

LOTUS:11 & Clubman Notes



The Official Magazine of Lotus Club Victoria, Lotus Club Queensland

Features:

EMRs Australia Day Elan Restoration Lakeside Day



DIY: Inspection Panel Fasteners for Lotus Elise. by Rob Stevens

Those of us with Elise S2's are familiar with the two front inspection panels, directly in front of the windscreen: these are originally held in place with three hex bolts each, and are a real pain to remove when performing the simple duties of checking the water/brake fluid/radiator/Air Con unit, etc.

On the workbench, I re-discovered a set of stainless steel threaded pins - these accept an 'R' clip through the nose of the pin, and were originally destined for a quick-release system on the undertray of my Elise (via www.eliseparts.com).

I had tried using these pins there, and discovered it was next to impossible to push the R-clips into place with the weight of the undertray pushing down, so I decided to try them in place of the hex bolts on the inspection panels.

The results: really easy to install - the inspection panels already had the same size circlip in place - so by adjusting the threaded pins until they were snug, the R-clips just slot into place.

Easy!







Lotus enthusiasts are gathering at Easter 2011 for their Biennial weekend of driving, dining & socialising. Based around the picturesque Southern Darling Downs and featuring the highly acclaimed Morgan Park Raceway near Warwick; Put it in your diary now!

When: 22nd-24th April, Easter Weekend 2011

Touring & Social: Around the Great Dividing Range on the border between Queensland and New South Wales; Historic Warwick is only a stone's throw away from the Granite Belt Wineries, picturesque Killarney and Queen Mary Falls.

Track Venue: Morgan Park Raceway
Accommodation: Cherrabah Resort

To make bookings & for more information, head to www.lotus2011.com.au



Some unusual cars on the day. An early Toyota 700

and this year was no exception.

The day starts at around 7:30am with a breakfast B.B.Q then registration of entrant's vehicles. The cars are displayed on the ovals at the school and this year filled about one and a half ovals, approximately 200 - 250 cars of all shapes and sizes from Veteran, Vintage, Historic and Classic varieties.

Our Club was invited, and although numbers were down from previous years, still put up a showing with lots of spectator interest in the Lotus makes .

Two Sevens (Daryl & Moira Wilson, John Lungren), Chris & Greg Bray's

Elan, Russell & Leigh Carter's Esprit & Carlton and three Elises (John & Penny Barrum S1, Garry Pitt S2 and one unknown S1) made up the numbers. Mr. & Mrs. Dean arrived as spectators in their "Lotus" Mitsibushi Ute. — couldn't decide which Lotus to take??

The BVRC always organize four alternate runs later in the morning, finishing at the Alexandra Hills for lunch. However as the day was turning out to be a "scorcher" our Club members decided to call it a day and head off on their adventures.

Some members ended up at Anita & Derek's lovely Raby Bay home enjoying a cold drink, tea or coffee, sitting around the pool - a lot cooler. Thanks to the Deans for the invite.

Everyone enjoyed the day and I am sure will turn out to this rally again in 2012.

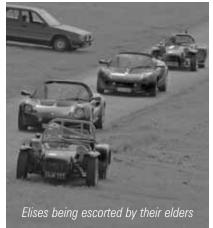
Lotus sport, the new and the old











Did I ever make comment about our glorious summer weather we have in SE Queensland? I can't remember, but if I have never mentioned it, I should, it's great. Blue sky, lovely temperature, 100% humidity, and that's only early in the morning, can't help but think I've heard this some where before...... And to think our southern friends often talk of the weather in such derogatory terms, I just don't understand.

Gosh this feels good, I haven't written an article for more than a year (the Elise decided to try a different route on Mt Glorious Christmas 2009). Every body should write an article, one always experiences a sense of, of, of, well a sense of, err, of, well yes, one should write a magazine article (you can always pad it out you know).

And so, one of the best track days occurred at Lakeside Race Park. LCQ (read Derek), at almost no notice, managed to pull off an extraordinary morning for the club; an early morning start at the track, 8:00 am breakfast of bacon, eggs, tea or coffee washed down with one hour of track time for all, no skill required, finishing at 9:30 am. Speed limited to 120kph, over taking on the main straight only, and all for \$20. When there's a deal to be done, Derek can do it, and what a great morning it was!

The opportunity for non-competitive track time brought many "non-track" members out of the woodwork, enjoying quick motoring without fear of a "flash for cash" moment to ruin their day. The 120kph speed limit also appears to have been inviting for many. There was no need for fire proofs, no need for helmets, no need for empty passenger seats and no need for people to feel they were placed in a situation out of their comfort zone. And those more addicted to race tracks, they were seen carrying passengers, no doubt pointing out the finer points of entering and exiting corners, applying power at the right moment, or applying brakes at the appropriate time and manner. Then there was the experience I encountered, a demonstration of the sheer joy that only an Elise powered by a super-charged Honda can elicit....awe. And if that wasn't enough, it was soon followed by a ride in a certain turbo-charged Datsun disguised as an MX-5, it was more than





DRIWING SKILLS — HEEL AND TOE

Driving on the road involves many skills and techniques. As we all own sports cars one of the joys of our cars in going round a corner. That is why roads like the Great Ocean Road are so popular. When approaching a corner we do several things. We assess the corner, we brake, change to the appropriate gear, turn into and drive around the corner, and then accelerate out of it. To make a smoother gear change we can learn the technique of Heel-Toe. When you down shift in a manual you can use this technique that allows you to brake and down shift at the same time. Why do you do this? The main reason is to give you the smoothest possible gear change to keep your car balanced and at the same time help preserve your gearbox.

Most racing drivers use this technique, unless they have semi-automatic gearboxes. For example the Formula Vee, Formula Ford, Formula Two, Formula Three, Sports Sedan, and Clubman drivers would all use this technique. There is no reason why you can't use it on your car.

For this article I have worked from my own experience (club motorsport with the Triumph Sports Owner's Association from 1984 to 1994); I've used a French-Canadian's driving instructor - Joe Bear's video on how to drive a racing car, and Peter Wherrett's book Motoring Skills and Tactics.

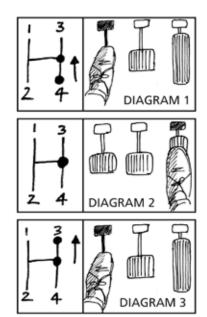
The Double Clutch

In the early days of motoring everyone who drove a car had to learn to double clutch when changing up or down the gears. This ensured a smooth, noiseless change. All cars are now fitted with synchromesh an engineering feature that allows for an accurate mesh of the gears making it easier to drive the car and change the gears. The driver who wants to improve his technique, to be a better, smoother driver with empathy towards his machinery will use the following techniques.

Firstly I'd like to deal with the simple down change, without the need

of brakes. For example as you approach a railway crossing which is usually on a different level to the road and effectively becomes a speed hump, you will need to slow the car down and then change into the right gear to drive on. Another example is going uphill and you are in too high a gear and need to change down. This technique is called the double clutch or double shuffle.

In changing down, for example from fourth to third, the driver will want to bring the engine speed up as he engages the lower gear.



With synchromesh he is able to simply change the gear then release the clutch pedal with the result, that for a brief moment, the transmission forces the revs up. The transmission is under considerable load with the possibility (usually in hard driving) of the rear wheels locking up even for a moment while the engine adjusts. Not smooth at all.

Using the double clutch method the driver brings the revs up smoothly so the change is smoother and places less load on the transmission.

How is it done?

Diagram 1). Disengage the throttle, push the clutch in and shift the gear stick to neutral. 2) Release the clutch and rev the engine. 3) Push the clutch in and complete the shift to third. 4) The shift is complete, now accelerate or decelerate as appropriate. Judging the right amount of throttle you give becomes based on experience, through trial and error, using your ears and your body/hands to feel the engine and gearbox, but a rough rule is to get 1000 more revs than the gear you are coming from. Once you are at ease with this you can then progress onto heel and toe.

Heel and Toe

Heel and toe originated, as above with early motor cars, especially in motor racing where it was essential to use this technique. The process of matching engine revs to gear and road speed was part and parcel of the corner approach procedure. It was this reason that lead car designers to position the pedals as they are today, to be able to operate the throttle and brake with the right foot. Literally, the ball of the foot (or toes) goes on the brake and the heel on the throttle - hence heel and toe. The other alternative uses the ball of the foot and the side of the foot. Both achieve the same outcome.



Some people will argue that it is a technique only for the racetrack. I disagree, I use it all the time! Practice makes perfect. One of the most used and abused gears is the second gear synchro and by using heel-toe I'm extending the longevity of the gearbox).

Most sporting cars have good pedal arrangements with the pedals being close together. Another factor to take into consideration which we can learn from is the boots that racing drivers wear. If you take close look at them you will notice they have a very thin sole like a ballet shoe. Why? For two reasons, better feel and they are not big and clumsy. Trying to heel-toe in big boots will be more difficult than a sleeker shoe with a thinner sole. Another safety tip is NEVER drive in thongs, (or for the ladies, in heels. Have a spare pair of thin-soled runners in the car for such occasions.) They could get caught up in the pedals and cause an accident. You are better off driving in bare feet (IF the only footwear you have is thongs).

How is it done?

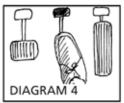
This example is based on driving a small open-wheel racing car with a straight cut gearbox with no synchromesh. Synchromesh does help with making the technique easier.

As you brake you have the ball of your foot on the brake pedal, heel in line with the gas pedal. As you down shift, to blip the throttle, all you have to do is roll your foot to blip the accelerator. To do this your knee should be cocked to the inside and your foot at an angle. You try to keep a good strong, steady pressure on the brake pedal and with the edge/side of your foot you are able to bring the revs up so the gears will mesh into the lower gears. After you blip the throttle you don't want to lose your brakes, you have to keep the pressure on the brake pedal. After you've blipped the throttle you also have to make sure your right foot is not touching the throttle. If you still have throttle pressure when your release the clutch you will accelerate against the brakes. When down shifting you have to blip the throttle before selecting the lower gear. When you blip the throttle the rpms will go up, it is when they start falling do you engage the lower gear. If you try to select the gear as the revs are rising you will get a lot of grinding and sometimes the gear will not go in. If you wait too long the revs will be back at idle and you'll get the same result as if the revs are too highs. Slipping the gear in as the rpms fall will make for a very smooth down shift.

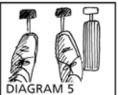
If you are not doing it right, say you over blip as you release the clutch the car will accelerate and you'll get a jerk forward. When you don't blip enough as you release the clutch the gears will grind and the car will slow down against the compression of the engine. Either of these scenarios will cause the car to become un-balanced. It may even spin and it may also cause damage to your components. Get it right and the car will remain in the same attitude. It's not going to change its attitude as you are slowing down into the corner. When down shifting you can use two techniques A) the single clutch and B) the double clutch (the preferred option).

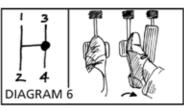
A) The Single Clutch

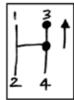
4) You brake 5) and while braking you push the clutch in move the gear to neutral, 6) blip the throttle, 7) select the lower gear and let the clutch out. Finish braking and then accelerate out of the corner.









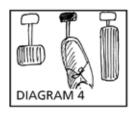




B) The Double Clutch

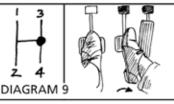
4) You brake and 5) while braking push the clutch in, move the gear to neutral, 9) release the clutch, blip the throttle, 10) push the clutch in, 7) change to the lower gear and release the clutch. Finish braking and then accelerate out of the corner

Practicing these techniques will make you a smoother driver and help preserve the mechanicals of your car. Your passengers will appreciate the smoother drive.



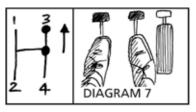
















No pressure on pedal

Pressure on pedal



Vale Ron Hickman

From the Jersey newspaper:

The inventor Ron Hickman has died in Jersey.

Mr Hickman famously invented the Black and Decker Workmate in the 1970s

It came about as a by-product of his work as a car designer - he was the chief road car designer with Lotus and created the Lotus Elan.

At first, Ron struggled to find a firm willing to take on his Workmate invention, but eventually the product went global as the perfect addition for any DIY enthusiast. It is used mainly for precision cutting of wood.

The device was so successful that many others attempted to copy it.

That resulted in patent protection actions in courts around the world.

After moving to Jersey in the late 70s - he'd previously honeymooned in the island - Ron put some of his personal wealth into a design factory where more inventions were spawned, but none of them was as successful as the Workmate.

The St Brelade resident, who was 78, suffered a fall five months ago and his health began to deteriorate in recent weeks. He died in hospital this morning.

Ron is survived by his wife Helen and children Karen, Jamie and Marcus.

Ron had a life-long love of cars and was a member of the Jersey Old Motor Club.

St Peter Constable, John Refault, who was president of the club for three years, paid this tribute.

"I was lucky to have known Ron for the past 17 years. I contacted him about LOG 14 - The Elite Reunion and he was an enthusiastic participant. We kept in touch and regularly saw each other at Lotus events, mostly in the UK. Ron's desire to be 100% correct prevented him from completing his book about Lotus. One of the great things about Ron was his ability to laugh at his quirks, especially his love of talking.

I will miss Ron and his passing is a great loss to the Lotus community."

Vale Ron Hickman

It was with sadness that I learnt of the passing of Ron Hickman. Ron known as "Mr Lotus Elan" died this week in Jersey after a protracted illness. He was 78. Ron joined Lotus during the period of the original Lotus Elite and spent time sorting out problems including those with the importer in the USA. His first new project was the Elan where he was the Designer and Project Engineer. The Elan introduced the concept of the backbone chassis to Lotus. This was to see them so well served in all their road cars (and some racing sports cars) up until the Elise. With this concept Lotus could make money, unlike the situation on the Elite. Ron did much to keep Lotus financial during his time with them and was rewarded by Colin Chapman with a position on the Lotus Board.

Ron left Lotus to pursue his design activities in other areas. His fertile mind was at all times trying to get these ideas into a working state. Ron's big project, and one that he mortgaged his house for, was the Workmate. Eventually selling this to Black and Decker he was able to make himself very comfortable. He designed his own magnificent home after moving to Jersey. This home is one of the icons of the island and forms a lasting monument to his creativity.

Ron's talents were many and kept him busy his whole life. His last major project had been the design and manufacture of what would have been a stunning retro style coupe. This he had invested a great deal of time and money into and will in all probability be stillborn. In spite of Ron's considerable success in life he had more than his fair share of sadness. His was a complex and very full life.

Ron is survived by his wife Helen and his 3 children.

lain Palmer

Feb 2011

For those wishing to know a little more about Ron see lain Palmer's article on page 14 of the October 2006 issue of Lotus Notes.



So the media machine would have us believe that organised religion is in decline... Poppycock! Clearly we have all become Flagellants! Now now, please! Suspend your cynicism for a moment! I am not suggesting that we have become so overt as to be rolling up to our local Churches of a Sunday morning, polished cat o nine tails glistening in the morning light, punctuating our druid like chants with the rhythmical thwack of our disciplines. No no, clearly since Flagellants were condemned by the Catholic Church as a cult in the 14th century, we have had to be a little more discrete

So discrete that perhaps some of our order don't realise what they are a party to. Take for example the large group of Lotus Club QLD members who gave up their beds in the early hours of Sunday morning to play dodge the cyclist. I need not mention the cyclists themselves, I mean really! Ride, a pushbike, up 10 odd km of hill, dodging potholes and landslides while nutters in little plastic sports cars do their utmost to startle you into a ditch. That my friends, is beyond mere self flagellation that can only be seen as lunacy!

Given my oft commented upon fondness for a jolly good Sunday sleep in, it's will not startle any of my readers (into a ditch or otherwise) to read that I was the last of us to arrive at our meeting place. Chastised on arrival, I turned around and left immediately.

And the rest of the club came with me.

Our deity has apparently been displeased with us antipodean lot lately, perhaps that explains not only our observation of the morn, but also the cyclists and the oddest bunch of all, the "fun runners" who had accumulated at the top of the mountain. While the road up the mountain has to a large extent escaped the wrath so heavily dealt upon the south east in recent times, one could still sense a little displeasure in the sections of earth flicked down over the road narrowing it to a single lane. Fortunately, given there is typically very little traffic coming down the hill that early, there was plenty of room on the wrong side of the road to overtake cyclists or

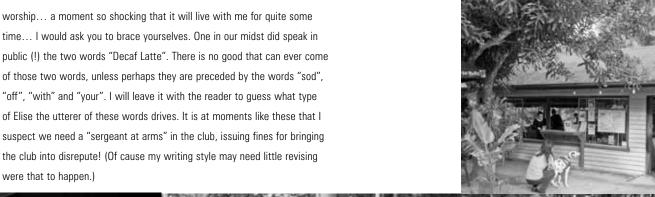


explain away with tenuous links to bygone methods of

Dodging the cyclists



Entering the Maiala Rainforest Teahouse





Lotus line up



At our February 2011 meeting, Lotus Club QLD welcomed to our numbers Matt Plowman.

Matt has taken a limited edition Exige known as the Scura and built a 500+ horsepower monster which had its debut at Lakeside on Saturday the 5th of Feb and what an impressive beast it is!

I arrived in time to watch Matt and the notedly fast supercharged-Honda

Scura ready for action



Carousel, which one might reasonably put down to familiarity with both the circuit and the car under him.

Matt's target is to be competitive at Superlap, an event which attracts some extremely quick machinery built to very open rules from all over the country and internationally.

He sees 58 seconds as the benchmark time around Lakeside to be competitive and concedes that he has work to do to get down to that time. As to be expected with a very new set up, he and the car were a little way off of that time on debut, the car only being returned from its engine upgrade a few days prior to the event.

I'm sure I speak for the rest of us (ok maybe not Geoff) in wishing him well! It will be great to see another very quick Lotus joining the Mackie brothers and Geoff, mixing it with the fastest of the Japanese imports.



Matt and Scura