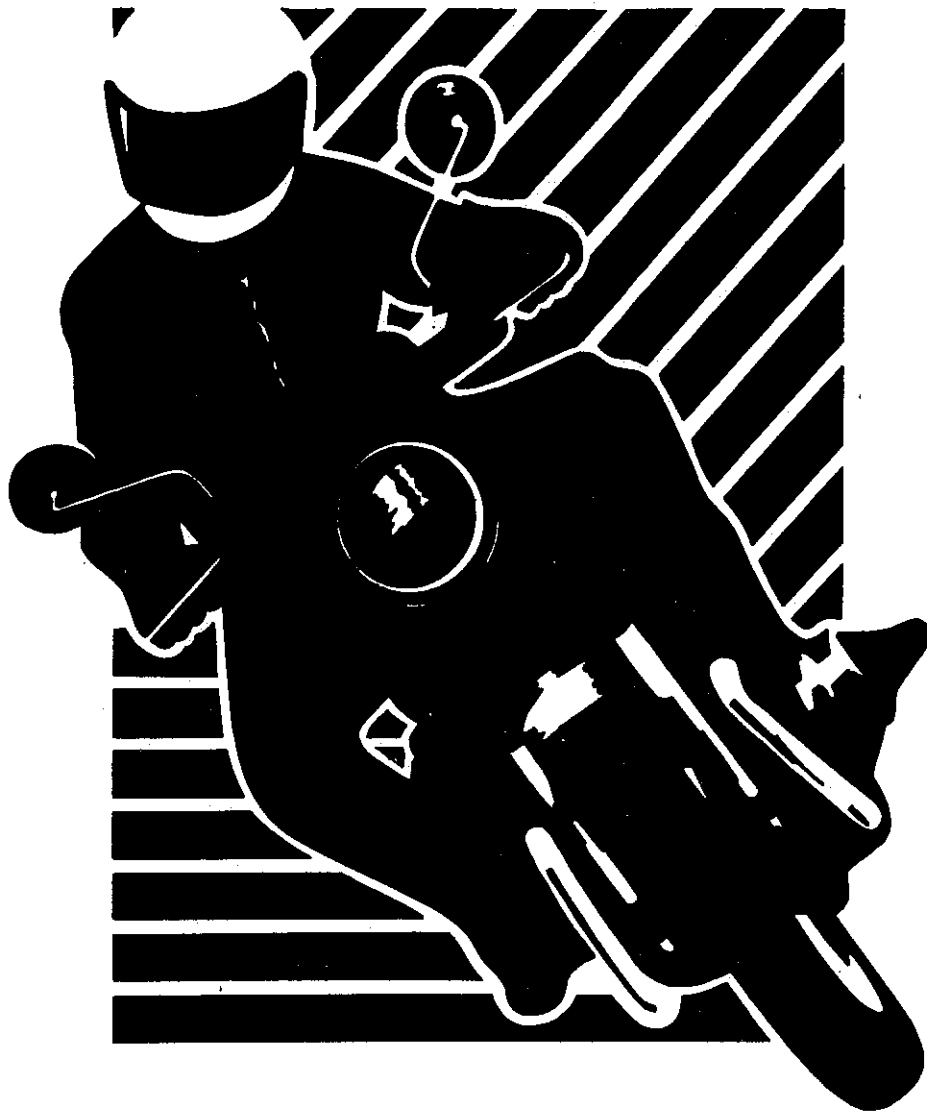


Oct 9)

Good Vibrations



MOTORCYCLE TOURING CLUB OF VICTORIA.

P.O. Box 453, Richmond 3121, Victoria

SUNDAY 6th.	MARYSVILLE HORSE RIDING 9.30 KBCP. 10.15 Hallam. Sam & Rita leading. 2 Hours Horse Riding.	This popular event will encompass a short ride to the Riding school in Marysville. Those wishing will then head off on the trail ride leaving the rest of the group to explore some of the local roads.
SUNDAY 13th.	EILDON. 9.30 KBCP. 10.30 Yarra Glen. Ben Warden leading.	Across to Healesville, the Black Spur, Marysville, Buxton, Taggerty & Eildon. Up Mt.Pinninger lookout then lunch. Home via Fraser Nat.Park, Molesworth, Yea and finish the ride at Kinglake West.
SATURDAY 19th.	WORLD SUPERBIKES. Phillip Island. ***9.00AM Hallam***	From this early start at Hallam we will head straight down to the Island to catch all the action of this International event.
SUNDAY 20th.	AVOCA. 9.30 KBCP. Ian Payne leading.	From the KBCP we'll head west to Ballan and Creswick for smoko. We then continue west to Clunes, Talbot and Avoca (lunch), a visit to Moonabel for some FGP? then home via Maryborough, Dalesford and Melton.
SUNDAY 27th.	SWITZERLAND RANGES. "Some Dirt" 9.30 KBCP. Tom Saville leading.	Out to Mt.Slide, Flowerdale, Broadford and Seymour through these obscure ranges then on to Euroa for lunch. Home through Strathbogie and Merton to Healesville.

NOVEMBER

SATURDAY 2nd to TUESDAY 5th.	ADELAIDE HILLS ***8.30KBCP*** Tom Saville leading.	Those going would have pre-booked and will begin this Melb.Cup weekend with a 550km ride down to Mt.Gambier via the Great Ocean Road, hence the EARLY start.
THURSDAY 7th.	GENERAL MEETING Club Hall 8.15pm Sharp.	Usual highly entertaining night followed by a natter and nibble.
SUNDAY 10th.	CAPE SCHANCK LIGHTHOUSE. 9.30 KBCP. 10.15 Hallam. Luke Richardson leading.	This leisurely ride will take us to Berwick Somerville & Hastings (smoko). Then to Shoreham, Arthurs Seat the Lighthouse and Dromana for lunch. Home via Tooradin, Koo-Wee-Rup, Cockatoo and Emerald.

MOTORCYCLE TOURING CLUB OF VICTORIA

MINUTES OF GENERAL MEETING

DATE: 5 September 1991.

LOCATION: Jika Jika Community Hall.

OPENED: 8.50 pm.

PRESENT: 48 members and guests.

APOLOGIES: Pam & Andrew Dunn; Angus Parker; Garry Breare; Trevor Harris; Mike Davies

CORRESPONDENCE: 9 subscriptions and 1 ride write-up.

TREASURER'S REPORT: Not given, due to the absence of the Treasurer, but stated that the Club is financially healthy at this time.

CAPTAIN'S REPORT: WILLOW GROVE - 4/8/91
24 bikes, 29 people, sunny and warm, Luke and Jack leaders, Martin, Anita and Andi share rear riding, 370 kms. Mt Donna Buang by the back way. Snow at the top. Roll race down, stop near Warburton, Powelltown, and Noojee. Stop at Willow Grove for scenic view of snow-capped Mt Baw Baw then home via Trafalgar and Drouin. One incident: Luke high sides the GSX750 and decides not to continue. Thanks to Jack Youdan for taking the ride from Noojee and to Jon and Belinda for the recovery of Luke's bike.

SINGING GARDENS - 11/8/91
32 bikes, 35 people, fine but cloudy, Garry leader, Terry rear rider, 400 kms. Healesville to Toolangi, Kinglake West, Yea for lunch then Molesworth, Buxton, Marysville and Healesville to Toolangi again but via a different road, all winding. Afternoon smoko at the gardens and breakup. A few incidents: I successfully plugged a flat rear tyre; ZZR (first timer) had the guard rubbing on his front wheel successfully removed but that same rider and his mate (also a first timer) crashed on the way home.

WATER MILL - 18/8/91
29 bikes, 32 people, fine and sunny, Ross leader, Peter P and Gary D rear riders, 334 kms. Toolern Vale via Gisbourne, stop at Dalesford and lunch at Clunes. On to Smeaton building, which was closed but we still saw the 60 HP wheel. Break up at Ballan. No incidents.

TANK MUSEUM - 1/9/91
20 bikes, 21 people, fine for the most part, Michael leader, Rod rear rider, 370 kms. Yarra Glen, Healesville, Broadford, Puckapunyal. 1 incident: Frank crashes on Junction Hill, totals the bike and breaks his collar bone.

Thanks to all leaders and rear riders.

GENERAL BUSINESS:

- Subscriptions: Subscriptions have now closed off with 77 members. The Club looks healthy, particularly in view of the recession.
- Crashes: There have been a few crashes lately but they don't seem to be as bad as previously. It has been quite some time since anyone sustained a really severe injury. The calibre of rider coming down just goes to show that no matter how much experience you have, you can still go overboard.
- Jika Jika Community Hall: We will have to vacate Jika Jika Community Hall as it is intended to be used by the Fairfield and Northcote communities. The Council has provided a list of available halls in the area, which are being checked out.
- Road Rules: The discussion at the August meeting was a bit disappointing. Would like it to continue for more depth and scope of feeling from Club members.
- Adelaide Weekend: The numbers have now been closed off though there are some beds available. If all beds are taken additional people are welcome to participate in the weekend but will have to make their own accommodation arrangements.
- Murderous Driver: Jon Riddett shared his Father's Day experience when the driver of a late model Falcon hassled Belinda and himself, first by tailgating them, then using his car to force Jon off the road, then backing into Jon's bike while Jon was trying to get around him and fisting the face of Jon's pillion. When reported to the police it was found the driver had previous records of DUI and assault and was currently disqualified. The driver seems to be sufficiently vindictive to go looking for Jon and Belinda when the charges go to Court.
- TWO WHEELS Article: Martin shared with us an article describing a 9 day old ZX10 Ninja taken out in fantastic weather and caught for speeding by police. The rider admitted to 270 km/h while "... exploring the limits of Jap technology". An article describing the "What the Hell!" attitude of which we are all guilty but not often caught in the act.
- CLUB PARAPHENALIA: Still for sale.
- DOOR PRIZE: Won by Peter P - Safety First book and First Aid tips.
- CLOSED: 9.20 pm for Auction.

Sorry to hear that Jacquie Llatse's GPX250 came off second best after a motorist "failed to see her". Fortunately Jacquie is OK but has deferred the replacement of her bike until after Christmas as by then she can progress to a bigger machine.

Congrats to Jon Riddett on reaching his 23rd birthday. The event looked a little doubtful after his recent close shave with a psychopathic motorist.

Andrew, Pam & Naomi Dunn had the right idea, "head north for winter" and with the daily temperature around 35°C, Fiji seemed ideal.

Sam & Rita on returning from a holiday to Darwin and Alice Springs proved you don't need a 4WD to see the sights, just combine a Campervan with an XL600 Honda.

Angus Parker is thinking of giving his CB900 Bol'Dor a new lease of life with the addition of a WISECO performance kit!

Bon Voyage to Martin Bastock as he heads off overseas for the next 4 weeks. Hopefully his return flight will not be as memorable as the previous one when he flew on the ill-fated UNITED AIRLINES FLIGHT 811 back in 1989!

Garry Breare, after fitting a new pair of Michelins to his XJ900, had to double check to make sure it was the same bike. Seems the difference in handling over the previous Cheng Shins was quite remarkable.

COMMISERATIONS to Mike Davis on the recent bereavement of his brother.

Margaret's GS650 having had new tyres, chain & sprockets fitted plus a once-over at the maintenance day, was running like a dream when suddenly it stopped with lack of drive to the rear wheel. With thoughts of expensive repairs to clutch/gearbox, Margaret trailers it home where she finds the front sprocket off the shaft and the nut nowhere to be found! Needless to say PABLO'S will not be frequented again.

During the Maintenance day Tom, Andi, Les & Steve headed for the goat tracks in an effort to christen Les's new HONDA XR600. On their return it was evident they had by-passed the goat tracks and headed straight for the pigs sty - YUK.

The Economy ride once again proved that the ZX10 is one frugal machine, with Ben managing to squeeze 150km out of 5.04 litres, (29.76kmpl or 84.1mpg) not bad for a 1000cc machine!

Angus & Lisa Parker's efforts at attending the Superbikes at Phillip Island went a little astray when they found themselves at GEMBROOK? Oh well nice spot for a picnic.

Martin Bastock found out how soft all the rain has made the ground, when his CBR1000 decided to lay down while parked on the side-stand during the Economy ride. Fortunately no damage was sustained.

Lukes FJ1100 is finally going, although the valve clearances mysteriously growing had the heads scratching. Seems when the engine reconditioner replaced the valve stem seals he also ground the ends of the valve stems!

The proceeds from the successful Club auction at the September meeting helped boost the club's coffers by a little over \$150. Thanks to all who participated, especially those members who donated the proceeds from the sale of their goods to the Club.

NEW BIKES:-

Les Leahy.....HONDA XR600

Adam Locke.....HONDA CBR1000

Andrew Platt.....KAWASAKI ZZR600

Up early to a day that doesn't look too bright but has been forecast as good, so get dressed, on the bike and head to the City. A few people already gathered, wait for a few more, and then off through favourite routes to the second pick up at Yarra Glen. The final ride list:

Michael (L)	GSXR1100	Andrew	CB1100R	Geoff	RZ350
Eric & Carl	FZR1000	Kylie	GT550	Jack	CBR1000
Steve	GPX750	Ferdie	GSXR1100	Ian	GPX250
Ian	XJ900	Ray	ZX10	Ben	1ZX10
John	VF1000	Eric	KR1	Frank	GSXR1100
Megs	GS650E	John	FZR1000	Colin	RZ250
				Rod (R)	GSX250S

From Yarra Glen to Healesville, to Kinglake and the general direction of Yea. There was some intermittent drizzle, just enough to make the conditions slippery and the visor filthy, but the roads out there are a lot of fun and it felt really good to be on the bike and riding.

Steve, John, Eric, Ian and Frank went round me pretty rapidly (they must have been corner marking) and I decided against trying to tag along with them - they're a bit too quick for me. I watched them fade in the distance ahead of me and relaxed, taking greater enjoyment from my own bike. Then, coming over the top of Junction Hill, the signal to slow down - someone hasn't made it through.

Someone turned out to be Frank, who seemed OK wandering around and talking coherently but his bike was totalled and he was in pain (not to mention losing one lens from his glasses). Apparently he didn't take the corner at all - a classic example of riding much too quickly for the conditions at the time and riding well beyond his own capabilities. He was picked up by a car driver and taken to Yea Hospital where he was diagnosed as having a broken collar bone. A special thanks to John and Eric who stayed with the bike until it was collected.

So lunch was at Yea, a bit drawn out waiting for everyone to regroup, eat and get petrol (but with the weather definitely improving), then on the bikes again and keep moving. Through Flowerdale, Strath Creek, Broadford and on to Puckapunyal where we are told the entrance fee to the Museum is \$3. A bit of fast talking by Michael and we have a group discount - \$2 entry.

The Tank Museum was very interesting and it was quite pleasant walking around the exhibits and watching *"the boys"* playing on whatever could be moved - be it gun sights, engine exhibits or simply flaps on one of the tanks. There was also knowledgable discourse on practically every item on display, even when the opposite of what was being said was staring the remainder of the audience in the face, but it's all part of the fun of *"boys being boys!"*

After a pleasant hour or so wandering around it was back on the bikes and head for Broadford. Another turn-off and I'm completely lost, but every now and then I glimpse one of the other bikes well ahead in the distance so I just settled back and enjoyed the feel of my bike under me and eventually we turned into Whittlesea for the break-up.

An interesting destination and a fun day's ride! What more needs to be said except, "Thanks Michael, really appreciate it!"

Megs (GS650E)

Participants:-

Ben-ZX10 (leader), Jack-CBR1000, Chris-VT250, Noel-GPX250,
Martin & Karen-CBR1000, John VD & Kenny-VF1000f2, Ferdie-GSXR1100,
Peter Gruener-GSXR1100 (1st ride), Margaret-GS650, Rod-GSX250,
Derek-R100RS, Kylee-GT550, Steve-GPX750, Peter-FJ1100, Ian-XJ900,
Geof-RZ350, Colin-RZ250, Keith-ZZR600 (1st ride), John & Merryn-XJ900,
Bob & Colin-FJ1200 (1st ride), Max & Barbara-GPz900, Eric &
Nadene-FZR1000, Les-XR600 (rear rider).
23 bikes and 29 people.

The Route:-

Out to Lilydale then Launching Place, Powelltown, Noojee and Warrigul
for lunch. Around to Yarragon and trafilgar then south on a great bit
of road to Thorpdale and Mirboo North, on to Dumbalk and Leongatha
(the section with the 40,50,60km corners kept you on your toes!) for
smoko. We then head northish to Arawata then up the Korumburra/Warrigul
road to Lardiner, Bales and finish up at Narre Warren.

Incidents:-

- 1/ Margaret finds a wet/oily patch of road at a 'T' intersection out
the back of Wonga Park. Minimal damage to her bike but decides to
head home as the ride will be quite long and demanding.
- 2/ Rod East runs wide on a left hander and does a bit of gardening
with his GSX250. Results in some minor damage to the bikini fairing.

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Will TAC cover your claim?

The introduction of Victoria's Transport Accident Commission (TAC) "no fault" scheme greatly simplified compulsory third party injury claims. However, there are certain situations in which, if a person is injured or killed in a motor vehicle crash in Victoria, he or she (or the victim's dependants) may not succeed in a claim for benefits through the TAC "no fault" scheme.

A recent Australian High Court case in Queensland highlights one such instance. A stolen car containing the driver and a passenger crashed into a tree and the passenger was seriously injured. As is the normal practice in these cases, the passenger sued the driver for damages, but the claim failed on the basis that both the driver and the injured person were engaged in a criminal activity when the crash occurred.

Neither the driver nor the passenger would have success in similar circumstan-

ces in Victoria. There are, in fact, a number of situations in which the Transport Accident Commission would not pay compensation. Problems would arise if the driver:

- was receiving compensation under another Act for the same accident (such as WorkCare benefit);
- failed to make a report of the accident to a member of the police force;
- was convicted of culpable driving causing death;
- was convicted for drink driving when the intoxicating liquor or drug contributed to the crash. (There are graded reductions according to the extent of intoxication);
- has not paid the Transport Accident Charge (with the vehicle's registration);
- doesn't and has never held a driver's licence at the time of the accident;
- has a suspended or cancelled licence;
- was involved in the commission of an

indictable offence and is convicted thereof;
- was convicted of refusing to give a sample of blood;
- was involved in an organised motor sport event.

The passenger in the vehicle would not be able to claim from the TAC if he/she:
- was receiving compensation under another Act from the same accident (such as a WorkCare benefit);
- was involved in an indictable offence (such as the theft of a car) and was convicted.

The previous Common Law right to sue for damages is no longer available unless the injury is serious and the degree of physical impairment is assessed at 30 per cent or more.

If a person is killed in the crash and he/she isn't convicted of a charge, the TAC may provide compensation to dependants.

For further information regarding this or any motoring related legal matter, contact the Member Legal Services on (03) 607 2128 or call in person. We are located on the first floor, 422 Little Collins Street, above the RACV Melbourne Branch Office.

From the carpark we take the usual route via the Kew Boulevard, Templestowe, Warrendyte, Kangaroo Ground, Christmas Hills into Yarra Glen without incident. Although the news of landslides on the Christmas Hills road was real (due to the large amount of rain over the previous week) by the time we went through a brown muddy stain on the bitumen was all that remained. Fortunately I had been pre-warned the day before by Jon Riddett and had made the group aware of the danger, But as it was, quick action by the authorities averted any holdup.

At Yarra Glen the crowd doubled and Garry our host for the day took over as leader. After a short talk we headed off and out the back roads to Healesville West, up to Toolangi then down to Healesville and Garry's home for the BBQ and our "familiarize yourself with your bike day". Almost all the group took advantage of the barby and by lunch-time even the weather had decided to behave, so with the sun shining we settled in enjoying each others company and some work on the bikes. Some of the work done:

- # I changed the front fork gaiters on my XL.
- # Margaret, with John VD's help, checked the valve gear and changed the fork oil on her Suzuki.
- # Ian did an oil change & grease on his Yamaha TT350.
- # Garry fitted some new rear shockers to his XJ900.
- # Michael Chan & Luke attempted to straighten, tidy-up and fix the instruments on Luke's damaged GSX750.
- # Ben gave the ZX10 a new set of front brake pads.
- # Chris Lea gave his VT250 a quick once-over.

A couple of hours after lunch, Tom figured it was a good time to break -in, so to speak, Les's new XR600, so four of us headed for the hills looking for the wilder side of motorcycling and in one way or another Tom, Andi, Les & myself all came unstuck on the slippery muddy tracks that Tommy had so generously thrown in. Granted this kind of motorcycling is not for every-one I suppose, but I liked it. By the time we got back to Garry's the crowd had thinned a little but there was still enough people left to bullshit to about our adventure.

Thanks to Tom for the dirt ride and thanks to Garry for putting on a top day. P.S. Sorry about the wheelie, hope the grass grows back!

Steve XL600.

Participants:-

KBCP

Gary & Cynthia-GSXR1100, Ferdie-GSXR1100, Kylee-GT550, Meggs-GS650, Michael-GSXR1100, Martin & Karen-CBR1000, Steve-XL600 (1st leader), John VD & Jenny-VF1000f2, Colin-RZ250, Angus-CB900f2, Frank-LT1000, Les-XR600 (rear rider).

YARRA GLEN

Chris-VT250, John-FZR1000, Eric-KR1-S, Ben & Vicki-ZX10, Ian-TT350, Peter.P-GT750, Mike-ZZR250, Garry-XJ900 (leader), Lou & pillion-GPz1100.

HEALESVILLE

Sam & Rita-FZR1000, Tom-TDR239, Andi-R80GS, Luke-GSX750, Gary & Dot-Car, John.B & son-Car, Anita & family-Car, Andrew, Pam & Naomi-Car, Keith & Joanne & son-Car.

Total: 45 people, 25 bikes & 5 cars.

Economy Run

September 22nd, 1991.

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What has forty wheels, sixty-three cylinders and gets 0.98 kilometres per litre (2.8 miles per gallon)? The MCTV 1991 Economy Run, that's what! Yes folks, if you add all of the bikes ridden and litres used, then this is the result. And we thought that our bikes were economical.....

With Steve L leading the city group to the starting point, Margarets GS 650 decided that it didn't want to play with the others, and promptly broke down. Luke was good enough to take her home, and then attempted to catch the group.

A total of twenty bikes and twentyseven people played follow-the-leader on the slowest ride of the year. Ben Warden was witnessed being passed by a semi, how often have you seen that happen? Ditto the red Porche on Junction Hill - he got to pass a number of bikes ON A WINDING ROAD.

The Economy Run itself left Whittlesea, and headed to Broadford via Kinglake West, Glenburn, Junction Hill, Yea, Junction Hill (again), Flowerdale, and Strath Creek. The course took in straight roads, winding roads, uphill bits and downhill bits, in fact something for everyone. There were three stretches of dirt, with the first near Glenburn being the worst. This allowed everyone to get their bikes dirty, and led to a few white-knuckle moments. The later two stretches were pretty good, allowing everyone to stretch their legs. At the end of the third stretch there was a regroup, where the days "incident" occurred. Martins CBR 1000 toppled over v-e-r-y s-l-o-w-l-y while parked on the roadside. So slowly, that there was not even a scratch to show for it!

The final run from here to Broadford with its' Extremely Appealing Corners proved too hard for some to resist, with their wrists taking over from their minds. John Van D apparently went from last in the group to first through here..... Yah Hoo!

After filling our tanks, it was time to fill our tumms. With the highly complex instructions to find the Commercial Hotel (up the hill, on the right, past the church) being too difficult for some to follow - they stopped at the pub on the left at the bottom of the hill! - we had our meals and calculated the winners.

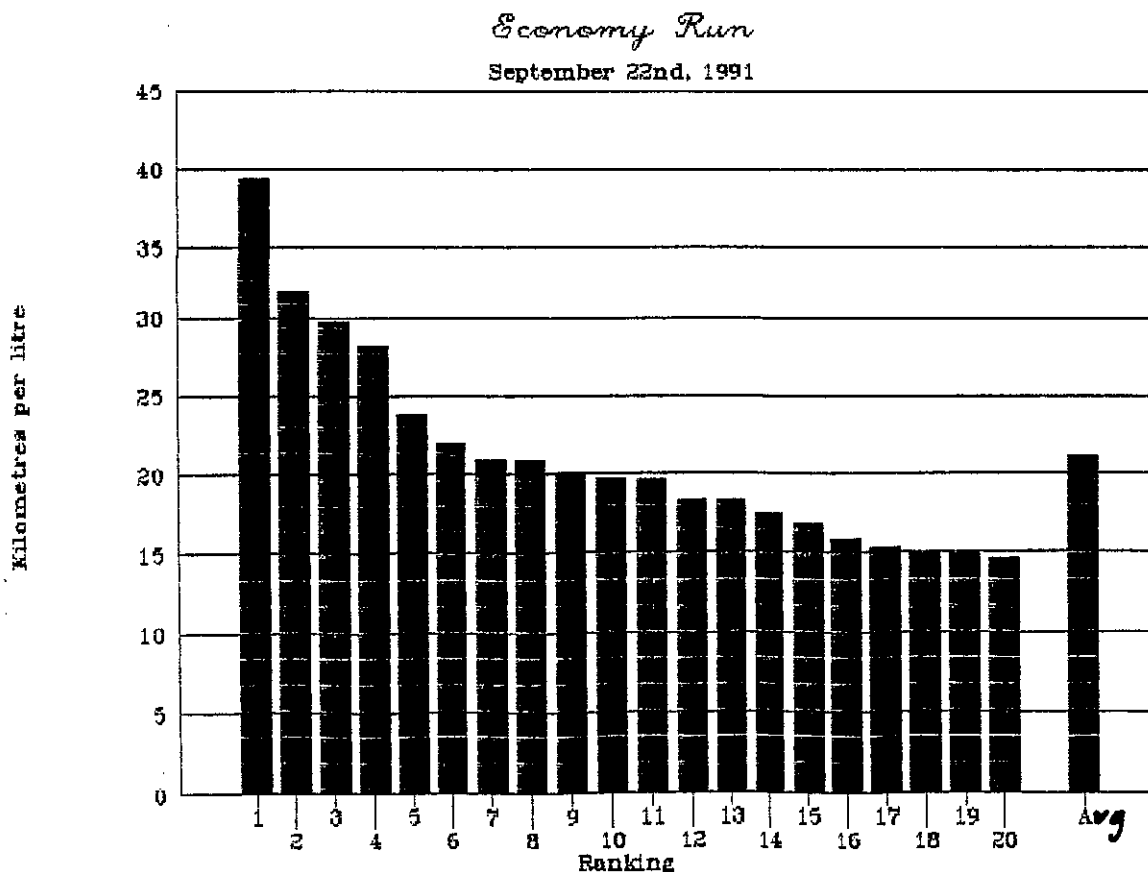
Outright mileage went to Luke on the CBX 250 single, no surprise there. Closest to estimate was John Riddett, with a real k/litre of 28.08, his estimate was 28.5. Worst mileage went to John Van D on the VF 1000 F2, the Oil Companys' friend. Both Johns (sounds like a toilet block) won a chokky bar for their efforts. While at Broadford, we stimulated the local economy to the tune of \$300+, with \$106.23 going to the servo.

Afterwards it was a short 100 k's via Tallarook, Kerrisdale and Flowerdale to Kinglake West where the ride broke up.

Facts and Figures are as follows:

Economy Run 22nd September 1991.
Distance travelled: 149.4 kilometres.

Rank	Name	Bike	k/litre	mpg
1	Luke	CBX 250	39.31	111.1
2	Noel	GPx 250	31.78	89.8
3	Ben W	ZX 10	29.76	84.1
4	John Riddet	GPZ 500	28.08	79.4
5	Les Leahey	XR 600	23.75	67.1
6	Ian & Kerrie	XJ 900	21.97	62.1
7	Peter P	GT 750	20.98	59.3
8	Gary Lugg & Cynthia	GSX-R 1100	20.89	59.1
9	David Lennox	GPz 900 R	20.18	57.1
10	Michael Chan	GSX-R 1100	19.68	55.6
11	Trevor Harris	KL 650	19.65	55.6
12	Peter White & Sandra	GPz 1100	18.33	51.8
13	Colin	RZ 250 R	18.30	51.7
14	Steve L & Tanya	GPx 750	17.37	49.1
15	Nick Lowe	GSX 750 SE	16.75	47.4
16	Shane	FZ 750	15.77	44.6
17	Jeff Jones & Ben	RZ 350	15.24	43.1
18	Geoff Taylor	Zephyr 550	14.94	42.2
19	Martin & Karen	CBR 1000 FL	14.91	42.2
20	John Van D & Jennifer	VF 1000 F2	14.53	41.1
A	Average	20 bikes	21.11	59.7



INTRODUCTION

THE kid was not impressed: "Dad, if you ever want to see a grandchild born into this family, you'd better do something about the ride comfort of this tricycle."

The father looked pityingly at his 10-year-old son, who had just hobbled into the house clutching his backside in pain. Cobbled streets circa 1888 and solid-tyred trikes were putting serious doubt on his family's future.

"No worries, mate," said the father, a bloke named John Boyd Dunlop. He set about inventing the pneumatic tyre and his son lived happily ever after.

Well, maybe history isn't quite like this but Dunlop and his son are responsible for the modern tyre. The idea of filling a tyre with air was pooh-pooed by all and sundry when Dunlop first expressed his opinions but the man went on to prove it was not only possible but it had so many advantages there was no point in continuing with solid-rubber tyres.

Since that time, more than a hundred years ago, tyre technology has leapt ahead as quickly as vehicle technology. Now the range of rubber is as extensive as the range of motorcycles it's made for. If you want tyres for even the most obscure task, chances are there're several choices!

This feature is an explanation of what a tyre's all about. Unfortunately they're not as simple as just being 'rim protectors' and



they need to be selected correctly, used properly and treated right — and the cost of ignoring or abusing them can be much more than merely a new set of rubber...

Like anything else in motorcycling, understanding your tyres means maximising your riding enjoyment; you'll get the best performance from your bike, you'll get plenty of miles under the wheels and you won't be forking out more than you have to. It's one thing to simply fit the tyres 'they' say are best and check the pressures now and then but if you know a bit more you can make an educated decision on what is going to be best for you.

Somewhere there's a tyre which is your perfect mixture of performance, mileage and price. But finding it means either knowing what you should look for or trying the lot, one by one! Hopefully this guide will arm you with the details you need to narrow down the choice to only a few, if not right

down to one particular set of tyres. The number of things to consider is incredible, from simple size and ratings to belt configuration and tread type. And then some...

We've also got hints about looking after your tyres so you get the best life out of them without sacrificing their performance for even a kilometre.

The information we've gathered comes from the experts, people who've been involved with tyres for years. Many of them have been directly involved with testing new offerings for the factories; they've been there at endurance races studiously taking notes on how their tyres have performed; most importantly, they've ridden Aussie roads on all kinds of tyres. When these people talk tyres the rest of us sit up and pay attention!

We hope you get as much from this guide to tyres as we did putting it together. And keep the rubber side down!

1. From Drawing Board To Production

Design Criteria

NO one tyre can possibly do the job for every motorcycle, simply because the variables involved in tyre design means the best which can be achieved in one area usually dictates a sacrifice in another. So when a new tyre is little more than a gleam in a designer's eyes, the first thing the designer must do is decide what he/she intends the tyre to do.

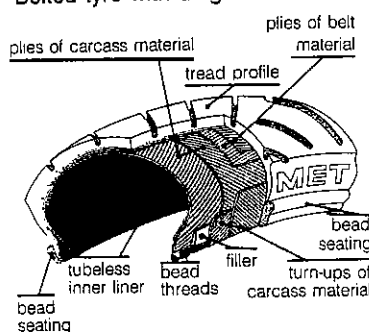
High on the list of desirable tyre qualities are: grip (or skid resistance); mileage; stability; speed; load-carrying ability; and comfort. Other characteristics include steering response, feedback to rider, etc, but these often fall under one of the first criteria.

Whatever the designer decides, the first parts of the tyre which he/she will have to produce in line with his/her decision are the carcass and belt. These determine the basic characteristics of the tyre, whether it'll be suitable for sports riding, touring or whatever.

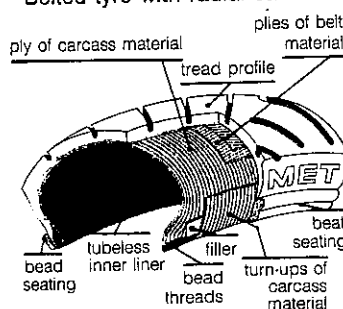
The Carcass

THE central piece of a tyre is the carcass, the layers of material which basically form the 'skeleton' of a tyre. It's this carcass

Belted tyre with diagonal carcass



Belted tyre with radial carcass



which is either bias-ply (also known as a cross-ply tyre) or radial, depending on which way its cords are aligned. The number of 'plies' a tyre is said to have is also determined here, one ply being a single layer of carcass material.

A radial tyre will have the carcass cords running at 90 degrees to the rotational direction of the tyre, ie, from side to side, whereas a bias tyre has the cords arranged diagonally across the angle (see diagrams). Typical angles for a bias tyre carcass are around 30-50 degrees on modern tyres.

It's quite common to find radial tyres with bias-ply layers included too. This simply helps strengthen the whole tyre.

Since this has to be a very strong part of the tyre, able to withstand a lot of forces without flexing too much, favoured materials for its construction are things like nylon, rayon, Kevlar or Aramid.

The Belt

NOT all tyres get a belt, simply because only the most stressed tyres need them. Their aim is to reinforce the carcass at very high speeds, when 'tyre growth' or expansion due to the centrifugal forces sets in. When a tyre grows ►

at speed, its profile, outside diameter and contact patch are altered, usually for the worse. A belt reduces the amount of growth.

Rather than being laid across the tyre like the carcass, the belt loops right around it, in the same direction as the tyre rotates. To do this, the belt is constructed in one piece, with no seaming, and the carcass is shrunk into it; this effectively ensures the belt is always under tension.

Where a carcass's 'ideal' cord direction is 90 degrees, a belt's is closer to zero degrees. Some radial tyres actually run the carcass plys at 90 degrees with the belt angled at zero degrees.

Often a 'cap' is also put in on top of the belt. This is, in effect, a second belt, usually aligned at zero degrees, to reinforce the main belt.

Belts are typically made from nylon, rayon, Kevlar or Aramid.

In most cases, the tread compound and pattern will be dictated, to some degree, by the choice of belt and carcass construction. The carcass/belt variation will have decided what the tyre is for and the tread details will have to fit the bill.

If it's a tyre for hauling Gold Wings around, the chances are it'll be a bias



PETER BEATTIE PHOTO

design. The gentler cord angles mean less high-speed ability but this, of course, is a very minor concern. Decent carrying capacity is a major point, though, and the cords will be aligned for this purpose — plenty of strength to handle the weight without flexing or building up excess heat.

On the other hand, if it was spirited sports riding the designer had in mind, we'll probably have a radial (although there's no reason it couldn't be a suitable bias-ply): it'll hold its composure even at very high speeds; it'll maintain a large contact patch even at extreme angles.

Commuter tyres require neither outstanding carrying capacity nor high-speed potential but have to last a fair while and be cheap. So they'll get the bare essentials for this purpose.

The Tread Compound

VARIOUS synthetic rubbers go into tyre treads (in fact, real rubber is extremely rare, if not obsolete). The obvious

Radial

High speed ability

Better suited to wide rims

Stiff tread surface/flexible sidewalls for extreme cornering ability

Better mileage (because of less tread flex, heat)

Bias-ply

Load carrying capacity

Better suited to narrow rims

Stiffer sidewalls, less variation of stiffness between tread and sidewall

Cheaper

Opinions differ in some areas concerning some aspects of radial/bias tyres. According to some in the trade, radials are better at soaking bumps and so improve comfort but at the expense of some feedback to the rider. Others suggested the situation was reversed, ie, bias tyres have more comfort but less feedback.

The thought of getting better mileage from a radial may seem a bit odd but you have to remember the radials we're used to these days are mainly for modern race-replicas which require extraordinary levels of grip from their tyres. Therefore, the tyres get the soft compound treatment and don't last long. The point is, a similar compound in a bias tyre would probably last even less distance.



compromise here is between mileage and grip. Go for ultra-soft rubber and you could blitz around Eastern Creek flat-out without a skid, while scraping the undercarriage to pieces. But after half a dozen laps there'd be no useful rubber left — expensive! Alternatively choose an extremely (in this case unrealistically) hard compound and a fully-loaded Gold Wing 1500/6 could do 100,000 km on 'em ... if the tyres kept it upright for that long!

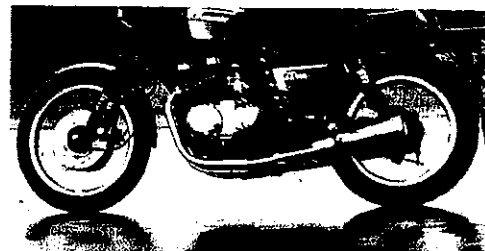
The compound also has to handle the forces being applied, eg, hard braking exerts a huge load, at an angle, on a front tyre and the tread compound not only has to hold the road under that force, it has to stay together, not shred itself to bits. Same goes for extreme cornering.

Heat build-up is another potential rubber destroyer. Even a soft compound, when used very hard, can build up enough heat to ruin it under extreme use. The carcass will have been designed to keep heat build-up to a minimum but the compound has to be up to the limits of the body.

The Tread Pattern

THERE'S a strong tie-in between the tread pattern and the carcass. The latter will, to a great extent, affect steering and stability; so will the tread pattern. So a balance has to be reached by matching them to each other.

Wet weather performance also has a lot to do with tread patterns. The tread has



to force water out from under the tyre as it rolls onto the road surface and the better it does this the better it sticks.

Mileage is affected by the tread blocks. The smaller the blocks, the more flex they have and therefore the quicker they wear. This is why dual-purpose tyres often don't last very long on the tar. Alternatively, larger blocks or interconnected/overlapping blocks don't have the opportunity to squirm as much so they tend to last longer.

Warning Slide Or Grip?

WHEN a tyre comes together, there's one other result of its design which will have been allowed for — its limits of adhesion/lean and how the rider finds out about them.

There are two policies here, one or other of which will be adhered to by a manufacturer for a range of tyres. In one school is the 'warning slide' theory, which says riders who are pushing the limits of their tyres prefer to be told of those limits by a slow, controllable slide — nothing drastic, of course, and it'll

usually only be the rear tyre which is designed to do it.

The second theory is to provide maximum grip all the way through to the limit, rather than slightly reducing the limits by building in the warning slide. The pitfall here is once the limits are passed, the slide comes quickly and with no warning.

Which one you prefer the sound of is up to you. Your tyre dealer should be able to tell exactly what your chosen tyres are designed to do in this kind of situation.

Directional Tyres

THE only manufacturing practise which

is directly important to us is that of joining the tyre's 'ends' together to form the loop. A bevel splice is used for this which, up until the '70s, proved no problem. But as new, synthetic compounds came into use, and engines and brakes put more strain on tyres, these bevel joints began opening up under extreme conditions.

Manufacturers ran back to the drawing boards and labs to find out why and discovered the joints only opened in one direction. So then a directional arrow was stamped on the sidewalls, ensuring the tyre would run against the bevel joint and there was no more problem.

As it's only the hardest forces which

tear the joint open, front and rear run 'opposite' directions, ie, the rear tyre is aligned to deal with acceleration forces and the front is reversed to cope with braking. This is why, if you ever want to fit a front tyre on the back or vice versa, you are advised to turn the tyre around and run it against the directional arrow.

Not all tyres are made this way, although most are. Just remember to check the sidewalls for an arrow before fitting a tyre. If there is no specified direction you can assume it's a bi-directional tyre. However, only a few tyres for lightweight bikes are made this way; every modern big-bike tyre will be uni-directional.

2. Hitting The Road

Selecting The Right Size

WHAT does it all mean? Do all those bloody numbers just designate a tyre? And why do some tyres get a 120/70-17-style number while others get something like 3.75-18?

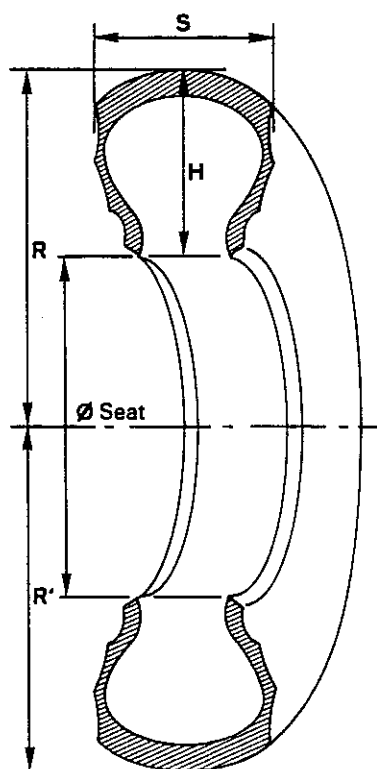
Confusing, eh? Too right! For one reason or another, we have four different systems of tyre sizing — the old inches system, the American (or perhaps more accurately, the Harley) inches system, and the two metric systems, JATMA (Japanese) and ETRTO (European). The first is becoming increasingly rare, although it is still predominantly used in many areas, such as commuter tyres, off-road tyres, etc. The American version can only be found quoted for Harley-Davidsons (and even then it may only be for one of the bike's tyres!) and on tyres made for Harleys.

And then we come to metric, which should be straightforward, simple and universal except the Japanese and Europeans can't agree on a metric system! They are written the same way, eg, 120/70V17, but each system takes the section measurements from a different place on the tyre, meaning (slightly) different widths and different aspect ratios, even for supposedly identical tyres.

Picking the correct-sized tyre for your bike isn't simply a case of finding the fattest bit of rubber which you can squeeze onto the rim in the search for that little bit of extra grip. Tyre sizes have been carefully worked out to suit available rim sizes. There is some room to experiment within the limitations of your rims but you'll usually find the recommended OE size (and, in fact, brand and model) suits your bike better than anything else.

You'll also find any good tyre seller/fitter, as well as all the tyre

Tyre Dimensions



S = section width

H = section height

R = free radius

R' = loaded radius

Ø = rim bead seat diameter

Calculating the aspect ratio:

AR = H as a percentage of S, ie,

$\frac{H \times 100}{S} = \text{Aspect ratio}$

manufacturers, will always recommend the same size tyres as the bike manufacturer specified for your bike. It's often said you shouldn't deviate from the standard tyres unless you have a very good reason to.

Putting on a wider-section tyre than is advised for a particular rim simply means the profile and contact patch will be altered from what the tyre maker intended. Ditto if you go for a narrower tyre than was meant to fit.

The size of your tyres will also affect steering characteristics, not necessarily a good thing. Old bikes will show up their flexy frame, too, if they've got extra rubber holding them firmly onto the road — so an attempt to get better handling will only reward you with a worse handling bike.

Unfortunately there's no straight comparison between rim and tyre sizes. Each model of tyre is different to the next and, for example, one 110/80 may be OK for 2.15-inch rims but another may not be. The easiest way to find out what you can put on your bike is to speak to a good tyre shop or dealer.

These days, simply selecting the appropriate size isn't enough, either. Because bikes (and therefore tyres) are so much more specialised today, the slightest difference in a tyre's rating can be significant. Take speed ratings as an example. If your bike was designated for V240 tyres, it's not just because the bike is capable of 240 km/h (although it inevitably will be), it's because the characteristics of that V240-rated tyre suit the bike. A V230 or V250 will be constructed differently. If you reckon an H-rated tyre will do, you're into even more potential trouble.

This specialisation is why some tyres are stamped 'Kamazuda BGR600 only' — it's simply a measure of how specialised we are getting.

Tyre Sizes And Designations

Metric

Section **Speed** **Diameter** **Tube**

120/70VB17 (V260) TL

Aspect **Construction** **Speed**

Section **Diameter** **Speed**

120/90-18 65H TL

Aspect **Load** **Tube**

Section width in mm, measured from sidewalls (ETRTO) or edges of tread (JATMA).

Aspect ratio, as a percentage of the section width.

Speed rating. (NB: in the second example the dash between aspect and diameter does not relate to speed.) The second, numbered rating, eg, V260, is only used where applicable.

Construction of carcass, only quoted for bias-belted (B) and radial (R) tyres.

Diameter, in inches, of the bead seat (equals diameter of wheel rim).

Load index, or carrying capacity of tyre.

Tube usage: TL for tubeless tyres, TT for tube-type tyres.

Imperial

Width **Speed** **Diameter**

3.50H18

Width of tyre in inches. No aspect ratio is necessary as Imperial sizings have a 100 percent ratio.

Speed rating.

Diameter of bead seat in inches.

Note: Imperial sizings can also be quoted with the speed and load ratings written after the dimensions (see second metric example above), in which case a dash replaces the speed rating between the width and diameter figures, unless the tyre is bias-belted, in which case a 'B' is included.

Load Index Ratings

LI	kg	LI	kg	LI	kg	LI	kg
0	45	22	85	44	160	66	300
1	46.2	23	87.5	45	165	67	307
2	47.5	24	90	46	170	68	315
3	48.7	25	92.5	47	175	69	325
4	50	26	95	48	180	70	335
5	51.5	27	97.5	49	185	71	345
6	53	28	100	50	190	72	355
7	54.5	29	103	51	195	73	365
8	56	30	106	52	200	74	375
9	58	31	109	53	206	75	387
10	60	32	112	54	212	76	400
11	61.5	33	115	55	218	77	412
12	63	34	118	56	224	78	425
13	65	35	121	57	230	79	437
14	67	36	125	58	236	80	450
15	69	37	128	59	243	81	462
16	71	38	132	60	250	82	475
17	73	39	136	61	257	83	487
18	75	40	140	62	265	84	500
19	77.5	41	145	63	272	85	515
20	80	42	150	64	280	86	530
21	82.5	43	155	65	290	87	545

LI = Load Index

American

Aspect **Construction** **Diameter**

Rim **MU90B16**

Rim: relates to type of rim the tyre should be fitted to.

Aspect ratio.

Construction of carcass (in this instance, a dash relates to bias-ply).

Diameter of bead seat.

MOST quoted sizes are more a guide to fitment than accurate representations of actual dimensions. The standards for tyres (ETRTO, JATMA, etc) are, however, very specific about the variation from actual sizes permitted — usually within a few millimetres, although Imperial sizes can show greater differences.

Speed Ratings (km/h)

B	50	R	170
C	60	S	180
D	65	T	190
E	70	U	200
F	80	H	210
G	90	V & VB ²	over 210
J	100	Z & ZR ²	over 240
K	110	¹ P (or dash) rating may be written, eg,	
L	120	3.50-18 or 3.50P18.	
M	130	² Z and ZR are JATMA standards only.	
N	140	ETRTO classification does not use Z or ZR,	
P (dash) ¹	150	instead using V with a speed indicated, eg,	
Q	160	V280.	

The First Few Keys

NEW tyres are coated in a compound which prevents the rubber deteriorating or being damaged by chemicals, etc, before someone buys it. The trouble is, this stuff is slippery, so when you leave the shop with a new tyre fitted you need to take it easy! It usually takes only a while to wear away the 'slime' but do it gradually and tentatively, just to be on the safe side.

Pressures

ONCE you've chosen a tyre, the single most important thing you can do for it is to *always* run it at the recommended pressure. Tyre pressure affects grip, stability and wear.

Too little air in the tyre encourages wear on the outside of the tread. It also ►

builds up heat because the tyre has lost rigidity and is now flexing like crazy as it rotates. This excess heat means the rubber suffers. The tyre will also 'wander' because of the lack of rigidity, meaning less grip and poor handling. Grip also suffers because the contact patch and tread profile have been altered; this can be critical in the rain.

Over-inflating the tyre is just as bad. The contact patch becomes smaller, encouraging faster wear and giving you less rubber on the road and hence less grip. As the tread surface is stretched, the rubber is under stress and has less flexibility, so it doesn't form onto the road surface as well and you lose more grip. You'll be in for a harsher ride, too, because the tyre is more rigid and won't soak up bumps. The tyre also becomes more susceptible to impact damage and puncture at high pressures.

All this doesn't mean you can't alter pressures. There are times when you have to. Carrying extra weight, be it a pillion or luggage, means upgrading the air pressures front and rear. A rule of thumb for this is to increase the tyre pressure by one kPa per one kilogram weight added although be sure not to exceed the tyre's load rating nor maximum allowable pressure.

What kind of riding you're doing will make a difference, too, although it's not as critical as load, eg, tyres may benefit from an extra few kPa on a sustained freeway cruise. Check the manufacturer's recommendations on this score because it'll vary from tyre to tyre.

Air Pressure Conversions

psi to kPa $\times 6.8918$
 Bars to kPa..... $\times 100$
 Atmospheres to kPa $\times 101.3$
 psi to bars..... $\times 0.0689$

Kilopascals = kPa
 Pounds per square inch = psi

Seeing as pressure is so critical it's worth getting it right. So forget those tyre pumps at servos: they've been abused by every dork and his dog for so long they're bound to be inaccurate — or should at least be treated as inaccurate.

Buying your own tyre gauge is the best bet. A pump is also a good idea because tyre pressures should be checked when cold, so a run up to the servo to pump 'em up will only give a warm-tyre pressure. (As the air inside the tyre warms up the pressure increases.) *Choice* magazine recently surveyed tyre gauges and recommended, among others, the

PCL, Schrader, Leader and Lion pencil-type gauges. I've named these because they're not only cheap, they all survived *Choice*'s drop test, they're convenient for our use, being pencil-style designs, and they're quite accurate.

Wear

POSSIBLY the most dreaded word when talking tyres is wear. Unfortunately wear often means more than simply replacing a tyre when it reaches the legal two-millimetre tread depth limit, or the wear-indicator marks in the tread.

Most tyres are designed to be used



SEAN IZZARD PHOTO

specifically with a certain matching one. (Hence in the listing below most listings are for a front/rear combination.)

However, the more sensitive your bike is to setting up, the more important it can be that *both* tyres are renewed even if only one is down to the limit, because the built-in balance will be thrown out with two matched but unequally-worn tyres.

Tyres may also wear unevenly. Rear tyres often 'square off' — wear flat in the centre but not at the edges. Front tyres often show the opposite effects. These forms of wear can, depending on the tread pattern and how you ride, even be as pronounced as nearly-flat tread blocks sitting right beside barely-worn blocks. I've also seen a front with its edges worn completely flat but the centre groove almost untouched, so the tyre literally had a triangular profile.

Needless to say, all this can produce horrendous handling and steering. And you may only feel the wear as poor handling, rather than seeing it in the tyres. Modern motorcycles — particularly the sporting ones — can be critically sensitive to tyre wear.

Of course, it pays to check over everything else first before you blame poor handling on tyres. It can be expensive to replace half-used rubber and then find the wheel alignment was out! Don't forget tyre pressures, either . . .

People have been known to ride on bald tyres until the canvas shows through, claiming the lack of tread makes the tyre a slick. Sorry, but no.

HELMUT MUELLER PHOTO



First of all, riding a modern radial that far into the rubber is potentially fatal: they're made with only a few plies of carcass material — maybe only two or three — which translates to bugger-all thickness and high risk of puncture. Bang — tyre blows out and bike and rider do the big tumbling act.

Secondly, as the tread grooves disappear, the rubber is less capable of flexing. Thinner rubber also reduces flexibility. And less flex equals less grip, so you're not doing yourself a favour this way either.

Cleaning

A CLEAN bike looks terrible with dull, dusty tyres, so most of us like to clean them up too. But be warned: anything which shines rubber makes it slippery! Get any cleaning gunk on the tread and you'll know all about it!

Armour-All, CRC tyre cleaner, etc, are definitely not on for motorcycle tyres. Cars can get away with it because they've got a wide, flat contact patch which can put up with a little dribble from the sidewalls but bike tyres are a lot more touchy. Just a little liquid on the edge of the tread could send you down the road come the first corner.

So what is recommended? There are specially designed tyre cleaners — or liquid rubber-buffing compounds — such as Buff-O-Matic, for the job. Apparently Buff-O-Matic not only gets tyres clean but is frequently used for removing surface slime from the tread, which we're told is quite a safe thing to do.

Fitting

MOST of us go to a professional to get our tyres removed and refitted. It's not through laziness, either; have you ever tried getting a tubeless tyre on or off a rim? Because they're required to hold all the air in, tubeless tyres are 'beaded' to their rims, ie, their designs makes them lock into each other. Breaking the bead can be a nightmare job at the roadside, sometimes impossible. Hence, most tyre companies recommend having a well-kitted workshop do the honours.

Fortunately most shops offer free tyre

fitting when you buy a new one so there's no advantage in home surgery on your rubber. And if a tubeless tyre is punctured a repair kit will get you mobile again in minutes without having to take the tyre off at all.

Tubeless tyres are different. They don't lock into the rim, so once the pressure's been released a set of good tyre levers will easily force the two apart. And you will need to take it off to fix a puncture because it'll be the tube inside which needs a patch, if not replacement.

In both cases it's essential you don't damage the rim or tyre. Even minor damage could, in unlucky circumstances, mean the difference between a good ride or expensive repairs to the fairing . . .

Modern alloy rims are actually quite soft and can too simply be scored by tyre levers. Tubes, too, are very susceptible to heavy-handed levering. So take care and make sure your tyre levers are good ones, with profiles which will aid tyre changing. Small ones are generally recommended because they favour a delicate approach, whereas a set of large levers just invites a brute strength approach.

Let's assume you've had a puncture and there's nothing for it but to get the tyre off. The processes involved are quite easy to follow, but remember it can be an awkward task needing patience and care.

Step one, of course, is to curse, swear or kick something . . . Once you've got it out of your system, the wheel's got to come off the bike. Often this'll call for some improvising to keep the machine balanced if the front wheel is coming off or the bike only has a sidestand — usually there'll be a log or rocks around to help out.

If any pressure remains in the tyre, let it out through the valve by either unscrewing or depressing the valve. Then break the bead between rim and tyre — starting near the valve — by forcing the tyre into the rim well. A tubeless tyre may take some rubber-malleting or more, but whatever you do, don't damage the rim or the tyre bead.

Once this is done, work around the rim with the tyre levers to lift the tyre off one side. It's easy to 'pinch' a tube doing this, so take care. Work in small sections and take your time. When you've done it, the tube will pull out; if there's no significant hole in the tyre and only the tube needs a patch or replacement, this is as far as you have to go.

If the tyre has to come right off, simply stand up the wheel and begin levering the tyre's other sidewall over the rim. This time it'll be easier, too.

If there is no sign on the outside of the tyre of what caused the puncture, slowly feel around inside it, looking for anything which has embedded itself into the rubber. If you find anything take it out. If you don't, look again!

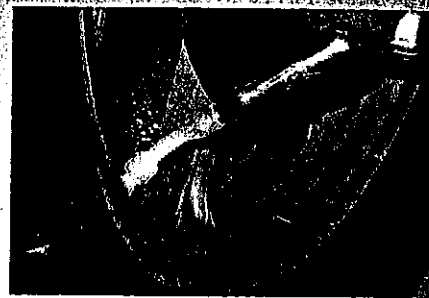
After everything's been checked/patched/replaced (see 'Punctures and Repairs') the

Punctures And Repairs

ONE of the great characteristics of tubeless tyres is they tend to go flat slowly, sometimes taking hours to lose their pressure, although it can only be a matter of seconds. On the other hand, tubed tyres are either inflated or flat — there seems to be no in-between! They also 'blow out' in a big way sometimes, shredding into little bits with predictably frightening results.

There's no such thing as a permanent repair to a motorcycle tyre. No matter what you do, no-one recommends continued running on a patch job. Repairs can — and do — fail. If you value your life and limbs, a damaged tyre or tube should be replaced as soon as possible. But, while it isn't possible, there are plenty of options for both tubed and tubeless tyres.

Tubeless tyres benefit from plugs or inserts, which come in a kit containing glue, plugs, plug insertion tool and air bottles. They're relatively straightforward to use and work very well. All you do is clean out the hole with the tool provided, press in a glue-covered plug and then inflate the tyre. Usually, these repairs are given a 60-odd km/h top speed and 50-odd km safe



distance, although some are more highly-rated than others. Either way, these figures are usually erring on the safe side, although it's true you're taking your life in your own hands after this.

A tubeless tyre can also be treated with a galvanised patch on the inside. But this means removing the tyre from the rim — and it's still only a temporary fix.

Aerosol cans containing chemical puncture repairs are available and can be a very simple and effective repair. However, our experience indicates they're not as good as the proper plugs and will also make a mess of your rim and valve, which won't be very popular with whoever changes the tyre next.

The trouble with all these repairs is they'll tend to become less effective as the tyre wears and flexes. Flex is likely to cause the repair to let go of its seal, while wear could get to the stage where the repair simply gives up.

For a tubed tyre, the tube is the main area of attention. A small hole in the tube can be patched with galvanised patches, available in kits with glue. But the best option, which will be necessary anyway if the tube is badly damaged, is simply replacement. Tubes only cost a few bucks, so it's no great sacrifice!

If the tyre is holed too, it'll need patching as well. The tube-repair patches are suitable if applied to the inside of the tyre.

Once again, aerosols are useful, as long as the tube has only a smallish hole. And you don't have to worry about the rim getting clogged where tubes are concerned, and if the tube was damaged enough to warrant the repair you won't mind the valve getting gummed up.

The tube goes on next. A little air in it will help prevent it pinching or crimping as you slide it between the tyre and rim. Pull the valve through the rim and loosely secure it with the locknut. Inflating the tube a bit more — so it is firm but not pressing into the tyre or rim — is a good idea now because the tyre levers have to be used to lift the other side of the tyre onto the rim. It's very easy to pinch the tube and puncture it doing this but the extra air pressure makes it less likely.

Tyre-fitting pastes are available to make ▶



tubed-tyre user is suddenly looking better off here by the roadside. The procedures for the two varieties of tyre are somewhat different, so we'll look at each separately.

TUBED TYRES: First, make sure the tape running around the rim well is secure and undamaged. This tape is there to protect the tube. Correctly line up the tyre's directional arrow, then, starting opposite the valve and using the tyre levers once again, ease one side of the tyre over the rim, ensuring the tyre's directional arrow (if it has one) is pointing the right way.

the tyre slip more easily into place. Water or soapy water used to be recommended but not any more, unless you're really stuck, in which case it's best to use a very mild soap applied with a wet finger. Soap can cause damage to the synthetic rubber, while water may build up inside the tyre if used excessively, so be careful if you have to go this route. Anything else — like WD40 — is a definite no-no. Talcum powder is a good idea for the tube before it goes into the tyre to prevent rubbing and chafing.

So when the tyre is onto the rim and the tube's slightly inflated inside, check the valve is protruding from the rim at right angles. If it's not pointing straight out, gently shift the tyre and tube around the rim until it is. Then check the tube is correctly positioned by moving around the tyre, pressing the beads together and looking to see if the tube is visible between the tyre and rim. If it is, press it back into the tyre — a visible tube means it'll be pinched (and therefore punctured) when you inflate it.

Pump it up, check that it's seated properly and make sure there aren't any more leaks. If all's well, you're set to go again but it pays to stop after a little while and check the valve's angle; if it's no longer sitting straight, the tyre and tube have moved on the rim. If the pressure was down, this is the probable cause but if it was high enough, the tyre hasn't seated properly or the paste hasn't dried enough to prevent the tyre moving.

TUBELESS TYRES: Line up the directional arrow with the wheel. Now's the time to put on any paste to make the task ahead a bit easier — seating the bead could prove nigh impossible without some lubricant, in fact.

If worst comes to worst and you have to put on a tubeless tyre yourself, and you've got a spare tube lying around, you can follow the tubed tyre method to get you to the next shop. There are two reasons why this isn't recommended as anything short of a temporary fix. Firstly, the tubeless rim's

valve hole is much larger so an adaptor needs to be used for long-term use of a tube on such a rim. Secondly (and more importantly in this case), seeing as the tyre and rim form an airtight seal, air may be trapped between the tyre and tube, which increases the risks of another puncture.

Alternatively, carefully lever the tyre onto the rim — but watch you don't damage the tyre or rim. Now comes the killer: the bead has to be seated with the aid of a quick blast of compressed air — more than a footpump can do. A large bottle of compressed air may do the trick but the average repair-kit bottle probably won't be sufficient.

If you *do* manage to get the seal, keep pumping in air until the bead 'pops' into place on the rim flange. Never use more than 150 percent of the tyre's maximum recommended inflation pressure to do this, eg, if the maximum allowable pressure is 300 kPa, don't go higher than 450 kPa. It's a good bet you'll damage the tyre and never be able to seat it . . .

If it won't pop into place have a look to see if anything's obstructing it. Maybe a rubber mallet, strategically wielded, will yield the desired result. Then, to ensure the seat is strong, the tyre can be inflated a bit more.

Finally, drop the pressure down to the recommended running pressure and you're right to set off again.

Examples Of Rim Designation

RIM widths, like tyre diameters, are still quoted in inches. Note that these are *not* tyre section widths.

Tube-type rims differ from tubeless-type by having no way of sealing air pressure (spoke holes, etc).

WM Rim

Also known as the cylindrical bead seat rim. Dimensions range from 30.5 mm (1.20 inches) x 9 mm to 55 mm (2.15 inches) x 14 mm. For tube-type tyres only.

CP Rim

Also called reversed taper or contrepente rim. Flanges from 40.5 mm (1.60 inches) x 12 mm to 70 mm (2.75 inches) x 14 mm. Tube-tyre tyres only.

MT

Five-degree taper rim. Height is 14 mm throughout the range of widths, which is from 47 mm (1.85 inches) to 101.5 mm (4.0 inches). Tubed or tubeless tyres permissible.

MT H2

Five-degree taper, double-hump rim. Height of 14 mm. Widths from 40.5 mm (1.60 inches) to 140 mm (5.5 inches). Tubeless tyres only.

Summary

THERE'S a lot to know about tyres if you want to get serious about the subject. What's included here is about as much as road-riders really need to know, but it really only scratches the surface.

So many ideas, theories, principles, standards, etc, exist in the tyre business it's hard to figure exactly who or what is right when conflicts arise. The key here is to believe everyone's right if their concepts work, and then find the concept which suits you.

But how to find out which one suits your needs? Which tyre? One of the problems with dealing with the trade — tyres or whatever — is being armed with the knowledge to be taken seriously by salespeople who know their stuff but have to deal with buyers who don't know much at all. Ask the right questions and you'll get the answers — hopefully this feature has, if nothing else, given you a broad enough understanding of the questions involved in tyres to allow you to work it out.

When shopping around, though, remember brand loyalty is very strong in this part of the industry! Getting 'balanced' views could be difficult . . . Finally, there's just one more thing you need to know. Almost everything you have read so far, with a few exceptions, is not to be taken as lore. There's an exception to every rule, they say — especially in the tyre manufacturing game! Sheesh . . .

ITINERARY:

SATURDAY 2nd; Leave KBCP at 8.30AM sharp, travel down to Geelong then along the Ocean Road to Mt.Gambier - approx 550kms. Overnight star at Jens Hotel.

SUNDAY 3rd; Continue along the coast then inland to Murray Bridge and the Bridgeport Hotel - approx 375kms. Unpack then head for Birdwood and the "National Motor Museum" (largest collection of motorcycles in Aust), View at leisure then back to our hotel.

MONDAY 4th; Spend the day "exploring" the great roads in and around the Adelaide Hills. Back to the Bridgeport Hotel for our second night.

TUESDAY 5th; Today will be spent travelling back to Melbourne, depending on route expect to cover 650-700kms.



WHERE:

A = ANDI

R = RITA

KW/t.U+I? = THE
POWER
TO WEIGH
RATIO YOU &
CAN ONLY DREA
ABOUT!

A x R x 2 x FZR1000 : KW/t.U&I?

CAMPING/DIRT RIDE NOV. 22-24.

ITINERARY:

FRIDAY 22nd; Leave Hallam at 7PM & travel to Maffra for an overnight stay in a local Hotel.

SATURDAY 23rd; Head for Valencia Creek and the Pinnacles then on to Arbuckle Junction & Guy's Hut for lunch. Over the Howitt High Plains to the Macalister River and an over-night camp.

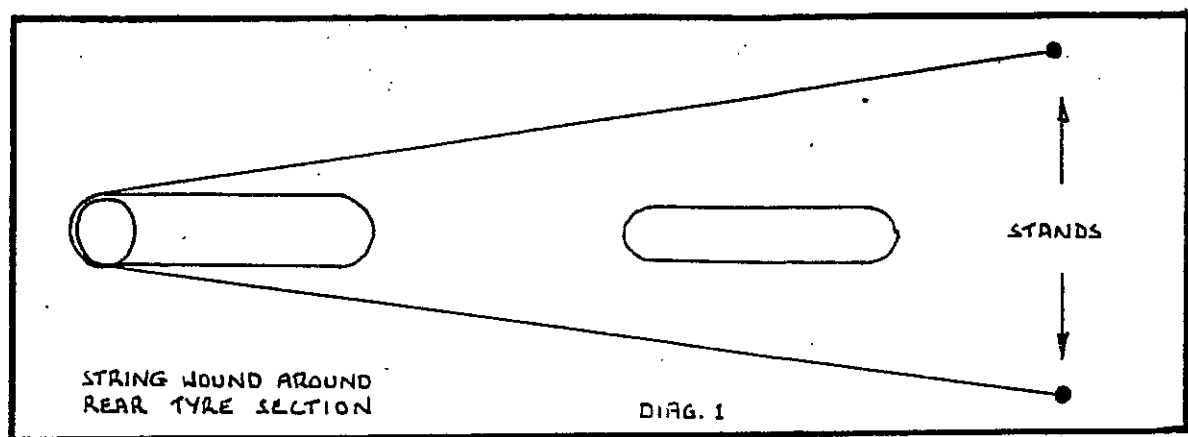
SUNDAY 24th; Up to Kingbilly & Lovick's Hut then down The Bluff track to Sheepyard Flat, Mansfield then inland to Cumberland Junction and home.

We intend to have a vehicle meet up with us on Saturday night and bring the camping gear & spare petrol.

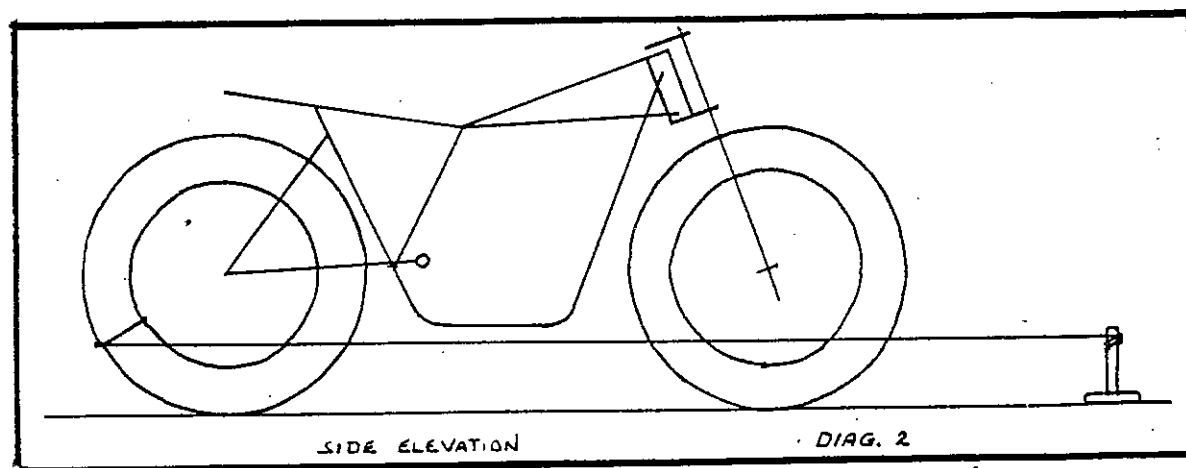
You will need to supply: Jerry can for petrol, Puncture repair kit, camping gear, Warm clothing, Spare cables, Food, Drink, Backpack, Tools etc etc.

Those contemplating going please contact Les Leahy for further details.

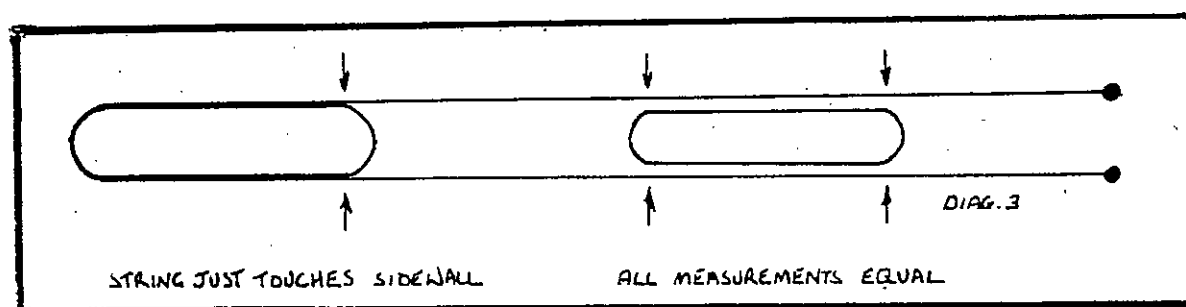
GOING STRAIGHT.



Place bike on flat level ground (up on centre stand), wind string around back tyre and tie each end to an axle stand (or similar) and pull string tight. Diag 1.



Point front wheel straight ahead and rotate back wheel so that string is held as high as possible without fouling on any of the bike's fittings. Make sure the string is parallel to the ground, adjust at the stand end. Diag 2.



Now with the stands apart, move them together until the string is just touching the side walls at the front of the REAR tyre. Now measure the distance between the string and the four points it passes on the front wheel. Diag 3.

If they are equal, wheel alignment and frame is OK. If not adjustment of the rear wheel is necessary, If both measurements on one side of the front wheel are larger than the other, the rear wheel is pointing slightly to that side. Loosen axle and adjust wheel accordingly, then string line wheels again. A few attempts may be necessary.

Once satisfied repunch adjustment reference marks on rear wheel adjusters.

PS. Only suitable for chain drive bikes...

	Members	Address	Home	Work	Motorcycle(s)
	Barta, John	28 Pine Rd Bayswater 3153	729-1712		Yamaha XJ900
	Bastock, Martin	1/4 Swinton Ave Kew 3107	853-7628		Honda CBR1000
	Bates, Stuart	4 McComb Blvd Frankston, 3199	787-1321		Kawasaki ZZR250
	Bloxham, Frank	41 Albert St, Mt Waverley, 3149	807-5212	420-8277	BMW R80 G/S
	Bradshaw, Ross	1/13 Orchid St, Heathmont, 3135	720-5317	603-4111	Kawasaki GTR1000
	Breare, Garry	35 Hannover Rd, Healesville 3777	059-622-949		Yamaha XJ900
	Brew, Max	RSD 9090 Willowgrove, 3825	051-271-222		Kawasaki GPz900
		Residential: Cnr Wilkes and Old Sale Rds			
	Brown, Alec	155 Power Rd Doveton 3177	791-1297		Suzuki GSXR1100L
	Brown, Noel	5 Shoring Rd, Diggers Rest 3427			Kawasaki GPX250
1	Brown, Ken	294 McKinnon Rd, McKinnon, 3204	578-3403		Honda 175CD
1	Carron, Fred	38 Valentine St, Ivanhoe, 3079	49-2776		
	Chan, Michael	100 Creek Rd Mitcham 3132	874-3373		Suzuki GSXR1100K
	Clifton, Gary	1 Hubert Ave Glenroy, 3046	306-7071		Honda CBR1000FK
	Clowes, John	17 Auburn Rd, Healesville 3777	059-622-309		Yamaha FZR1000
a	Clark, Tania	31 Snowden St Laverton 3028			
n	Cole, Daryl	1/69 Paris Square Narre Warren 3805	702-8324		Yamaha FZR600
	Crussel, Ron	2 Banksia St Sth. Oakleigh 3167	579-0917		Honda CB900F2
	Davies, Colin	94 Bowen Rd East Doncaster 3109	842-5098		Yamaha RZ250
	Davis, Mike	12 Rolland Crt., Montmorency, 3094	439-2378		Kawasaki ZZR250
	Dunn, Andrew,	3/17 Wimbledon Ave, Elwood, 3184	531-8034		BMW K100RS
a	Dunn, Pam	3/17 Wimbledon Ave, Elwood, 3184	531-8034		
	Dwyer, Peter	P.O. Box 57, Altona, 3018	398-2322	398-2322	Yamaha XJ900
n	East, Rod	2/15 Lindwall St Glen waverly 3150	803-3043		Suzuki GSX250
	Forsait, Doug	3 Toulon Ave Carrum 3197	772-4355		Kawasaki ZX10
*	Forsait, Stuart	14 Elvie St Doncaster East 3109			Honda CBR1000
	Gooding, Kerrie	2/3 Leroux St, Oakleigh, 3166	563-2410		
	Gouthro, Anita	4 Ralph St, Blackburn, 3130	878-5657		Honda CBX250
	Green, Vince	2 Dugdale St Taree 2430	065-523-105	065-51-0088	Honda ST1100
	Gustus, Tony	4 Bardwell Ave, Frankston, 3199	770-2092	706-5099	Yamaha XJ900
*	Harris, Trevor		434-4179		Kawasaki KL650
	Hodgetts, Peter	1/2 Lee Crt, Heathmont, 3135	870-3315		Yamaha FJ1100
	Hosking, Ian	6 The Brentwoods, Chirnside Park 3116	735-4951		Kawasaki GPx250
a	Jackson, Barbara	c/o Wilkes Rd Willow Grove 3825			
n	Jones, Geoff	34 Argyll Circuit West Melton 3337	743-3164		Yamaha RZ350
n	Kennedy, Andrew	79 Hull Rd Croydon 3136	725-9267		Honda CB1100RC
*	Kesting, Paul	18 Highfield Ave Warrenwood 3134	879-0029		Suzuki GSXR1100H
	King, Ross	23 Nicholson St, Essendon, 3040	370-9479	688-3400	Yamaha XJ900
1	Leahy, Les		889-6505		
	Lee, Chris	66 Ormond Rd, Clayton, 3168	543-2807		Honda VT250
n	Lennox, David	5 Lachlan St Bundoora 3083	467-2349		Kawasaki GPz900R
	Leyland, Steve	Honeyhush Caravan Park			Kawasaki GPx750
		6 Leakes Rd, Laverton North, 3026			
	Llatse, Jacquie	310 O'Neils Lane Anakie 3221	052-841-383		Kawasaki GPx250
	Llatse, John	310 O'Neils Lane Anakie 3221	052-841-383		Kawasaki ZXR750
	Locke, Adam	29 Grange Rd Sandringham 3191			Honda CBR1000
	Makin, Eric	17 Auburn Rd Healesville 3777	059-622-309	287-1627	Kawasaki KR1S-250
	Merz, Eric	7/27 Broadway St Chelsea 3196	772-9640		Yamaha FZR1000
	Miller, Harold	33 Day Cres., Nth Bayswater, 3153	761-426	328-4703	Yamaha FZR600
	Miskin, Rod	18 Linlithgow St, Mitcham, 3132	874-5569		Honda VF1000FII
	Mountney, Terry	6 Lambassa Grv. Keon Park 3073	460-1519		Kawasaki GPz900R
	Osborn, Gary	11 Aberdeen Rd, Blackburn Sth., 3130	877-3231		Kawasaki GTR1000
	Parker, Angus	P.O. Box 195 Bentleigh 3204	557-4833		Honda CB900F2

	Payne, Ian	2/3 Leroux St, Oakleigh, 3166	563-2410	550-6428	Yamaha XJ900
1	Philferan, Peter	19 Aird St, Camberwell, 3124	813-3518		Kawasaki GT750
	Piller, Vicki	12 Timor Parade, West Heidelberg, 3081	457-4479	867-1666	
+	Pope, Wayne	Lot 20B, Talbot Clunes Rd, Dunach, 3371			Honda XR600
	Price, Gary	5 Fallon St, Caulfield Sth, 3162	571-6941		Yamaha FZR1000
	Richardson, Luke	2/1 Linton Crt, East Hawthorn, 3123	882-9645		Yamaha FJ1100
	Riddett, Jon		877-6712		BMW K100RS
	Robinson, Lisa	11 Athenium Crt Carrum Downs 3201	785-2480		Kawasaki GPz900
	Saville, Tom		848-7867		BMW R80 G/S
	Schwarze, Dot	1 Hubert Ave Glenroy 3046	306-7071		
1	Shearer, Len	798 F'ntreegully Rd, Wheelers Hill, 3170	561-2857		
	Shelley, Margaret	7/750 Inkerman Rd Nth Caulfield 3161	509-4645		Suzuki GS650
	Sirianni, Sam	7 Surrey Close, Hallam, 3803	703-2405		Yamaha FZR1000
	Sirianni, Rita	7 Surrey Close, Hallam, 3803	703-2405	891-473	
	Sirninger, Andrea		848-7867		BMW R80 G/S
	Spackman, Terence	9 Taronga Crt, Nunawading, 3131	891-473		Yamaha SRX600
	Staniforth, Simon	17 Martin St, Box Hill North, 3129	890-1230	428-0999	Honda ST1100
	Stanley, Michael	6 Well St Brighton 3186	592-7990		BMW K100RT
+	Stroud, Chris	21A William St, Abbotsford, 3067	428-2286	344-5699	GSXR1100H
	Thomas, Ray	PO Box 242, Rosanna, 3084	458-4984		Kawasaki ZX10
	van Dorp, John	6 Leakes Rd Laverton 3028			Honda VF1000FI
	Warden, Ben	12 Timor Parade, West Heidelberg, 3081	457-4479	344-5733	Kawasaki ZX10
	Wurster, Hans	21 Medford St, Altona, 3018	398-5575		BMW K100RS
	Wurster, Ken	15 Redwood Drv, Hoppers Crossing, 3030	749-5575		BMW K100RS
a	Wurster, Ann	15 Redwood Drv, Hoppers Crossing, 3030	749-5575		
	Yates, Gary	18 Runnymede St East Doncaster 3109	842-5304		Kawasaki KL650
	Youdan, Jack	22 Fort St, Mt Waverley, 3149	232-3564	311-6555	

* changed address or phone number

+ new bike

1 life member

n new member

a associate member

Life Members - 5

Associate Members - 4

Full Members - 69

Total - 78



ALSO:

REPAIRS

ALTERATIONS

ZIP REPLACEMENT

& CUSTOM MADE.

(Margaret Shelley's sister)