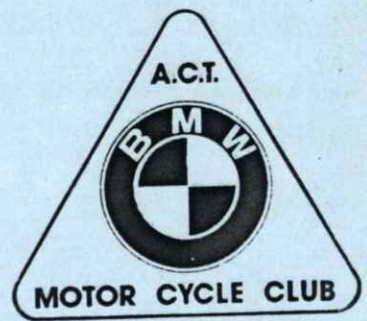


MONTHLY
JOURNAL
OF THE



P.O. BOX 1042,
WODEN
A.C.T. 2606

COMMITTEE

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 VICE PRESIDENT :- MIKE HOUSTON PH. 889609 (H)
 SECRETARY :- MARK COGLAN PH. 318059 (H) 684429 (W)
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 EDITOR :- JENNI COLE PH. 816559 (H) 887508 (W)

LIBRARIAN :- FRANK MILLWOOD
TOOLS OFFICER

CLUB ACTIVITIES

GENERAL MEETINGS SECOND MONDAY OF THE MONTH FROM 7.45PM,
ROYALS RUGBY FOOTBALL CLUB, LIARDET ST, WESTON

CLUB RUNS FIRST WEEKEND OF THE MONTH (SAT. OR SUN.)
MEET AT WESTON MOTORCYCLES. SEE "WHAT'S ON" PAGE.

SOCIAL EVENTS AS ARRANGED. WATCH "MINUTES" & "WHAT'S ON" PAGES.

KOSCIUSKO RALLY FIRST WEEKEND IN OCTOBER.
KOSCIUSKO NATIONAL PARK, GEEHI HUT CAMPSITE.

MEMBERSHIP FEES SINGLE - \$10 JOINT - \$12 ASSOCIATE - \$10 / \$12

DISCOUNTS

WESTON MOTORCYCLES
49 BRIERLY STREET,
WESTON. PH. 888747

GENGE MOTORCYCLES
7 LONSDALE STREET,
BRADDON, PH. 497923

JOE'S MOTORCYCLE WRECKERS
UNIT 10, 3 WILUNA STREET,
FYSHWICK. PH. 806703

PADDY PALLIN
46 NORTHBOURNE AVE,
CIVIC. PH. 478949
(AVAILABLE ON PURCHASES
TOTALLING OVER \$300)

PLEASE SHOW YOUR MEMBERSHIP CARD

WHATSON

- SEP 21 - 22 Jack Frost Rally, near Taralga, via Goulburn, NSW.
- OCT 5 - 7 KOSCIUSKO RALLY, Kosciusko National Park,
Geehi Hut Campsite.
- OCT 5 - 7 Outfit Rally, VIC.
- OCT 5 - 7 World's End Rally, Quorn, SA.
- OCT 12 - 14 Rally 'Round the Bend, Overland Corner, near Barmera,
SA.
- OCT 12 - 13 Thunder Rally, Lake Cargelligo, NSW.
- OCT 14 GENERAL MEETING, Royals Rugby Football Club, Weston.
7.45pm.
- OCT 26 - 27 King River Rally, VIC
- OCT 26 - 27 Observation Rally, from Portland near Sydney to
Gloucester near Newcastle.
- NOV 2 - 3 CLUB RUN, Trip to South Coast, staying at a Hotel,
details to be advised.
- NOV 2 - 4 100th Anniversary Rally, Phillip Island, VIC.
- NOV 9 - 10 Falls Rally, near Moe, VIC.
- NOV 16 - 17 Evans Crown Rally, near Cobram on the Murray River.



KOSCIUSKO RALLY SITE - see Pre-Rally Report
page 5

MINUTES OF GENERAL MEETING

9 SEPTEMBER 1985

Meeting opened at 8.10pm at Royals Rugby Football Club, Weston with 19 members and 8 visitors (Graham & Ken Auld, Philip Chown, Andrew Grant, Peter Jess, Paul Schwager plus Tim Sheldrick and Jenny Martin) present.
Six apologies were received.

MINUTES of August General Meeting accepted as published. Moved by Moff, seconded by Fran Gilchrist.

CORRESPONDENCE

OUT : BMW Australia - request for donations for K.Rally.

IN : Magazines QLD and VIC Clubs.

BUSINESS

- . Monthly financial report by Liz Coghlan (temp. relief Treasurer)
- . Kosciusko Rally sub-committee progress from Bob Rumsey
- . K. Rally entry fee for members \$2.50 each member
- . Revised draft Constitution not ready so vote not taken
- . BMW helmets successful court case brief report
- . Club T-shirts available - limited quantity & sizes for \$7 each.

GENERAL BUSINESS

- . Country Pub weekend trip 2 & 3 November report by Moff
- details next Journal accomodation for 20 to be finalised
- . Note of thanks to Leigh McNally at Weston Motorcycles for years of special sales assistance to Club members.

NEXT MEETING 14 October

NEXT RUN Kosciusko Rally 5 - 7 October

Meeting Closed at 8.35pm.

Current membership is 67.

Mark C.

10 September 1985

RECENT NEW MEMBERSHIPS

Walter BAGNAROL	W. 804944	Philip CHOWN	Yass
Peter HEMPEL	W. 702981 H. 415957	Stanley JONES	W. 662884 H. 417383
Peter KOCH	W. 474777 H. 417111	Tim SHELDRIK & Jenny MARTIN	W. 851811 H. 547155 (Assoc.'s)

RECENT RENEWED MEMBERSHIPS

George & Rada MILLWOOD	H. 7988515(02)	Peter OLIVER	W. 527071 H. 472724
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A NOTE FROM THE PREZ

Hi,

The time has come again when we feel like riding our motor cycles in T-shirts and denim jeans instead of wearing the bulkier leathers, boots and gloves. Although this is very understandable, it is also potentially a dangerous practice.

I recently read a report in a European motor cycle journal concerning safety clothing when riding a motor cycle. The report by the Institute for Law and Medicine at the University of Munich had some predictable words of wisdom.

Research showed that good quality all over protective clothing gave 80% of wearers protection from any permanent injury following an accident. Of the hospitalised cases, those without protective gear stayed in hospital on average for an additional 14 days and all suffered some kind of permanent injury. Most included skin injuries for the T-shirt wearers. An unpleasant thought.

So in the interest of maintaining our Club's good safety record, please continue to be conscious about personal protection and do the right thing.

Apologies for Ursula and myself are given for the period of our holidays (a month or two) which were to have been in July but business problems prevented that.

Cheers,

WERNER

RIDING INSTRUCTION
COURSE

- CATERS TO YOUR ABILITY -

EX-POLICE RIDING AND DRIVING INSTRUCTOR, BRIAN GRIFFIN

\$ 120 (\$ 15 DISCOUNT FOR GROUPS)

4 HRS THEORY (C.C.A.E.) & 8 HRS PRACTICAL

1ST GROUP IS ATTENDING 19TH & 22ND SEPTEMBER

CONTACT

JEANETTE HAHN
319314 (H)

ANSWERS TO LAST MONTH'S BMW HISTORY & PERSONALITY QUESTIONS -

1. c) Georg Meir also known as Sehorsh Meir.
2. d) in 1952 the first 100 mph production BMW
3. e) the R12 which was a 750 cc motorcycle
4. a) in 1935 the year the R12 was released
5. a) 19 from 1954 til 1974 missing out in 1968 and 1971.

CLASSIFIEDS

FOR SALE

NEW KRAUSER CRASH BARS
FOR R SERIES.
\$ 85
IAN 319314 (H)

1959 R60, RESTORED.
\$ 4,200
JOE KNIGHT (069) 214205 (W)
226055 (H)

CLUB T-SHIRTS
\$ 7 ORDERS TAKEN
BOB RUMSEY 919329 (H)

1984 K100RS, SILVER, 18,000 KMS,
INCLUDES BMW PANNIERS & RACK.
\$ 6,500
MARK GROSSBECHLER 917589 (H)
AFTER 4.30 MON-SAT, ALL SUN

POLICE TYPE CRASH GUARDS
SUIT /7 OR LATER \$ 20
PAINT - TOUCH UP KIT - BLUE
FOR /7 SERIES.
BILL BROWN 454493 (W) 547220 (H)

HOLDEN CAMIRA '83, 5 SPEED,
AIR-CONDITIONING, 30,000 KMS,
RUST PROOFING, 10 MONTHS REGO,
TOW BAR, VERY ECONOMICAL,
GARRY COLCOTT 655187 (W)

CLUB JUMPERS (NAVY STYLE) \$30
ORDERS TAKEN URSULA 864057

PANNIERS & RACK COMPLETE
V.G.C. \$ 250

TABLE TENNIS TABLE
BEST OFFER

LEATHER JACKET MEDIUM SIZE
BEST OFFER
MOFF 886895 (H)

KRAUSER 4 VALVE HEADS &
MATCHED PISTON SET
(1ST OVERSIZE) 18% TO 20%
POWER INCREASE, (TO 83 HP AT
7300 RPM), FLATTER TORQUE
CURVE, (TO 84 NM AT 4000 RPM)
REDUCED VIBRATION, IMPROVED
FUEL CONSUMPTION, HIGH
QUALITY CONSTRUCTION,
NORMALLY \$ 1700 PLUS,
ONLY \$ 1400 o.n.o.
MICHEAL BACHMANN
(069) 233233 EXT 3756 (A.H.)

WANTED

/5 MODEL HEADLIGHT, WITH INSTRUMENTS IF POSSIBLE, IN REASONABLE
CONDITION. PAUL SCHWAGER 816559 (H)

' INSTINCT IS UNTAUGHT ABILITY '

DR. A. BAIN

PRE-RALLY REPORT

*About forty entries have been received so far, have you put yours in yet ?
(Members \$2.50)*

*Looks like it will be a great weekend, here's a bit of info from a couple
of the Rally sub-committee members.*

See you there !

Ed.

Two meetings have been held by the Rally sub-committee so far, everything going ahead okay. Most supplies have been bought, the badges have been ordered and should be here any day.

Four Club members went up to Geehi Hut campsite, (Warren and Fran accompanied them as far as Dead Horse Gap) on a 'reconnaissance mission' last weekend (14 & 15 September).

Site and camping area is in a very good condition. Wood is a bit scarce, you'll have to go looking !
Plenty of water.
The local Ranger and Police have been notified of our intended presence.

There's a 'big' fishing competition in Khancoban that weekend, so if you are so inclined, bring along a line. Entry forms will be available at the Rally site. We may expect to find 'fisherpersons' in the area over the weekend.

The roads are in a good condition other than the first 2-3 kms of dirt between Dead Horse Gap and Pilot Lookout should it be wet. (The dabo end).
Khancoban end great.



On Sunday, Olsen's Lookout is the proposed site for a lunch/ run, about 15 km from Geehi, good (dirt) road all the way.

Volunteers will be required over the weekend, to assist with distribution of badges, coffee, tea etc. as well as gathering fire wood.

We'll also need helpers on the Monday and/ or Tuesday for clearing up.

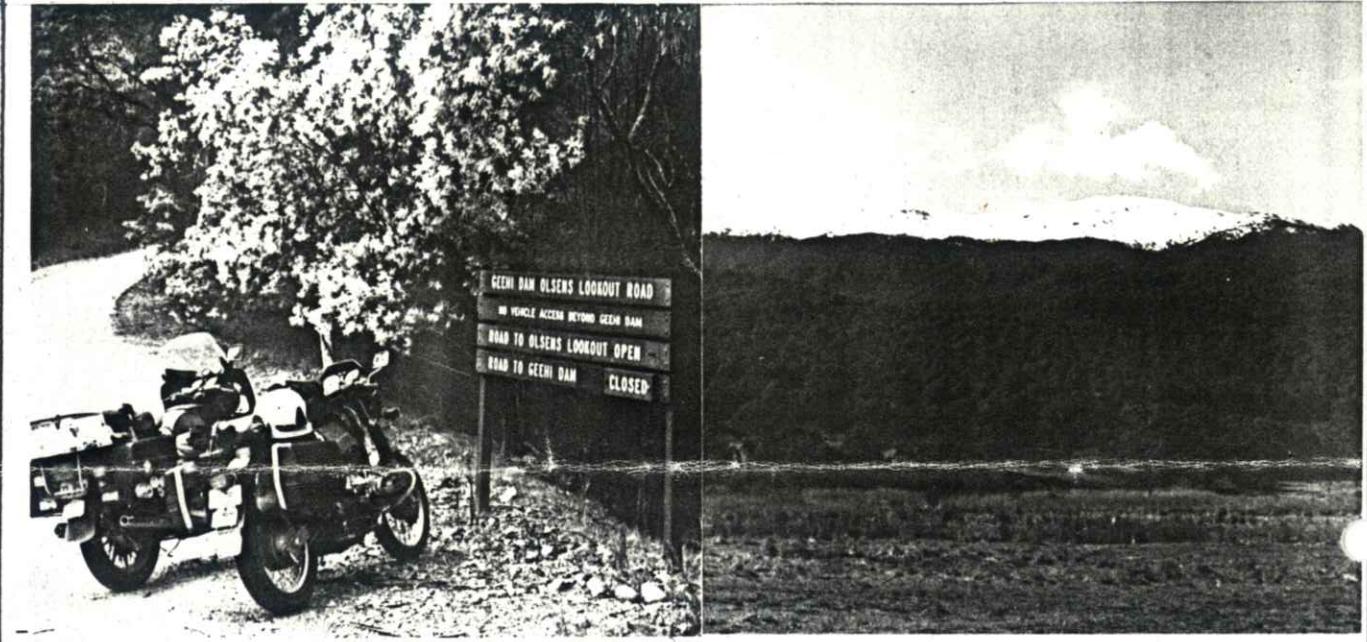
Anyone with a spare gas lamp, please advise the Rally sub-committee if available for loan over the weekend.

over →

Photos: Bob Rumsey

Pre-Rally Report continued....

Final e-Rally meeting will be Monday 30th September, 8.00pm at Chris's.
Please contact BOB RUMSEY or CHRIS FULKER for further information or offers of help.
919329 (H) 310114 (H)



- SEEN IN THE PAPERS -

Application on helmets rejected

The Federal Court in Sydney has rejected an application by the Trade Practices Commission for an injunction to restrain BMW Australia from selling their System motorcycle helmets in Australia.

The case, over an alleged breach of the mandatory Consumer Products Safety Standard, arose from allegations made last year to the House of Representatives Standing Committee on Road Safety.

A witness before the committee, also an importer of motorcycle helmets, gave evidence that the BMW helmet may not comply with the current Australian standard.

The helmets were already approved and certified by the Standards Association of Australia.

On Tuesday, Mr Justice Sheppard found that the BMW helmet complied with the standard and awarded costs in BMW's favour.

STOP PRESS

BMW System Helmets
now available at
Weston Motorcycles
all sizes in stock
\$199

More MPs in Canberra

THE AUSTRALIAN Federal Police have just taken delivery of an initial order of 200 Pirelli MP7 tyres for their BMW K100 motorcycles.

The Canberra-based Federal Police, the first force in the world to take delivery of the specially modified K100s, needed replacements for the originally-fitted Michelin tyres. After extensive testing of all tyres offered to them, Pirelli MP7s were chosen for their supreme safety and performance in wet and dry conditions and brilliant braking characteristics.

The Pirelli MP7s greatly improved the already noted stability of the BMW. It was also the long life and great control of the "radial-concept" Pirelli's which proved to be major factors in their decision.

Meanwhile, the NSW Highway Patrol are currently replacing their BMW R100 machines (shod with Pirelli Phantom Supertouring tyres), with similar K100 machines. They too, are replacing the original tyres with Pirelli MP7s.

THE R12

The R12 was made from 1935 til 1938 in which some 36,000 examples were built, it replaced the R11 as the touring and sidecar machine in the BMW range at the time.

The motor, a type M56S6 was a flat twin side valve four stroke, it had a capacity of 745 cm³ with a bore and stroke of 78 x 78 mm, with a compression ratio of 5.2 to 1. The single carburettor motor putting out 18 BHP at 3,400 rpm, with a twin carburettor motor putting out 20 BHP at 4,000 rpm. There was a double-disc dry clutch which fed power straight to a type 212/1 four speed gearbox with gear ratio of 3.18 to 1 for 1st, 2.06 to 1 for 2nd, 1.42 to 1 for 3rd and 1.09 to 1 for 4th with a final drive ratio of 4.07 to 1 for solo and 4.75 to 1 for sidecars.

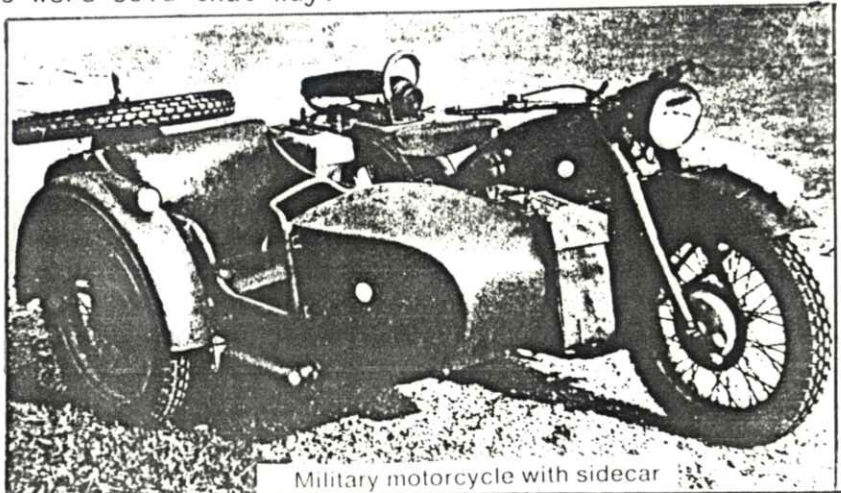
The frame type 212/1 was a rigid pressed steel twin loop, the front forks were maintenance free telescopic with hydraulic shock absorbers, the rear end was rigid. Wheels were interchangeable 19 inch with single leading shoe brakes front and back.

The R12 was 2100mm long with a height of 940mm, a width of 900mm and weighed in at 185kg unladen. Fuel tank capacity was 17 litres with a fuel consumption of 18km/l, it had a range of 300km. The R12 had a top speed of 110 km/h solo or 90km/h if fitted with a sidecar.

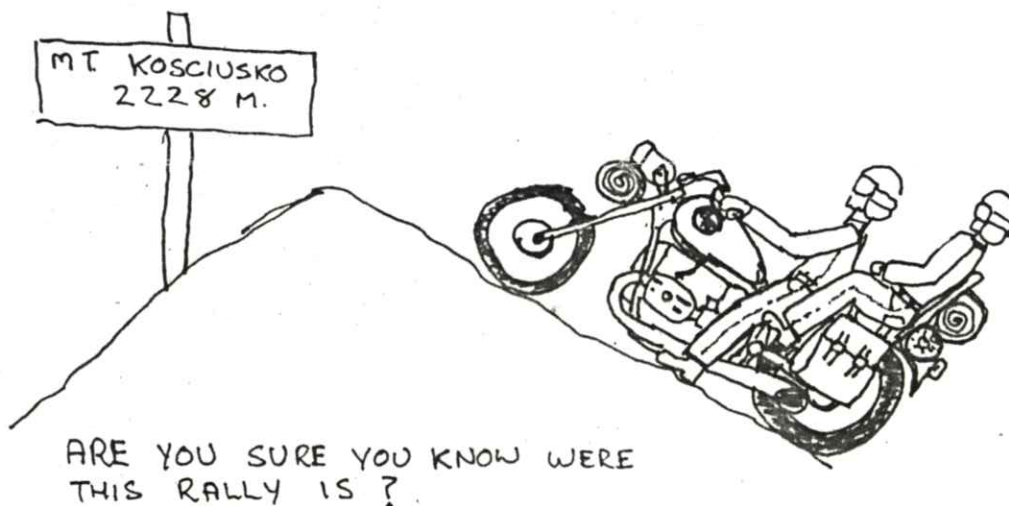
BMW led the world with the R12 being the first bike to be fitted with telescopic forks, it was also the first BMW to become readily available in Great Britain through A.F.N. Ltd who sold the cars in Great Britain as FRAZER NASH - BMW, but I do not know if the bikes were sold that way.

The R12 was the most popular pre-war BMW model selling an average of 9,000 bikes a year, these bikes were often with sidecars using either the Stieb or Munich based Royal chair. The bikes were used by the German Army and Mail Service as well as commercial and local fire fighting.

FRANK
R80ST



Military motorcycle with sidecar



THE CLUB RUN TO YOUNG - (RICHARD GORDON'S PLACE)

Sunday morning I awoke to heavy rain and I said that was alright because we had no bike and were therefore not able to go on the run. (The new tank was in being fitted to our bike). I had breakfast and then Taffy phoned to ask if we were going. I said "No" because we had no bike. He asked what was wrong and I told him. He said "What a shame".

Five minutes later Doug called and said that the excuse we had was not good enough. I said "But the bike.....". He didn't let me finish, "It only takes ten minutes and the bike is running". I told that to Werner and he had a chat to Doug, then after that we got dressed to go on the run. Our daughter gave us a lift to Weston. When we arrived at the meeting place Doug was already working on the bike. It took him half an hour and the bike was running. The members who were coming on the run had waited patiently for us and at 10.30 we were on our way.

The weather cleared up when we left. On the Barton Highway Taffy joined us and we swapped bikes. We rode Taffy's bike with the new shock absorber as he wanted us to try it out. Werner was happy with the comfort but I found the ride to be too hard.

We had a hail shower before Yass but it cleared again and we had good weather all the way. It's a very beautiful countryside but the cherries were not in blossom because it was too early yet.

We arrived at Richard Gordon's place before one o'clock with some locals on bikes waiting for us. We had to go through some paddocks to where Richard had made a BBQ for us. I was so happy that Doug made it possible for us to be on this run because it was beautiful and we had such nice company.

Then the sky told us it was time to go. Richard informed us that it would rain in half an hour, so everybody left very happy. He was right, we left just in time as we saw the rain behind us.

Taffy of course had to swap bikes again and picked Warren's. After a while he had enough of it so we stopped in a small town. He then said "I would like to have my bike back, but when everybody had filled up the tanks he took Doug's bike, and said "I like this bike".

Werner was wondering why Taffy was always taking somebody else's bike but his own. He told Taffy, "In the time you ride everybody else's bike you don't use petrol on yours".

Anyhow on the way back from Yass to Canberra, the men had a ball and I had to jab Werner's ribs for him to brake because they were both travelling too fast for me.

On the first turn-off into Canberra we departed very happily from a nice Sunday outing.

Ursula Strotmann

Suggested Rally Camping Equipment

TENT with poles, pegs & fly
SLEEPING BAG (S)
FRYING PAN
PLATES (plastic or metal)
KNIFE, FORK & SPOON
CAN OPENER
BILLY

MATCHES
CUPS
TEA, COFFEE, SUGAR, MILK
TOILET PAPER - never know when it will come in handy ie. writing on, starting fires etc.
SML FIRST AID ITEMS

Below is the Australian information relating to unleaded petrol (ULP):

Unleaded petrol:

As a result of an agreement in 1981 between the Commonwealth and State Governments unleaded petrol will be introduced throughout Australia by July 1985.

From 1 January 1986, all new passenger vehicles manufactured for sale in Australia will be required by law to use unleaded petrol. The new standards will apply to motorcycles from 1 March 1988, and petrol-engined trucks from 1 July 1988.

Super petrol will continue to be available for many years, alongside the new unleaded petrol grade. Standard petrol will go off the market when unleaded petrol is introduced. The storage, distribution and retail dispensing facilities now used for standard petrol will be cleaned out and switched to unleaded petrol.

Introduction

Lead is poisonous. It can cause serious health problems. Lead levels in the air in several Australian cities often exceed the National Health and Medical Research Council's maximum level; and Government action to reduce lead concentrations by limiting the lead content of petrol has proved unsatisfactory, primarily because of the high level of petrol consumption.

Exhaust fumes are responsible for most of the lead and carbon monoxide in the atmosphere and much of the hydrocarbons and oxides of nitrogen (the latter compounds react to produce photo-chemical smog).

In February 1981, the Commonwealth Government and the Governments of the

States and Territories decided to introduce unleaded petrol on a national basis. As a result, all new passenger cars and derivatives (ie. utilities and panel vans etc.) manufactured after 1 January 1986 will be required to operate on unleaded petrol, and the oil companies will be making it available by July 1985.

The use of ULP is covered by Australian Design Rule 37. Australian Design Rule requirements are largely reflected in State legislation although they may be complemented by local environmental legislation. ADR 37 also sets new emission standards for carbon monoxide and hydrocarbons and specifies dimensions for the ULP nozzle on the petrol bowser and the fuel filler inlet on the vehicle. The latter specification is to prevent mistfelling, ie. when leaded petrol is used in vehicles designed to use ULP.

Manufacturers will in most cases meet the new standards set by ADR 37 by the introduction of the catalytic converter which has been in use overseas for some years.

Initial additional costs imposed on motorists and business people as the result of the introduction of ULP will be offset by the savings to oil companies as standard petrols withdrawn from the market and because ULP promotes better fuel economy and lower maintenance needs.

Why is lead currently added to petrol?

Lead is added to petrol as a way of increasing its octane number. This gives resistance to engine "knock" or "pinging".

The octane rating of petrol is a measure of its anti-knock characteristics, not its power. The average octane rating of petrol at

refineries before lead is added is about 90. Using high-octane petrol in an engine designed to run on lower-octane petrol is wasteful. At least one-third of the cars on the road today will run just as well on 89 or 92 octane petrol (standard) as on 97 octane fuel (super), although only about 10 percent of motorists take advantage of this fact.

To distinguish ULP from the red-coloured super grade it will be pale yellow, and will have an octane rating between those of super and standard.

For example, the comparative octane ratings are:

Super petrol	97
Unleaded petrol	91-93
Standard petrol	89-92

The decision by Federal and State Governments that ULP of 92 octane rating should be introduced was based on a study which recognised the desirability of keeping costs down and of conserving oil. To make ULP of 97 octane rating would mean using significantly more crude oil in refineries, thereby raising costs. Government authorities determined the optimum rating for Australian ULP as 92, and engines of 1986 model vehicles will have compression ratios to match that.

How serious is our lead air pollution?

Each year some seven thousand tonnes of fine lead particles are added to Australia's air. Most of it comes from the exhaust of vehicles with petrol engines.

Indeed most of the lead added to petrol ends up polluting the air. As petrol evaporates from storage, handling facilities and motor vehicle fuel-system vents, lead escapes into the atmosphere. After combustion, some lead is deposited in motor vehicle engines and exhaust systems. Some contaminates engine lubricating oil and is often sent into the atmosphere when reclaimed oil is burnt as a fuel.

But most lead in petrol burnt in motor vehicle engines - about 70 percent - is discharged directly to the atmosphere through the exhaust.

Lead in the air enters our bodies directly when we breathe and indirectly through the food we eat and the water we drink. Children absorb by putting

dusty fingers, toys and other objects in their mouths.

Lead is highly toxic and when inhaled or ingested in sufficient quantities can damage health severely. There is increasing concern about the effects of even low concentrations of lead on people, especially children.

Children are more susceptible to the effects of lead than adults, and their developing nervous systems are more easily damaged. Effects in children include reduced intelligence, reduced ability to concentrate, and hyperactivity.

Pregnant women are another group identified in some studies as having a greater than average susceptibility to the harmful effects of even low levels of lead. The National Health and Medical Research Council estimates that 20 percent of all lead taken in by people is inhaled.

Lead emissions have been controlled to some extent in recent years by limiting the lead content of petrol. Despite this action atmospheric lead concentrations have not been reduced to satisfactory levels. To meet health goals more stringent controls on lead are required. The most effective way of reducing lead pollution is not to add lead to petrol in the first place.

Recommended levels have often been exceeded in Melbourne, Sydney, Brisbane, Adelaide, and Canberra. Research in Australia and overseas indicates that lead levels lower than those previously thought to be significant may now be harmful to health.

In addition to the health effects of lead pollution, ethylene dibromide, one of the "lead scavengers" commonly added to petrol to reduce the amount of lead deposited in engines, can cause cancer. In 1983 it was recommended phasing out ethylene dibromide as an additive in petrol.

How will unleaded petrol help?

The introduction of ULP and the new emission standards will:

- *Reduce lead pollution in Australian cities and towns;
- *Reduce other forms of air pollution, especially:
 - carbon monoxide

-hydrocarbon emissions, which help create photochemical smog

- particles which contribute to the brown haze in Australia's major cities, and
- oxides of nitrogen from some vehicles; *phase out use of ethylene dibromide as a petrol additive;
- *improve vehicle fuel economy and reduce potential requirements for crude oil;
- *reduce maintenance for motor vehicles; and
- *improve community health and reduce environmental degradation as air quality improves.

By using ULP and, in time, as the older vehicles using leaded petrol go off the road, lead emissions from motor cars will be virtually eliminated. Thus atmospheric lead concentrations will be very much reduced in almost all urban areas.

Catalytic converters

Vehicle manufacturers will be able to use catalytic converters and other new engine-control technologies to control exhaust emissions.

Catalytic converters convert harmful gases to water vapour and carbon dioxide. The chemical reactions are helped by catalysts such as platinum and palladium. Converters can only be used with ULP because lead poisons the catalysts and greatly reduces their ability to control exhaust emissions

Catalytic Converters can dramatically reduce exhaust emissions of hydrocarbons, carbon monoxide, fine particles and oxides of nitrogen. They are installed in the exhaust system between the engine and the muffler. Thus vehicle manufacturers will be free to design and tune engines without compromises imposed by current engine-based emission control.

Most vehicle manufacturers in the United States, Canada and Japan, all of which have ULP, have used catalytic converters since 1975-76. ULP is also being introduced in several countries in Europe over the next few years.

Although the new motor vehicle standards will not impose stricter controls on emissions of fine particles and oxides of nitrogen, the ULP/catalytic converter program could help to reduce these pollutants.

Pre-1986 vehicles

Most vehicles which now run satisfactorily on leaded standard-grade (89 or 92-octane) petrol will be able to run just as efficiently on unleaded (91-93 octane) petrol. Some 30 percent of existing vehicles can use standard petrol.

If these vehicles are models with hardened valve seat inserts they will be able to use ULP exclusively with no ill effects. Owners of models without hardened valve seats or valve seat inserts will be able to use unleaded petrol most of the time, and fill up with ("super") leaded petrol about every tenth time to avoid any possibility of increasing valve wear. (NOTE: MAKE THAT EVERY FOURTH TIME FOR YOUR BMW IF IT'S CURRENTLY USING STANDARD - ED.)

Existing vehicles with higher compression ratio engines needing 97-octane petrol will be able to continue using this fuel.

Vehicle manufacturers will be providing detailed advice on which models can use ULP.

Standard-grade 89 or 92 octane petrol will not be marketed after ULP is introduced.

Super-grade 97-octane leaded petrol will continue to be available, for use in those pre-1986 vehicles unable to run satisfactorily on 91-93 octane ULP.

New vehicles

These vehicles will have specially designed fuel-tank filler pipes to prevent their tanks being filled with leaded petrol, ie misteuling. Leaded petrol will only be allowed to be dispensed from petrol pumps with nozzles too wide to fit into the filling pipes of ULP vehicles.

New vehicles operating on ULP will be fitted with labels stating that only ULP may be used. Similar warnings will be displayed at service stations. Other signs on petrol pumps will clearly indicate whether the petrol is leaded or unleaded. ULP will be coloured pale yellow, to distinguish it from pink-coloured leaded fuel.

Nothing is gained by misfuelling an unleaded petrol vehicle. There will be no performance or fuel-economy gains. All such vehicles will be designed to run efficiently on 91-93 octane fuel - and almost certainly ULP will cost no more to buy than leaded fuel. Quite apart from the risk of a fine, the use

of leaded petrol in ULP vehicles:

- * "poisons" the catalyst in the converter and increases the emission of harmful air pollutants. Although there would be some recovery in the performance of the catalyst after an isolated misfuelling episode, persistent or repeated misfuelling would completely destroy the catalyst's ability to reduce air pollutants;
- * renders void the manufacturer's warranty;
- * deactivates the oxygen sensor used with some types of catalytic converters ("three-way" catalysts), and thereby reduces fuel economy and performance; and
- * causes increased engine wear (eg. in valves and piston rings) and a need for more exhaust system maintenance.

Is unleaded petrol going to cost me more?

There will be direct savings for motorists, because vehicle maintenance will be reduced and the fuel economy of most vehicles will be improved.

When a motor vehicle engine runs on leaded petrol, lead compounds are deposited in the combustion chamber, on the valves and spark plugs, and in the engine oil, exhaust-gas recirculation (EGR) valve and exhaust systems. In addition, the "lead scavengers" in leaded petrol form acids which corrode

the engine and exhaust system and accumulate in the engine oil, along with the lead and other combustion chamber products. The acids and residual lead also foul spark plugs and other engine components.

The use of leaded petrol thus shortens the useful life of engines, spark plugs, engine oil, EGR valves, exhaust pipes and mufflers, and adds significantly to vehicle maintenance costs. Using ULP will therefore reduce maintenance costs. The fuel consumption of most vehicles designed to use ULP will be reduced for two main reasons:

- * Catalytic converters "clean up" motor vehicle emissions after they leave the engine, so the engine can be designed and tuned to maximise fuel economy and performance, unencumbered by current engine-based pollution-control systems. The fuel consumption penalty associated with current emission controls will thus be removed, leaving a much smaller fuel penalty arising from a need to redesign some cars engines for the lower octane number of ULP. For most vehicles, overall fuel consumption will be reduced.

* The introduction of ULP and catalytic converters will greatly facilitate the transfer to Australian vehicles of many of the latest fuel-saving technologies, especially those developed for ULP vehicles in the United States, Canada, and Japan.

Overall, there will be a substantial fuel saving, and the ULP program will help to conserve valuable fuel resources.

SO, if you are using super now, continue to do so. If you have been using standard, switch to ULP - BUT use super for every third tankful, alternately re-tune and change to super.

Following are the serial numbers of new BMW's which will run on ULP:

R80RT	Serial Numbers 64/70/94/98 and up.
R80	" 644/0512 "
R80/GS	" 6283306 "
K100	" 0007291 "
K100RS	" 0081107 "
K100RT	" 002499 "

NOTE: All the R65's and R100's must run on super. The R80's which will run on ULP have a blue spot on the cylinder head below the lower cylinder head bolt.