. Completely transformed it. Now Naomi was saying maybe..

Eventually got the engine going. The clock was showing 30,000 and I was fast concluding it was first time around. Apparently, petrol goes stale and this had me tricked for a while. But it fired up eventually. We bought some temporary rego, and went for a hoon. Came home on a flat top as the engine dropped a big end. Not happy!

The plan was simply swap the motor from the wreck into Lazarus. However, the auto had been damaged in the write off, so I had to peel the auto off the block and do a swap. Back together, still on tempory rego, and the automatic cracked up. Out it came again!

This time, I was going to bite the bullet and do it properly. Her first 1800, a mk 1 which demolished a lamppost- with an unlicensed ex boy friend behind the wheel had only done 30,000 miles. I had this mated to a new Austin Ambassador automatic for her second 1800

Just before her 21 st, she was offered either a party or another car. The condition when she decided on the car was that dirt bag- the boyfriend had to go. A deal was agreed to. I bought a resprayed mk 1, the car in Crackerjack, and restored it mechanically over a few weeks. With the much later automatic it was a really nice car. Dirt bag still unlicensed put it into an embankment at 120 ks, writing it off I felt like writing her off!

I managed to salvage the power unit but was fearful of damage. The bright side was that dirt bag was un loaded. The big plates at both ends of the engine were trashed, the drive plate was busted and the connection in the 'box for the gear change cable was totaled. Could not help myself. While it was in bits, I had an 1800 S camm made by Wade Camshafts. This I reasoned would suit the later automatic as the change points were higher;

Was about to drop the power unit back in Lazarus when son Adam totaled his manual mk 11. It finished up here which was most fortuitous because the head was unleaded. I had also spent hours polishing all the airways inside the head, and had matched the inlet/ exit ports to the manifolds. This mk 11 head **had to go** onto the mk 1 block - it is not a problem, but **the block must be recessed for the larger inlet valves.**

Installed the electronic ignition - the one available through the club- bought some more temporary rego and away we went. Both back hydro units promptly let go. The easiest way round this was simple transfer Adams complete suspension over- front and rear. This had the bigger hydro units all round, with new hoses on them. I had recently done the ball joints, so one big day and Bob was your Aunties husband. Adams car also had Globe rally master mages and new Michelin tires, so on they went. Also, custom made lamswool seat covers plus the English Mk 11 instrument panel. . This puts the blinker warning lights under the respective fuel and temperature gauges. It also puts the horn and high \ low beam on the stalk. And of cause, the Speedo has the metric scale as well. A bonus was the more reliable Mk 1 Girling front calipers not forgetting the heated rear window!. And last but not least, four not broken plastic window winders!

Since the Road Worthy and Registration, the car performed brilliantly.

Since the Mk 11 combustion chamber is 43.ml and the Mk 11, 38. - About 10% different, I estimate that the compression ratio is up 10%- around 9.5 to one. Either way, I have never driven a quicker automatic

Lazarus is currently being replayed and I am herbing around in a completely standard Mk 1 auto, so I have a back to back comparison... The Mk 11 is definitely lighter in the steering and more neutral in the handling. Far as I know, the only difference is the upper suspension arm. An easy swap for anybody to lighten the Mk 1 steering. Cannot pick any difference in the brakes. Both use the more reliable Girling front calipers and the PBR 40 **EL** power booster. It should be noted that unless the booster is **EL, stopping will not be as good.** When time permits, I will again install 1800 S/ 2200 brakes. The easy way to make this happen is reduce the diameter of the Kimberley discs to 9.7" and grab the 3 spot calipers of a Rover P6B. One would think that the X6 cars should stop

really well- better than an 1800- but they do not. The reason is the drop in the diameter of the rear wheel cylinder. By installing an 1800 Mk 11 rear wheel cylinder, the X6 will really stop/

Now I am facing the reality that I may never own another manual vehicle! Quite strange when I went to a lot o trouble to obtain an 18/67 i.e. 3.7 crown wheel and pinion... I guess the same is also true for both sets do twin carbines, and both sets of extractors! The roller rockers and lighter weight push rods will definitely be used again.

Naomi then decided a rice burner was the way to go. However. A 2.6 Magna fell out of a tree – as new for only \$6,000 - and they hope to live happily ever after.

FW: WARNING from NRMA

You walk across the car park, unlock your car and get inside. Then you lock all your doors, start the engine and shift into REVERSE, and you look into the rear-view mirror to back out of your parking space and you notice a piece of paper stuck to the middle of the rear window. So, you shift the gear stick back into PARK, unlock your doors and jump out of your car to remove that paper (or whatever it is) that is obstructing your view.

When you reach the back of your car, that is when the car-jackers appear out of nowhere, jump into your car and take off!!

Your engine was running, you would have left your purse/wallet/briefcase in the car and they practically mow you down as they speed off in your car.

BE AWARE OF THIS NEW SCHEME THAT IS NOW BEING USED IN SYDNEY AND COULD SPREAD ACROSS AUSTRALIA (and elsewhere)

Advice. Just drive away and remove the paper that is stuck to your window later, and be thankful that you read this email.

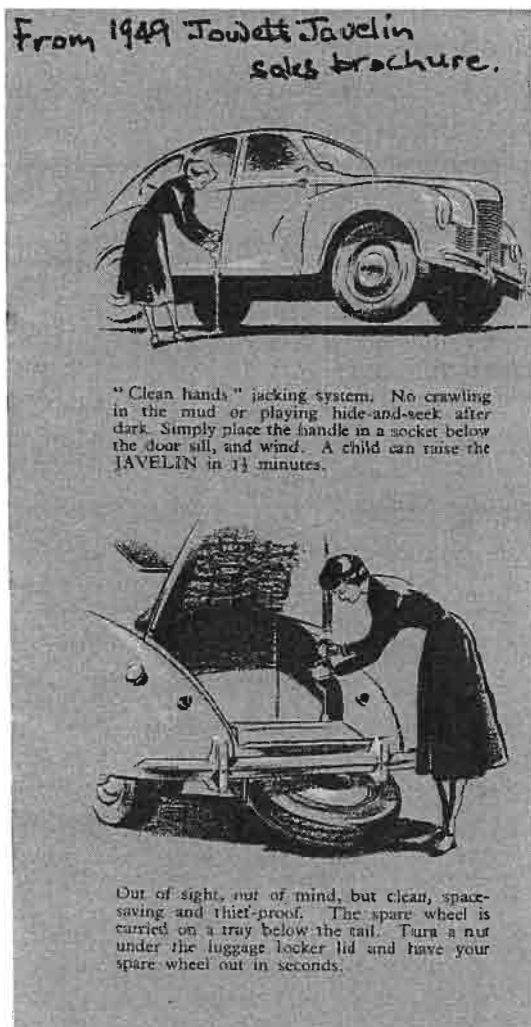
I hope you will forward this to friends and family. A purse/wallet/briefcase contains all identification, and you certainly do NOT want someone getting your home address. Especially when they already HAVE your HOUSE KEYS!!!

Loretta Peters
Dept of Police & Public Safety
Traffic Liaison Services

I don't personally know of any attacks but it is very feasible, you would have to agree.

NEWS and VIEWS from the WEST

What wonderfully enlightening and entertaining articles we receive in our newsletter from the pen of Mr Herb Simpfordorfer. There are travel tales, philosophies on the whys and wherefores of our 1800s, suggestions for detail improvements, plus maintenance hints. I don't have the in-depth knowledge, or the travel experiences (or for that matter that famous Christian name !!). Not too sure, either, whether I can match the easy going literary style. However, I can add a little to a couple of points raised in recent articles.



Firstly, regarding the 1800 car's wind-down spare wheel carrier, as mentioned in Newsletter No 125, there was at least one other manufacturer who used this idea, and it was some years earlier too. I have such a car – a Jowett Javelin manufactured in Yorkshire from 1948 to 1953. The arrangement is identical, using the wheelbrace on a hexagon at the rear of the boot to raise and lower the carrier. Also, the Javelin uses a pillar jack which fits into a central socket on the side of the car to be raised and lifts both wheels on that side off the ground, again using the wheelbrace to operate the jack.

An interesting point arises from this – or could it be the reason that these features appeared on the 1800s? – that it was Jowett's designer of the Javelin body, Mr Reg Korner, who assisted in the 1800 body design. The Javelin, too, is of unitary construction, one of the first British cars to use the combined body/chassis principle – and this included the tubular cross member between the upper suspension mounts, as found on 1800's. As Chris Kingham, project manager for the 1800 development, put it "...it was undoubtedly Reg's expertise and knowledge that resulted in the amazing strength of the 1800's structure." (from the book *Men and Motors of 'THE AUSTIN'* by Barry Sharratt). Very interesting, don't you think?

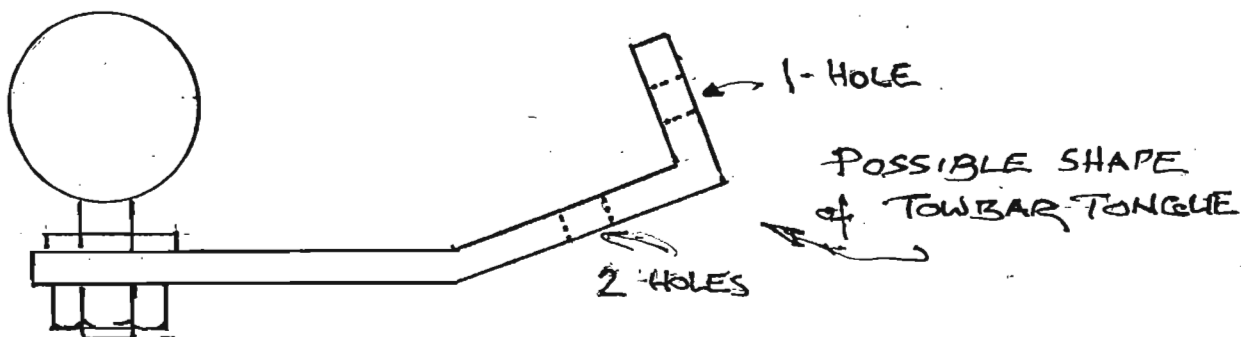
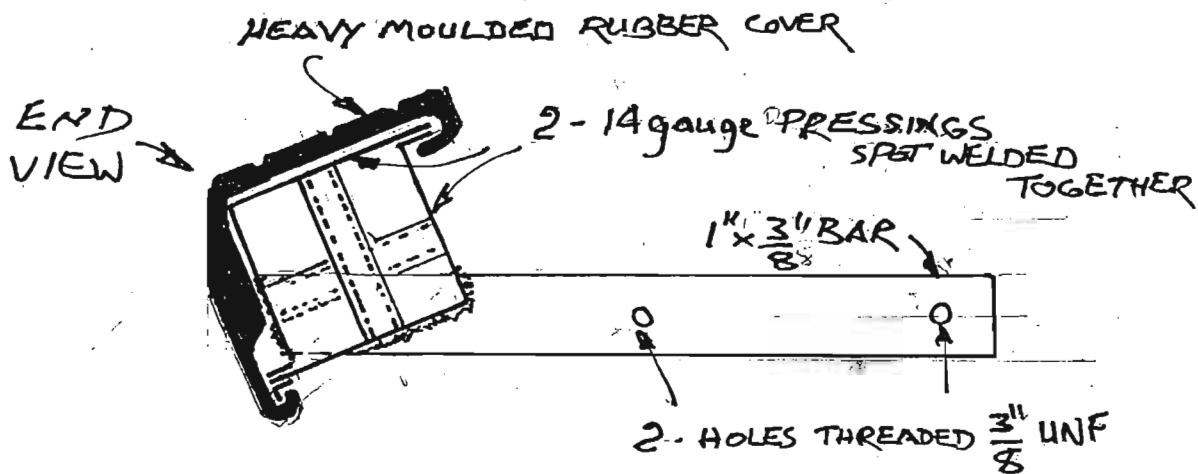
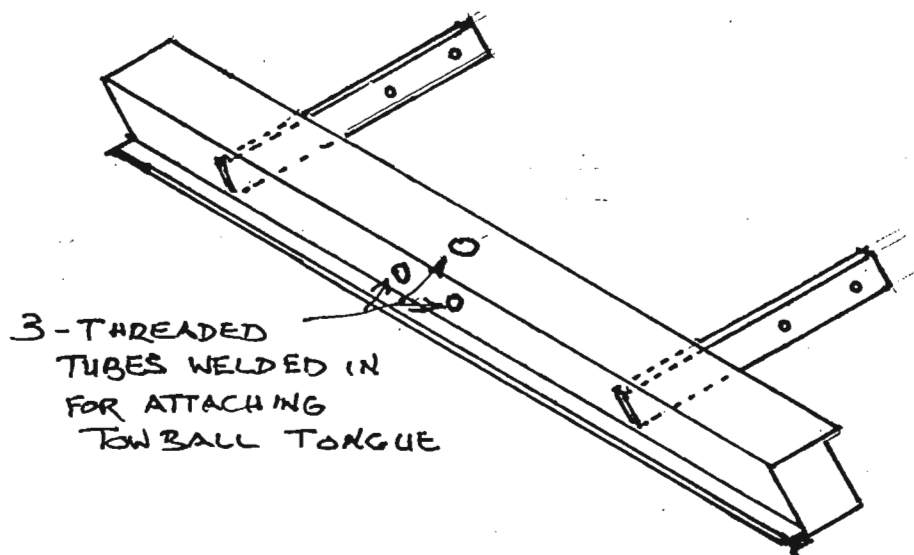
That was an unusual "half" towbar, pictured in Newsletter 124. I think I would prefer a "whole" one if intending to use an 1800 to its maximum towing capacity of 2240 lbs as stated in the owner's manual!. The utes also have this towing rating and they had a towbar fitted as standard, ex factory. It doubles as a rear bumper, fitting between the two chromed corner bumperettes, and is covered with a heavy rubber moulding which protects the rear of the body when loading/unloading. Very clever – as is all the engineering of the utility conversion. There are three threaded sleeves welded into the centre of the bar for attaching a towball tongue. I have never seen one of these tongues, nor a sales brochure for the utility. Probably they were an optional extra, maybe something like the attached sketch.

This is one tough little ute. Just think, with a vehicle weight of 2598lbs, loaded to its allowable load of 10 ¾ cwt and towing one ton, the all up rolling weight is 6040lbs, or 2.7 tons.

AUSTIN 1800 UTILITY TOWBAR

MAX TOWING WEIGHT - 2240 LBS

sketched by
Tony George



As aforementioned, I am relatively new to the 1800 scene. I needed a vehicle to temporarily take the place of my old HK Holden van while I gave it a well-earned mechanical and cosmetic restoration. This 1800 ute was advertised in a local car club newsletter, licensed, air conditioned, a spare brand new bonnet and l.h. front mudguard, spare rear guards, auto transmission and a "parts" car, also with auto transmission. I gave him the asking price of \$1800 for the lot.

That was around two years ago and it has done all I need so well, with the same load carrying capacity as the HK, that the Holden was forgotten and a month ago I sold it (the Holden), as was, for \$1500. One could say, I suppose, that this grand little in size but big in heart Austin workhorse cost me the princely sum of \$300.

It is a 1968 Mark II, serial no 612, and came with its original driver's handbook which shows it was sold by the Fremantle Austin agents, The Porter Motor Company, on the 16th of June 1970. So there was quite a delay from manufacture to sale. However, it went into immediate duty from then; less than one month later, on the 10th of July, at 1156 miles, it was back for its first service.

The paint colour, a bit faded now, is a sort of mustard tan/yellow. But the I.D. plate lists it as Sapphire Blue (actually spelt with one "p" on the plate!). And here and there, where the paint has chipped, this blue colour can be seen underneath. But if it has been repainted after it left Zetland then every single item was removed first. For instance, behind all wiring, cables and clips in the engine bay – the lot – is the mustard colour. It almost looks as though something happened to the original blue on the production line and it went back for a repaint, at which time there was mustard in the gun!. Maybe it was put aside and forgotten for a while. Could this be the reason for the couple of years before it rolled out of the showroom?

Over the years it has had some less than sympathetic service and treatment. Here's an example – and you will have to read it to believe it. But it's true. The torsion bar helper/stabilizer springs on the rear suspension had been cut through ! With an oxy torch !!! How this torch wrecker - and the ute – survived with the petrol tank just a couple of inches away is somewhat of a miracle. But it also begs the question "Why?" Why cut them? Some sort of ride experiment? If so, why not just unbolt them? The mind boggles.

Happily, a couple of replacements were found locally. There's some not-too-serious rust to be removed, botched up wiring to replace, a couple of nondescript bucket seats have replaced the much more practical (for a Ute) bench seat and typically the tailgate badges have been souvenired . But it will steadily be restored to its former glory

I've bought the paint! My grandson found me a Dulux number – 10110 – on the 'net'. The local Spartan Wattyl shop punched this into their computer and 10 minutes later I walked out with 4 litres of genuine formula British Leyland Sapphire Blue.

Happy 1800ing,

Tony George, Rockingham, Western Australia

BMC B-SERIES

From best-selling sports cars to lumbering diesel saloons, the B-series has done it all

WHEN AUSTIN and Morris merged in 1951, the newly formed BMC found itself producing 14 cars with 11 different types of engine. It was obvious that if the firm was to be competitive, it needed a new engine that could be used to power a wide range of medium-sized saloon and sports cars.

It's unlikely that when engineer Eric Barham set about designing the new engine in the early Fifties he could have dreamt it would still be in production in the year 2000. But unless something drastic happens, the Hindustan company in India will be building their Ambassadors (pre-Parina Austin Cambridge-based saloons) with B-series engines into the next millennium.

The engine first appeared in 1489cc form in an MG Magnette in 1953 — in fact, all-new versions of the engine appeared in the MG before they found homes in more mundane Austin and Morris vehicles. A 1200cc version was then launched in the Austin A40.

By the late Fifties the engine had grown to 1588cc, then 1622cc — as used in the MGA and Parina saloons — but it's the 1798cc version that was produced in the biggest numbers. It powered the MGB in this form for 18 years and found homes in Landcrabs, Marinas and Princesses along the way.

Early 1798cc engines continued to use

crankshafts carried in three main bearings, but problems were experienced with the shaft flexing at high revs and MG engineers demanded a solution.

In 1961 the answer came in the form of a redesigned bottom end, which now had five main bearings to keep the crank in check. In this form the engine continued basically unchanged until the last MGB was made in 1980.

It's the bottom end that makes the later B-series so durable. Even in MGB tune, where it produces 93bhp, it's easily capable of covering 100,000 miles before a rebuild is necessary.

Cylinder heads are non-crossflow, so the exhaust and inlet ports are all on one side of the engine. There are only three exhaust ports, so waste gases from the middle two cylinders have to share one. The four inlet valves also share two ports, but despite the restrictions this places on the engine's breathing characteristics, the design was never changed.

BMC did make a completely different cylinder head though. The MGA twin cam was an interesting attempt at a true high-performance derivative of the B-series, using a double

overhead camshaft alloy crossflow head on a 1588cc block. Unfortunately the engine's development

wasn't quite finished before it was put into production. High oil consump-

tion and melted pistons for the sake of 108bhp were the result. Only 2000 were built before BMC gave up.

BLOCK, CRANK AND CAMSHAFT

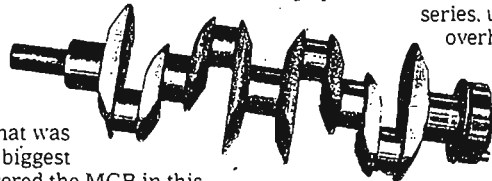
B-SERIES blocks are very strong and during normal road use are unlikely to give any problems. The fact that the 1798cc version is a stretched version of the 1200 proves that the original design was a tough one. Blocks used in transverse applications are different to their rear-wheel-drive counterparts and are not interchangeable.

Boring a standard 1798cc block out to accept 0.060in oversize pistons gives a useful boost in capacity to 1860cc, and the engine will stay reliable. The largest overbore possible is to 1950cc, using Lotus twin cam pistons. The block face will need machining though, because the Lotus pistons are shorter than standard.

Number one cylinder bore (timing chain end) wears quicker than the others because it's right next to the water pump. When the thermostat opens it gets a rush of cold water which makes it contract, accelerating wear.

Standard cranks are cast iron and tough enough for anything other than racing use. Even early three-main-bearing 1798cc cranks can cover 100,000 miles without problems as long as they are not subjected to high revs for long periods.

The five main-bearing cranks will survive all manner of punishment as long as the engine gets an oil change every 4000-6000 miles. Camshafts and tappets tend to start getting noisy at



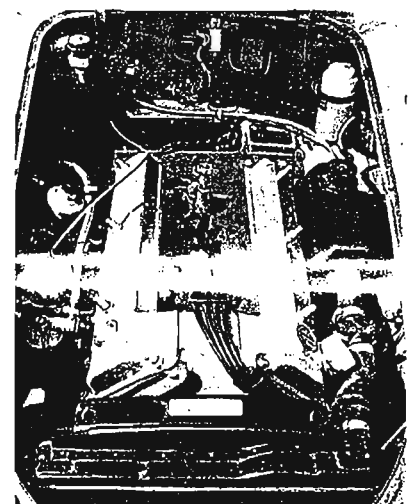
ABOVE: crankshaft was uprated from three to five main bearings from 1964 to prevent flexing.



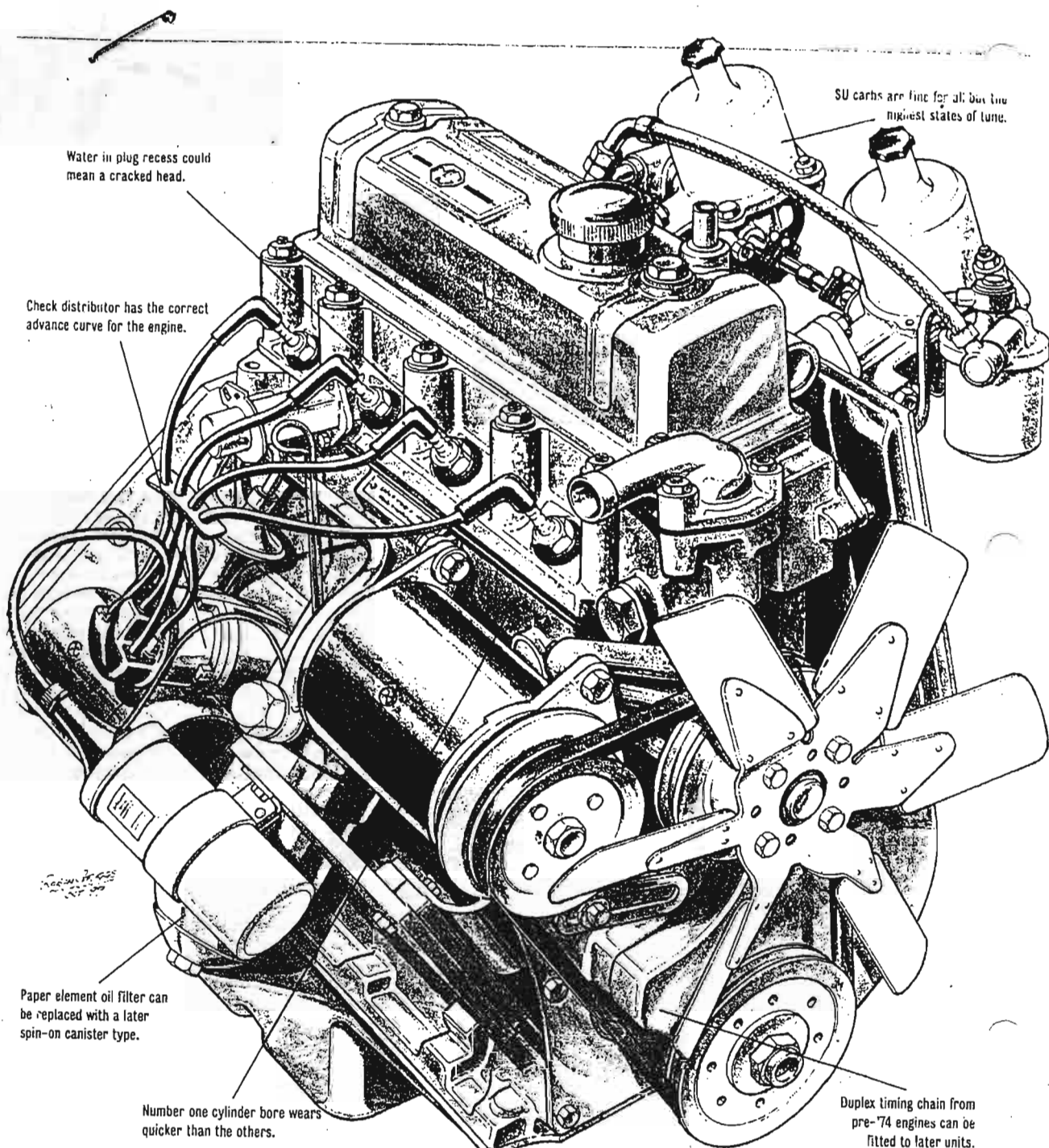
B-series engine is ideal for the amateur mechanic to.



All B-series heads need replacement valve inserts to



Twin-cam B-series was available in the MGA but had



around the 70,000-mile mark as they wear. This is not easy to detect because the B-series produced a fair amount of valve train noise even when new.

Timing chains wear quite quickly and by 50,000 miles can be sloppy enough to throw the valve timing out. Because the engine has a very good automatic hydraulic chain tensioner, the chain is unlikely to rattle too badly. New chains cost less than £10 and are easy to fit.

From 1974, BL's accountants changed the chain from duplex to simplex type, which isn't as strong. These engines can be fitted with a duplex set-up by simply wrapping the sprockets and chain.

PISTONS

PISTONS IN early engines had split skirts but all MG variants used solid skirt-types which are stronger and will withstand higher revs. These can be fitted to lower-spec engines but only in conjunction with MG-type conrods.

CYLINDER HEADS

ALL HEADS need to be fitted with hardened valve seats to allow the use of unleaded petrol. 1798cc heads fitted to high-compression engines can crack after high mileage because of metal fatigue.

Look for water seeping from the centre head stud into the spark plug recess. There's no point trying to repair damage like this. There are plenty of replacement heads around and the increased heat and strain produced by running on unleaded means the repair isn't likely to last long.

It's common for 1798cc engines' headgaskets to weep coolant along the spark plug side. An engine will run for many years like this but corrosion can cause the head to get stuck on its mounting studs, making removal difficult. The solution is to remove the head as soon as the problem appears, get it checked for flatness and skimmed if necessary.

ENGINE EXPERT

Be careful when buying secondhand or reconditioned rocker gear. The oil feed to the rockers comes from a hole in the cylinder head, which corresponds to a hole in the rear rocker pedestal. The holes were moved slightly on some engines. If you fit rocker gear with the modified hole to an original-spec head (or vice versa), the top end of the engine will be completely starved of oil.

CARBURETTORS

EARLY AUSTIN models used Zenith fixed-jet carburettors but all other engines have either one or two SUs. Parts for all are available and SUs in particular are very reliable and simple to work on for the DIY mechanic. After 100,000 miles, the throttle spindles can wear which makes adjusting the idle speed impossible. If a new throttle spindle doesn't take up all the wear, then the carb body can be machined and fitted with bushes to cure the problem.

From the late Seventies, the SU HS carbs were replaced with HIF types. These have small sprung valves in the throttle butterflies which are designed to reduce emissions on the over-run. The springs wear and in extreme cases, the valves can fall out and get sucked into the engine. Replace the throttle butterflies with HS-type items to cure the problem for good.

LUBRICATION

USE A QUALITY 20/50 multigrade and change it every 4000-6000 miles for maximum engine life. Oil filters on engines built before 1969 have a replaceable

paper element type of oil filter. You can change to the later spin-on canister type using the mounting from a later engine.

Oil filters mount upside down so need to be original-spec items with an anti-drain valve. Cheap types without one can completely empty when left standing and the engine will be starved of oil for a few seconds when it's restarted.

MGBs have an oil cooler as standard which not only prevents the oil from overheating but provides a useful increase in oil capacity. The set-up can be fitted to other cars by using the cooler, pipes and oil filter head from an MGB.

LUBRICATION

ALL MODELS have Lucas distributors which look similar and in many cases will fit different applications. However, they have advance curves designed to match specific engines. Check with a workshop manual to make sure the correct one is fitted.

Adding contactless electronic ignition means never having to adjust points or ignition timing again. It also compensates for wear in distributor bearings.

THANKS TO

Steve Hall of Hall's Garage.
MGB specialists (01778 570286).



SPECIFICATIONS

Capacity	1200cc	1489cc	1588cc	1622cc	1798cc
Layout	ohv	ohv	ohv	ohv	ohv
Power (bhp@rpm)	42/4500	50/4400	80/5600	90/5500	93/5400
Torque (lb ft@rpm)	58/2400	70/2100	87/3800	97/4000	110/3000

TUNING AND IMPROVING

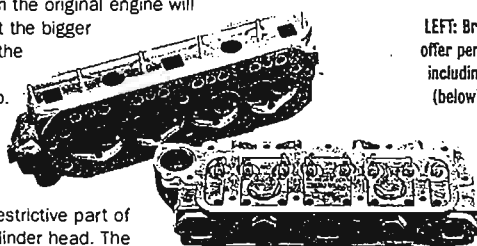
THE B-SERIES is a good candidate for tuning because it's so strong. Unless originality is important to you there's little point starting with anything other than the 1798cc unit. This is a straight swap for the 1489, 1588 and 1622cc versions, although gearbox input shafts will need modifying to fit some cars and the front plate (which carries the engine mounts) from the original engine will need modifying to fit the bigger engine. Check with the relevant club before attempting the swap. Engines with single SUs can be fitted with the twin-carb set-up from an MG.

By far the most restrictive part of the engine is the cylinder head. The best standard head was not an MGB item, but the one fitted to the Austin 1800S (Landcrab), which had bigger valves. These cars have engine numbers with 18H prefixes but it's rare to find one in a scrapyards now.

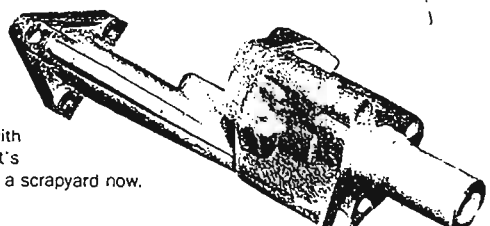
Specialists will sell you a big-valve, gas-flowed head for about £350. This, in conjunction with an extractor exhaust manifold, free-flow air filters and a fast road camshaft, will give an extra 15bhp. More importantly, it will greatly improve 40-70mph acceleration in top gear, making the car more driveable in modern traffic conditions.

For more power, the next step is to bore

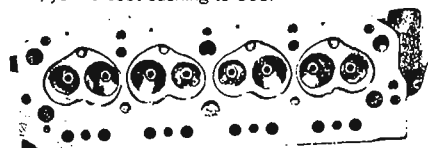
the block to 1950cc. At this size, porosity of the bores can be a problem, so get the block inspected by a specialist before you have it machined. A 1950cc engine with the mods listed above can produce about 125bhp. At this stage it becomes worthwhile to fit a twin-choke Weber sidedraught carb, but for anything below this state of tune, you're best sticking to SUs.



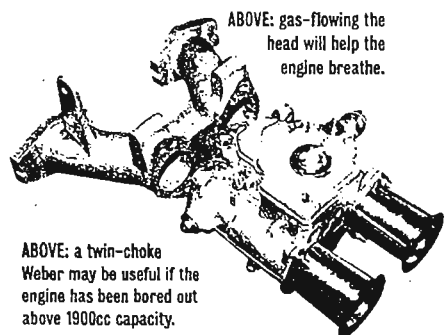
LEFT: Brown & Gammons offer performance heads, including MGB crossflow (below) and gas-flowed MGA/MGB.



LEFT: an uprated oil pump can be fitted for competition use.



ABOVE: gas-flowing the head will help the engine breathe.



ABOVE: a twin-choke Weber may be useful if the engine has been bored out above 1900cc capacity.

JUST A FEW APPLICATIONS

Austin Z-ton van, Austin 1800 Landcrab, Austin A40 Sports, Austin Cambridge and badge-engineered variants, Austin J-type van, Austin Lancer (Australian), Austin Metropolitan, Austin Onnivan, Austin Princess, Elva Courier, Gibern GT, Ginetta G11, Hanomag Tempo van (German), Hindustan Ambassador (Indian), International Harvester panel van (American), Leyland Sherpa van, MG Magnette, MGA, MGB, Morris Cowley, Morris Major (Australian), Morris Marina, Morris Oxford (including diesel), Nash Metropolitan, Riley 1.5, Rochdale Olympic, Turner Sports and GT, TVR Grantura, Wolseley 1500

PARTS PRICES (1798cc)

Full gasket set: £20
Oil pump: £26.50
Distributor: £47.50
Pistons: £100
Camshaft and followers: £41
Reconditioned unleaded cyl head: £195

BEST BOOK

BMC and Leyland B-series Engine Data, by Lindsay Porter. Motorbooks International, ISBN 0-85045-597-9

ISSIGONIS

Jonathan Wood continues his tribute to Alec Issigonis, BMC's gifted engineer who died recently

ALTHOUGH Issigonis had originally conceived it with a flat-four side-valve engine, the Morris Minor was powered by the dull, but proven, four-cylinder side-valve unit carried over from the prewar Series E Morris Eight. From 1952 it was fitted with the Austin 803cc overhead-valve A-Series engine, following the effective take over of Morris by Austin and the creation, that year, of the British Motor Corporation. But Issigonis had left Cowley — "I always hated mergers" — and, in 1952, joined Alvis and began work on a completely new car for the firm, a V8-powered rear-wheel drive model with all-independent interconnected suspension. But Issigonis was "never happy with that car... [it was] very small and compact, like a Lancia Aurelia in appearance but very, very spacious inside with hardly any propshaft tunnel. We did the styling ourselves... We used a barrel crankcase for the engine, like the Miller racing engines, but it was a ghastly mistake because we could never keep the engine quiet."

The engine was subsequently redesigned with a conventional crankcase but when projected tooling costs began to soar, the Alvis directors began to have doubts that the firm had the resources to put the car into production. Meanwhile, back at BMC, headed by the redoubtable Sir Leonard Lord, the corporation's top selling model was the Morris Minor. It became the first British car to sell a million, in 1960, and by the time that production ceased in 1971, 1.2 million had been built. Yet despite these impressive figures, the Minor's potential was never truly realised and the model was never developed in the manner of its world beating Volkswagen contemporary. But, back in 1955, Lord had recognised that Issigonis, the Minor's creator, was working for another car company. Therefore he wooed Issigonis back to the BMC fold and Alec brought Chris Kingham and John Shepherd with him from Alvis. 'Issy' as he was known by his close colleagues, was soon reunited with Jack Daniels from Cowley days and this nucleus formed the basis of the Longbridge team that would create the world famous Mini in a mere two years. Announced in 1959, this front-wheel drive baby car with its ingenious transverse engine and integral sump-located gearbox was Issigonis' masterpiece, for the unconventional mechanicals meant that an unprecedented 80% of the 10ft long box ("styling is designing for obsolescence") could be used for passenger accommodation. If people complained about the uncomfortable seats, Issigonis countered: "Drivers should be

uncomfortable so that they stay alert." But the Mini is still in production today, nearly 30 years after it appeared.

Tragically for BMC, the car was drastically underpriced at £496 in its cheapest form, a shortcoming that was perpetuated when its 1100 derivative went into production in 1962 though, ironically, until 1970 it was Britain's top selling car.

Sir Leonard Lord stepped down as BMC's Chairman in 1961, and was succeeded by George Harriman, who immediately promoted Issigonis to the post of Technical Director. This duo steered BMC's fortunes throughout the increasingly competitive Sixties. Issigonis initiated a strategy of Engineering Excellence, best exemplified by the 1100, which was destined for a 10-year production life. Inspired by Citroën practice, he argued that by producing

technically advanced cars, regular and expensive model changes could be avoided.

The problem was that both Harriman and Issigonis had little marketing knowledge, preferring to espouse Sir



Leon
blood
Issig
conte



Above
Left, t
design

THOROUGH



Of all his designs the 1800 was Issigonis' favourite, but the model sold poorly

Leonard Lord's dictum that "if you build bloody good cars, they'll sell themselves." Issigonis, in particular, was contemptuous of market research and the

product planning procedure as pioneered by Ford. And George Harriman, who had grown up in Leonard Lord's shadow, was no match for the formidable Issigonis. "He was very quick on the uptake, no other director could argue with him," remembered a colleague.

This singleminded, dogmatic approach was reflected in Issigonis' next front-wheel drive car, the 1800 introduced in

1964. Although destined to be a slow seller, Issigonis was subsequently to maintain: "I still think [it] was the best car. I loved that car." Not only was the car dull externally but the interior, although roomy, was starkly finished, an ergonomic disaster, and suffered from heavy steering, problems that also marred the Maxi, his last design which appeared in 1969. Despite his earlier words, Issigonis wrote, with considerable candour during the 1800's gestation, "I was really weaned on Austin Sevens so it is, perhaps, natural that in my professional work I disliked designing big cars."

BMC's stand at the 1967 Motor Show, alas, bore testament to the limitations of Issigonis' talent. There was the 1100, little changed since 1962, with its belated 1300 engine, and a ghastly new 3-litre saloon, which used the centre section of the 1800, but with a revised, and unsatisfactory C-Series six-cylinder power unit, and rear-wheel drive. Its power unit was shared with the simultaneously announced MGC, which tarnished MG's hitherto impeccable reputation. In 1967 BMC made its first ever loss, of £3.2 million.

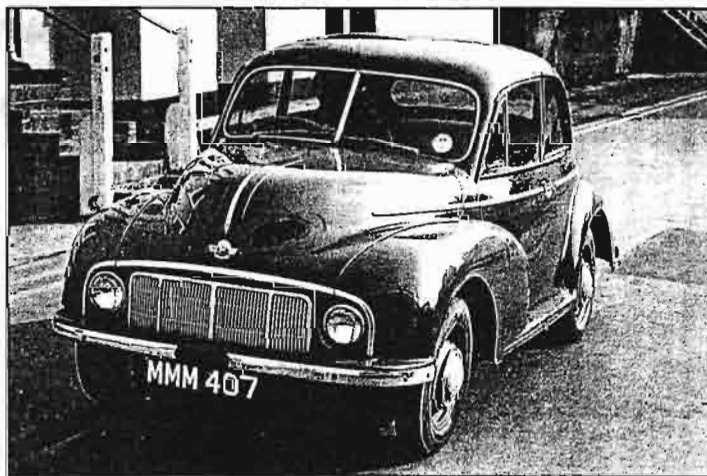
The following year, with governmental encouragement, BMC was taken over by the Leyland Motor Corporation to form the British Leyland Motor Corporation and, with the appointment of Harry Webster as the new Austin Morris division's Technical Director, Issigonis was effectively sidelined and became Director of Research.

In 1971 Issigonis retired from British Leyland though, in the role of Advanced Design Consultant, he continued to pursue the concept of a gearless Mini but his great contribution to the motor industry had already been recognised. In 1964 he was made a CBE and a Royal Designer for Industry and, in 1967, he received the ultimate accolade by being made a Fellow of the Royal Society, so becoming one of the few members of the British motor industry to be so honoured, Sir Harry Ricardo and Dr Frederick Lanchester being two other notable recipients. In 1969 he received a knighthood.

But the Mini remains the finest memorial to his work, it having changed the course of car design in much the same way that *Système Panhard*, with its revolutionary front engine/rear drive configuration, did back in 1891. But never again will one man dominate car design in the way in which Issigonis did at BMC in the Sixties, something of which he was all too aware. His artistic sensibilities ensured that he was, in his own words, "the last of the Bugattis."



Left, outstanding handling made the Mini a competition success — here Paddy Hopkirk negotiates the Turini during the '67 Monte Carlo rally

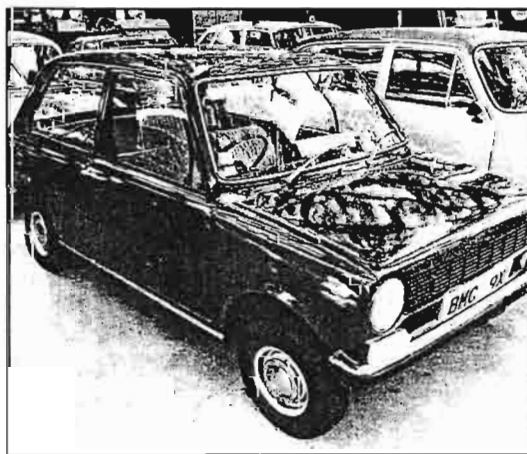


Above, the massively successful Morris Minor; below right, the 9X was an advanced design intended by Issigonis to supersede the Mini in 1968, but BMC abandoned the project and the Mini lived on



Above, Issigonis in 1978

Left, the popular, well-designed but underpriced 1100



For Sale

Restored mk 1 ute Manual Michael Lyons Bunderberg, QLD 0429 703 862 \$4,500

1800 mk 11 auto reg til November 1 Owner good condition, always garaged
\$3,500 Beecroft NSW 9484 5398

1800 mk 1 auto no reg \$3,500 Miranda NSW 0414 608 245

1968 mk 1 87,000 original miles reg till july 06 auto \$1,300 02 4971 2983
Swansea NSW

Kimberely mk 11 1 owner 100,000 miles Offers Ipswich QLD 3281 8207

Mk 1 1800 1966 white/ green Offers Perth 97521522

1968 1800 73,000 miles \$4,000 0414 477 437

Answer If you cannot find out the manufacturer's recommended compression test figure for your engine, or if you have altered its compression ratio, you can estimate the test pressures to look for using the chart below. The figures assume a thoroughly warm engine, with the throttle held wide

Compression ratio	6:1	7:1	8:1	9:1	10:1	11:1
Pressure (psi)	108	123	131	152	167	181

Approximate cylinder pressures for CRs between 6:1 and 11:1

open, and a fully charged battery, to ensure a good cranking speed.

Cylinder pressures should not vary more than 10% from each other. Where readings are low, try again after introducing a few squirts of engine oil into the cylinder. If the readings improve, piston ring and/or bore wear is present. If they remain low, suspect valve or head-gasket trouble.

My mechanic could not fix my brakes, so he fitted a louder horn,

Merry Christmas to all !!