

LOOSE FILLINGS

GOOD VIBRATIONS

Elsewhere in this issue we mention the award of the Ashley Cowan trophy to John Coffin, some recognition for his unceasing enthusiasm which has done so much to help the air-cooled revival in Victoria. We also mention that the first 30 issues of *Loose Fillings* are now available on compact disc, and we describe a successful starter-motor installation – two ways of showing that while we enjoy playing with 50-year old cars, modern ideas can sometimes help.

LOST AUSTRALIAN 500S – THIRD IN AN OCCASIONAL SERIES

FIRST TO RACE - THE CONOULTY 500

The Conoulty 500 seems to have had just one race before disappearing some time after the 1948 Easter Bathurst meeting, where it completed practice and two laps of the Bathurst 100. As such it was probably the first 500 – either imported or locally-built - to actually race in Australia, as distinct from appearances of 500s in hillclimbs.

Bill Conoulty competed on motorcycles from 1917 with considerable success, and started racing on four wheels in 1929. In the 1930s he ran a garage and car sales business in Oxford St, Paddington, and gained a giant-killer reputation with modified Austin 7s, for which he also built two twin overhead-camshaft heads. After spectacularly crashing a Seven at Bathurst in 1947 he was reported as having decided to retire from race driving. Nonetheless,

when his 500 appeared at Mt Panorama Conoulty was the driver, although the car was entered by Arthur “Nobby” Emerson.

The car was briefly described in Australian Motor Sports magazine in October 1947, and the same description was used in the program for the October 1947 Bathurst meeting, for which the car was entered but did not appear.

“If this car gets off the line it will be the first of the NSW crop of 500cc cars to see the light of competition – there is a flourishing club devoted to these little machines, but so far activity has been confined to the workshop and none have been seen. With an Ariel 500cc single engine, light tubular frame and independent suspension by torsion bars all round, chain drive to a conventional Austin rear end, the power to weight ratio should be good.”

The report of the October 1947 race noted that the car had not been completed in time, and in the Easter 1948 program the same summary of its mechanical layout was used.

The two photographs I have seen of the car from Easter 1948 show a front-engined central-seater with 19-inch wire wheels and with only the centre section of a body, but with framing which indicated a finished version of the body would have been of more or less conventional single-seater shape, with a high driving position and a very high tail.

Continued on page 6

Below: Bill Conoulty and his 500 heading up Mountain Straight at the start of the 1948 Bathurst 100, with other early-handicap cars ready on the startline. Photo by the late Byron Gunther courtesy Garry Baker.



COWAN TROPHY TO JOHN COFFIN

The Ashley Cowan trophy, presented annually by Historic Sports & Racing Car Association for best performance by an air-cooled car, has been won for 2008 by John Coffin, for his consistent performances and regular appearances at Victorian sprints and hillclimbs with his very original Robbins BSA.

BOB GIBBONS CORRECTION

Bob Gibbons' Mk5 Cooper (*Loose Fillings* #30), first appeared at Wigram in 1952, not 1951, and it did not race at Mairehau, although Graham Vercoe's book *Historic Racing Cars of NZ* says it did. Bruce McLaren, not Tony Shelly, was NZ's first F1 driver.

LOOSE FILLINGS BY EMAIL & NOW ON CD

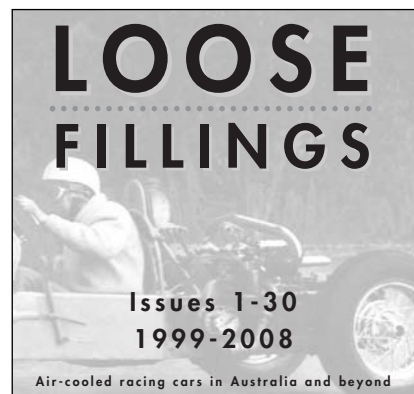
You can get *Loose Fillings* faster by e-mail (and save us postage at the same time) as follows.

- In New Zealand please email Ian at garmey@xtra.co.nz.
- In the UK and Europe please email James at James.Holland@icap.com.
- For Australia and elsewhere please email Garry at gjsimkin@iprimus.com.au.

For *Loose Fillings* to arrive by post please send Garry Simkin a book of 55 cent stamps (address on back page) from time to time.

The first 30 issues of *Loose Fillings* are now available as Acrobat files on a CD, (right) complete with an index. Copies are available as follows

- In New Zealand it's \$NZ20 post free



from Noel Martin-Smith, phone 06 875 8235.

- In the UK it's £10 post free from James Holland.
- For Australia and elsewhere, it's \$A20 post free from Garry Simkin.

50 YEARS SINCE WALTON'S FIRST AUSTRALIAN CHAMPIONSHIP

November 2008 was the 50th anniversary of the first of Bruce Walton's six consecutive Australian Hillclimb Championships. This was an unprecedented series of victories, and a sequence which only ended when he decided to retire. For all six title events he drove his self-developed supercharged 1100cc Cooper-JAP, winning at Rob Roy and Templestowe (1958), Hobart Domain (1959), Collingrove (1960), Toowoomba (1961) and Silverdale (1962 and 1963). He was always very generous towards his rivals, perhaps because he exactly understood how difficult it was to compete at the level he set himself. Accompanied by his supportive wife Camille he is still an occasional visitor at Victorian hillclimbs — surely the most unobtrusive six-times champion ever to have graced our sport. Below: Bruce Walton tips the Cooper into the first corner at Templestowe, year unknown. Where the spectators are standing, there is now a fence with houses behind. However most of the course remains in a park. Last year Bruce and Camille Walton took Terry Wright on a tour including the truly daunting "Wall" (right). What about a "Revival" of some sort, Victoria?



BITS & PIECES

● Forty years after it last raced, the remains of a very simple air-cooled racing car survive near Dunedoo in north-western NSW. Des Kelly, who lives in the area and who used to race a locally-built Ford V8 special in historic events, told *Loose Fillings* the air-cooled car had been built by Fred Nicholls and raced by him on the local dirt circuit at Pound Hill, which operated in the late 1950s. The car is essentially complete, but minus engine and gearbox.

The car used a Triumph Speed Twin engine and gearbox in a largely unchanged Austin 7 Meteor chassis. The chassis retained the Meteor radiator cowl and the Austin suspension, mechanical brakes and steering adapted to a central driving position. The car used a live rear axle, but avoided some of the problems of other live-axle 500s by mounting the engine/gearbox assembly on a swing-arm which was tied into the rear axle, but pivoted on a rubber bush at its forward end. While this meant the engine moved with every movement of the rear suspension, chain alignment and tension – the perennial bugbear for chain drive to a live rear axle – remained constant.

● Three air-cooled cars contested the hillclimb held at Mt Leura, near Camperdown in Victoria, as part of the 12th Australian Masters Games on February 21-22. Graeme Noonan broke the gearbox case on his Cooper Mk7 Norton and Paul Schilling had more frustrating engine problems with the RP Kawasaki. As a result, David Palstra, running a borrowed 350cc BSA while his 500cc engine is being rebuilt, was the only air-cooled runner to get a time – and won a gold medal! At the presentation he was introduced as “the Stephen Bradley of the Masters Games,” recalling the shrewd Australian speed-skater who won gold at the 2002 Winter Olympics.

● Early history of the 750cc BMW-powered car run in historic by the late Hank Northey, and nowadays owned by Pat O’Carroll on the NSW north coast, has been provided by Bruce Polain, who with longtime motorsport partner Phil Spring bought the car and gave it its first competition outing at Foley’s hillclimb in 1957. It has always been a puzzle that, despite being laid down by the Hooper brothers who had earlier built the very successful Hooper 500, their BMW-powered car in general did not seem like a car intended to improve on the Hooper 500’s impressive record in sprints and hillclimbs, being heavier than the Hooper 500 and using a side-valve engine, three-speed gearbox and beam-axle front suspension.

According to Bruce, the Hooper BMW was intended to be a road car, but there was some problem getting a suitable body and the Hooper brothers lost interest. By the time the car reached the Polain/Spring consortium, some previous owner had given it the simple single-seat body it still has.

● Queenslander Neil Cummins, who lives at Caboolture just north of Brisbane, has sent some background on the Shamrock Enfield 500, which he bought from Terry Hanly in 2008. No history is known prior to 2005 when Terry acquired the chassis from someone who had found it in a scrap yard but had never done anything with it. Terry manufactured all the suspension components and used Morris Minor brakes, wheels and steering rack and also made the body. He fitted a brand new Indian Royal Enfield 500 engine because it had electric start, so he didn’t need pushers.

In late 2007 Terry retired from racing, and Neil decided to buy the car, one reason being the electric start. Another reason was that, having a stiff leg from a motor bike accident some years ago, he could replace the clutch pedal with a motor bike clutch lever on the gear lever. He has since driven it at GEAR days at Queensland Raceway, and at the 2008 Speed on Tweed, about which he said, “had a great time and loved it”.

● In New Zealand, the collection of parts of two JBS 500s which had been accumulated over the years by Max Fisher, Norm Holloway and Dion Coleman has been purchased by Laurie Callender and Max Rutherford of Taranaki. Laurie’s father Johnny imported and raced a JBS in the 1950s and Laurie has all the correspondence pertaining to the purchase of this car in UK. As with most old racing cars world-

wide, these 500s were hacked about and re-engined etc as they became less competitive, but there is now the prospect they could re-emerge in their original form.

To almost universal surprise, another JBS, looking tatty but apparently highly original, surfaced in Belgium last year. So far no further information has been unearthed about the history of this car.

● Bert Flood, a very effective driver of Jack Godbehear’s 500 in its Norton-powered late- 1950s form, died in Melbourne in January 2009, aged 79. Although having sight in only one eye, he was also a successful motorcycle racer on marques as varied as Lambretta and Bultaco, also raced go-karts, and more recently played an important part in the development of Australian ultralight aviation as the Australian agent for Rotax.

ROB ROY NOVEMBER 2008

by John Coffin

Back in April 2008 I suggested to MG Car Club’s David White that there should be special efforts made to get historic air cooled cars out for the November Rob Roy meeting, including cars from interstate (although unfortunately the Rob Roy date clashed with the Tasman Revival meeting in NSW).

We finally had five runners - Lindsay Urquhart’s Coopin Anzani V-twin (best time 28.70 seconds), Neil Videan’s Cooper Irving s/c (29.53), then an amazingly tight group of 500s, my Robbins BSA (32.39), South Australian Kevin

Below: the Bowman JAP, built in southern NSW in the mid-50s, and used only twice, returned to competition with owner John Lennon at Speed on Tweed 2008.



Shearer's White 500 JAP (32.38), and David Palstra in Graeme Noonan's Cooper Mk7 Norton (32.39).

Other cars that had wanted to run but missed out due to other commitments were Derry Greeneklee (Cooper Mk9 1100, SA), David Palstra (Newbound 500), Keith Roberts (Pentland JAP) and John Hazelden (Sidney Rudge). Ken Bedggood and Penrite's Cooper did not run, but the car was on display. In other words, we potentially had ten cars available, which augurs well for the future.

On the Saturday before the event I picked up Kevin and Joan Shearer and took them to Rob Roy. As it was not raining we made two climbs in my road car to show them the hill. After Sunday, Kevin said he was keen to return, and Derry

Greeneklee has also said he wants to come over at a later date.

The only mishap for the day was Lindsay ending up with his front wheels pointing in different directions after leaving turn one. The chassis was bent, the lower wishbones were sadly out of shape and a steering arm was broken.

At the presentation I thanked David White for his ongoing support for Historic air-cooled cars and for allowing us to have a near-permanent position in the pits. During the day the course announcer kept referring to the "Air Cooled Corner," and in time we may get some sponsorship for this area. I also thanked Kevin and Joan for their support in travelling from South Australia. A great day was had by all, with good times and good racing.

scratch race at Mt Panorama at Easter 1955.

Austin was born at Fassifern, near Newcastle NSW, in 1929, the year after his family emigrated from England. He trained as a motor mechanic and in the 1950s ran a small workshop (since demolished) on the eastern side of Sydney's Circular Quay, before joining C.V. Holland at Rockdale to manage their used car division. In the 1970s he was appointed manager of Jack Brabham Ford at Greenacre, and went on to become general manager of Saab in Australia.



Right: Austin Tauranac with Ron in the background at Eastern Creek in 2003.

Below: Austin takes the Norton special down the hill to the start at King Edward Park 1954.



CLASSIFIEDS

For sale: Arnott JAP, 1952, one of two special long-chassis cars ex Ivor Bueb, modified in England by Pip Preece to coil-over suspension and lengthened by 10" in the centre of the chassis. Immaculate condition. Contact Rob Williams, NZ 09 427 8120 or roshwill@orcon.net.nz

For sale: BB Ariel, built '60-'61, Red Hunter engine, Norton box, complete spare engine plus engine and gearbox spares, new body panels. Chris Tracey, 02 6280 5285

For sale: Cooper Mk5, ex Hawkes, Patterson etc, huge Australian history with 500 and 8/80 JAPs including 1954 Australian Hillclimb Championship. Freshly overhauled 500 JAP. Offers to Don Biggar, 07 3889 7188

For sale: Cooper Mk5 MKV/8/51, 1951, ex Bob Gerard with Manx Norton, to Australia ex South Africa. Now with long-stroke Manx, new cases and timing covers, all new internals, fully rebuilt by Manx guru. Original Cooper steering wheel and magnesium road wheels. Brakes, chains, bearings all new, BTH TT magneto, new Amal series 1000 36mm carburettor. More details on request. Shipping and crating anywhere. \$38,000, Franc Trento, EuroBrit Australia, 03 9432 6886, www.eurobrit.com.au

For sale: Gilbert JAP 500, built 1968 by Roy Gilbert with 1938 4-stud JAP 500, upright Norton box, 10-inch steel Mini wheels. Spares include registered trailer, small Shorrock blower, some engine, gearbox and carburettor spares. \$10,000 or offer, John Cooper, 02 4982 6370, 0407 202 436

For sale: the Vincewill, built 1961-62 in Repco workshops by Brian F. Wilson, used in sprints and hillclimbs with Vincent twin; all later owners known. CAMS approval in principle to restore with Triumph 650 as presently fitted, but damaged. Keen to sell. Colin Goldsmith (Victoria), 0416 057 855

For sale: motoring and motorsport books and magazines, mostly US and European, email for 12-page list. Graham Howard.

Wanted: pre-WW2 Morris 8 Series I stub axles, steering arms, tie-rod ends and front brake backplates. Series I has bolt-on steering arms, not taper-fit type. Graham Howard, grimes@ix.net.au or 02 4787 8772

For Sale: Waye 500, built in 1953, CAMS log book, JAP 500 dry-sump engine, Norton gearbox, roll bar fitted, new upholstery TT carburettor, Lucas magneto, eligible to run overhead cam Norton, ready to run, \$16,000 ono, Andrew Halliday 02 9888 6175.

A revolution - that's all it took

BY TERRY PERKINS

When I purchased the Scarab Triumph in late 2007 I had three objectives; the first was to 'tidy up' the car and repair any broken or worn parts, the second was to fit an electric starter motor system to the car and the third was to have a reliable car to use at club level. The first objective turned into a comprehensive restoration of the complete car over 12 months. The starter motor system was a challenge and is the subject of this article.

The Scarab has a Triumph Bonneville 650cc twin engine and I was advised that other people had been down the starter motor path with Triumphs and that Alan Morton on the Gold Coast had been developing a starter for his Triumph powered Alba. I visited Alan at the first opportunity and I am indebted to him for his assistance.

The system is based upon the starter system from a Kawasaki Z440 twin, which has a reduction-geared Mitsuba 224 starter motor coupled to the crankshaft via a chain driven sprag clutch. Fortunately I was able to source a Kawasaki sprag clutch from a Gold Coast motorcycle wrecker while visiting Alan Morton, and there was room in the front of the car for a small 12v Pulse battery.

The plan was to mount the sprag clutch on the left end of the Triumph crankshaft with a purpose-made mounting hub secured to the crankshaft using the existing 4mm keyway. The clutch assembly originally contained a bronze bush and was lubricated by the crankcase oil, but with it now mounted externally it was replaced by a Teflon bush as this would require minimal lubrication.

The next step was to mount the starter motor on the front engine plates, which meant the starter had to drive in a counter-clockwise direction. Alas, the Mitsuba 224 runs in the other direction.

This starter motor was chosen because it was relatively small and light, and contained a 7:1 gear reduction which may help turning the 650cc twin although it was designed for 440cc. Advice from the local auto electricians was that if I rotated the brush plate in the starter 90 degrees in either direction it might work. This involved a bit of surgery on the internals but was successful in altering the rotation direction.

At this point the engine was out of the car and on the bench, so the next step was to mount the starter and bench test its operation. The first test was with spark plugs removed; this worked fine and it was look-

ing good. The next was to try it with the plugs in and see how it handled the 11:1 compression. On this test the starter hesitated at the top of each compression stroke. It needed more power to push it through compression and seemed to be stressing the starter motor.

Most suggested that I fit either exhaust valve lifters or decompression valves. Either of these options would allow the engine to build up speed before turning on the magneto. I took a different approach by fitting a locally-made 3:2 reduction box in the chain drive between starter and sprag clutch. This gave 50 per cent more torque at the crankshaft and provided smooth, slower rotation of the engine without

stressing the starter motor.

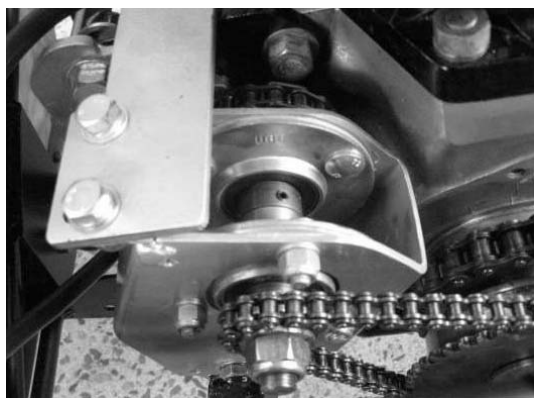
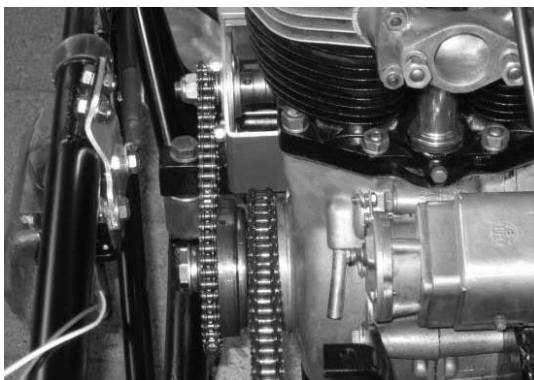
Although I had not owned a Triumph motorcycle I was aware of the kick-back one could get when kick-starting with the engine trying to run backwards, and I wondered what this might do my starter motor system. The engine came equipped with a BT-H magneto which had no auto or manual advance/retard, and I thought this could be a problem and make it hard to start with the slower rotation speed from the starter. In the '60s and '70s, BT-H did make a centrifugal advance/retard magneto drive gear to overcome the kick-back problem, but I was unable to purchase one anywhere on the internet.

While searching for a solution I visited the BT-H website in the UK and discovered that they now supply 'state of the art' breakerless magnetos for most British motorcycle engines. These replacement units have electronic advance/retard, look like the 1960's magneto, and just bolt straight on. Tony Harris of BT-H was most helpful, advising that these magnetos are designed to operate at considerably lower engine revs than the older magnetos which were designed around kick-starter or bump start speeds of approx 380rpm. The new magneto will operate at 150 crankshaft rpm.

The next step was to determine accurately the crankshaft speed when the starter motor was working against full engine compression. With the aid of my video camera I ascertained the speed was 192rpm. Eureka! I bought a new magneto, which arrived from the UK in four days. The engine was now back in the car and it took about two hours to fit and time the new magneto ready for the big test.

It took only one revolution for the engine to burst into life. I have been using the car regularly for local hill climbs and the GEAR days at Wakefield Park near Goulburn. It has proved reliable and still starts very easily.

Top: rear view with the sprag clutch on the outside of the primary drive sprocket. Middle: the starter motor in front of the engine drives the small sprocket which drives the big sprocket on the sprag clutch (bottom).



Continued from page 1

There cannot have been much by way of a floor when the car appeared at Bathurst, because the AMS report in 1948 mentioned Emerson brought the car to the line by using his feet to pedal it along the ground.

The photographs also show that in the metal the car differed considerably from its published description, notably in having neither torsion bars nor independent suspension. I have been fortunate to talk on several occasions to Bill Conoulty junior, now in his 80s, and he has provided much useful information to supplement the photographs.

The chassis, brazed from tube of about two inches diameter, appears to be a ladder, widest at the centre, tapering to either end, and without any kick-up at the rear axle. The steering system is unclear beyond the steering box, which is Austin 7, mounted on the centreline, ahead of the firewall and behind the engine. A gracefully curved tubular front axle – surely built specially for this car – was located sideways by a transverse leaf spring and fore-and-aft by paired radius rods.

Friction front dampers are visible, but the car had no front brakes, only mechanically-operated rear brakes. The photographs suggest the rear axle was located by single trailing arms on each side, but the rear springing is not visible. Wheels were Austin Big 7. The car had cylindrical tanks on each side, carried outboard of the chassis and below the chassis line. At least one of these tanks carried fuel. Bill Conoulty jnr told me this tank was pressurised to 5psi using a hand pump.

The engine, he recalled, combined an ex-army Ariel head and barrel with a Harley Davidson crankcase, which was chosen to cope with the 10:1 compression ratio. The carburettor was a 75mm Rochester from a Chevrolet 6, the rod was from a Norton Inter, the flywheels special-

ly made. The engine, mounted transversely, drove to an Austin 8 clutch and a close-ratio “herringbone” Austin 7 gearbox, and there was some form of chain drive along the driveline which allowed gearing to be varied. At Bathurst the car had fuel-supply problems, and the main jet was bored out and extra fuel pumps fitted; fuel pump failure was reported as causing the car’s retirement.

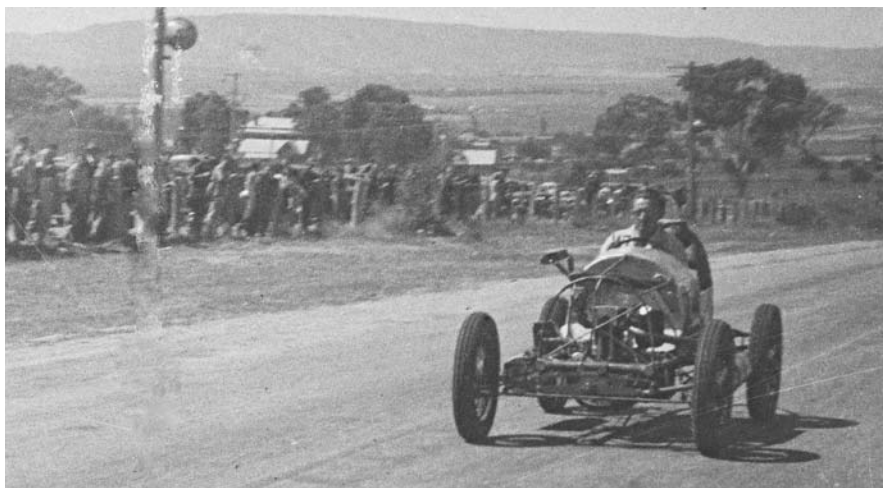
Bill Conoulty jnr told me both the 500 and the last of his father’s Austin 7 racers were sold to Emerson. I have not found any subsequent reference to the 500. While it might have been scrapped, its chassis specification suggests it could also have formed the basis for a speedway car. Bill also told me his father and Emerson “started the 500 Car Club,” and in the published notes of the first year of the NSW club, Conoulty snr is mentioned as one of two vice-presidents and a member of the technical committee (but only for 1947).

While talk of independent suspension and torsion bars would have been in character with the theory-laden world of the 1940s 500cc movement, it could well be that the very lack of such stuff on the Conoulty 500 explains how this car became the first Australian 500 to reach a race track – it was because its constructor worked with what he knew best, and built what was in effect a motorcycle-powered Austin 7 special.

As such, it looks like the car was well done and its layout had potential, as was shown by some of the early front-engine/shaft-drive British 500s. But only a few months before the Conoulty 500 ran at Bathurst, the Hooper 500 had made its impressive debut at Hawkesbury. Rear-engined, and combining simplicity with all-independent suspension, the Hooper spelled out what a 500cc car should be.

Graham Howard

The Conoulty passes the pits during practice.
Photo by long-time 500 supporter F A Schubach



THE LOG

With each issue of *Loose Fillings* we proudly list those happy occasions where one of our cars has fired up in public. The following marks those occasions since mid-November.

- Nov 23, 2008, Cooperabung hillclimb, Kempsey – Terry Perkins, Scarab Triumph 650.
- Nov 29-30, Eastern Creek historic races – Andrew Halliday, Cooper Mk5 Norton.
- Nov 30, Rob Roy hillclimb - John Coffin, Robbins 500 BSA; David Palstra, Graeme Noonan’s Cooper Mk7 Norton; Kevin Shearer, White 500 JAP; Lindsay Urquhart, Coopin Anzani; Neil Videan, Cooper Irving.
- Dec 10, GEAR, Wakefield Park - Terry Perkins, Scarab Triumph 650; Garry Simkin/David Williamson, Cooper Mk4 Vincent.
- Jan 18, 2009, RACV Rally, Mornington - John Coffin, Robbins BSA.
- Jan 25, Oran Park historic commemoration - Mike Bendiech, JMW CZ150; Andrew Halliday, Cooper Mk5 Norton.
- Feb 11, GEAR, Wakefield Park - Terry Perkins, Scarab Triumph 650.
- Feb 21-22, 12th Masters Games, Mt Leura hillclimb - Graeme Noonan, Cooper Mk7 Norton, David Palstra, Newbound BSA 350; Paul Schilling, RP Kawasaki 500.
- Mar 8, Cooperabung hillclimb, Kempsey – Terry Perkins, Scarab Triumph 650.
- Mar 23, Oran Park practice – David Williamson (Garry Simkin’s Cooper Vincent)
- Mar 26-29, Australian Grand Prix, Albert Park, demonstrations – Graeme Noonan, Cooper Mk7 Norton.
- Mar 28, Eddington sprints – John Coffin, Robbins BSA, Paul Schilling, RP Kawasaki
- Mar 29, Ian Garmey, Mk5/12/51 at the VCCNZ Waitemata Branch Springhill Sprint.
- April 1 - Wakefield Park, NSW, GEAR day; Terry Perkins (Scarab Triumph 650).
- April 11-12 - Mallala, SA, historic races; Derry Greeneklee (Mk9 Cooper JAP 1100), Kevin Shearer (White JAP 500).
- April 11-12 - Broadford, Vic., Classic motorcycles; John Coffin (Robbins BSA), Graeme Noonan (Mk7 Cooper Norton), David Palstra (Newbound BSA), Garry Simkin (Mk4 Cooper Vincent), Neal Videan (Mk5 Cooper Irving).

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