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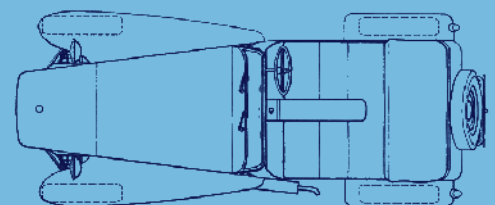
## & Clubman Notes



The Official Magazine of  
Lotus Club Victoria &  
Lotus Club Queensland

**Features:**

Christmas Parties  
EMRs  
Hampton Downs NZ  
Hinge Your Clam





## President's Prologue

By Geoff Noble,  
President, LCQ.

2010! Can you believe that the first decade of the 21st Century has already passed? Where did that time go! Not to worry, for me it was a great period during which I acquired my first Lotus and made a whole bunch of new friends and acquaintances. Yep, buying the Elise would rate as one of the best decisions I have made in my life and I look forward to many more years of Lotus ownership!

So, after a month off, it's back into the routine. Just a brief pause for recollection, and to thank Derek and Anita for their excellent hospitality at our final club meeting for 09. What a great night it was with around 40 Lotus present, and around 100 guests. After an excellent BBQ dinner (thanks to Mal for manning the tongs) and a few beverages, I quickly presided over the formalities, with a quick handover to John Barram for our annual trophy presentation, and then it was back into the socialising!

One of the few times this year that we didn't have any newbies turn up for a meeting, rather a couple of former members, who were pleasantly surprised to see that the club was flourishing and vibrant after their absence of so many years. As far as new members go, this month we welcome Chris Jordan of Automotion to the fold. Automotion are one of our supporters by way of advertising in the club magazine, so if you are in need of mechanical services for your car, make sure you speak to Chris first!

With the Christmas break and everyone's minds on other things, we were scratching for articles for this issue, but we've managed to get some interesting reading with some excellent contributions. All who were present at the December meeting would have viewed the innovative modification that Rob Stevens made to the back of his car for easier access to the engine and ancillaries. Rob has written up a comprehensive guide complete with pics and measurements to enable anyone to do this job to their own car. This is one of the best tech articles to appear in Lotus Notes in a long time.

January 17, saw an impromptu run to Mt Glorious for breakfast which was organised via the Aussie Elises web forum. From all accounts it was a well attended run with some 14 cars, including an Elise all the way from Byron Bay, out to play. Garry Pitt has out together some words, with pics from Giles Cooper. Happily, there were no dramas with this run, in stark contrast to the similar run in December, where Clive Wade suffered a mechanical failure that saw him meet the scenery at speed. Luckily Clive was uninjured, but the Elise was declared an economic write off by the insurer. The good news is that with some help from the Lotus brotherhood, Clive has sourced all the parts and purchased the car back from Shannons. He has engaged Greg Bray to do the rebuild and will be back in the

saddle in a couple of months!

Not much happening on the competition side, but late January saw 6 of our members pack cars into containers and head across to New Zealand for some historic racing. Peter Boel, Mike Goodfellow, David Reid and Alan Conway all took their Juniors, with Graham Vaughan campaigning his Eleven replica, and John Barram with the plum drive in Peter Boel's magnificent 41C. Sounds like fun – full report next month.

Then our regular season Sprints in Warwick will kick off later this month/ early March. By the look of some pics on the Morgan Park website, the track extensions are well advanced and we should get a run on the new, longer version at some stage during the year. It looks like the character of the track has been maintained, and the track designer hasn't been tempted to turn it into a high speed venue, which will suit our cars admirably!

I also heard a whisper that member David Barram is looking forward to some racing with his ASP Sports 1300. Rumour has it that a new tow car has been acquired and that a trip to Adelaide to compete at the 'Clipsal' meeting is on the cards.

Good luck David!

In Evora news, Lotus has unveiled the new Evora Cup, a race car based on the production Evora, but with another 118 horsepower and about 250 pounds less weight. The car is built to compete in a race series of the same name - the Lotus Evora Cup - to be run throughout Europe. Lotus director of motorsport Claudio Berro calls this move the "first step along the route for Lotus Motorsport to realize its racing ambitions." Appearance wise, it will look much like the example that graced the cover of last October's Lotus Notes. I'd be happy to see the standard car which hopefully Euromarque will have in stock in the next couple of months. While we're on the subject of Evora's, LCQ member John Bona has sent me a photo of himself and partner Clara with an Evora in Hong Kong. John is based there for the next couple of years and managed to con the local dealer into a test drive, which I think makes him the first of our number to actually drive an example!

That's about it for this month – see you at a club event soon!



## Next LCQ Club Meeting:

**7.30pm TUESDAY 9th February**  
**LCQ Monthly meeting;**

**Shannons Unit 3/11 Ross Street Newstead Contact**  
**Geoff Noble 0419 643 365**





**LCQ December Meeting & Christmas BBQ (Thur 17 Dec 2009) – by Daryl Wilson.**





This year the club combined the December LCQ club meeting and the Christmas party and had a club BBQ at Derek Dean's Motorman Imports Slacks Creek; just south of Brisbane. This followed the very successful Christmas BBQ at the same location at the end of last year.

Again Derek and his team cleared out a large part of the workshop, so members could drive their cars in and line them up under lights and under cover. There was an excellent line up of 39 cars, various Lotus models, lots of Elsie's, Exige, Lotus and Caterham Sevens, Europa's (old and new), Elites, Carlton, 340R etc. Plus Patrick in his newly acquired 1985 Ferrari 308 GTSI. What is going on Patrick? I know the Elan and Mini Cooper S are both in need of some surgery, but where is this going, how are you going to get the baby seats in the Ferrari?

Derek, his wife Anita and their team did a fantastic job organising things, ably assisted by Master Chef Mal Kelson who once again demonstrated his excellent BBQ skills.

A good crowd of around 100 members and spouses turned up on a hot, but clear night - check out the photos to see the cars and crowd.

Most of the ladies settled down for a chat while the husbands wandered



around in small groups catching up and admiring each others cars, plenty of automotive eye candy to keep everyone happy.

One thing of particular interest was the tilt rear body modification Rob Steven's had done to his Lotus Elise. There were a lot of Elise guys enthusiastically checking out the modification and hopefully Rob will do an article, so other Elise owners who maybe interested can do the same mod.

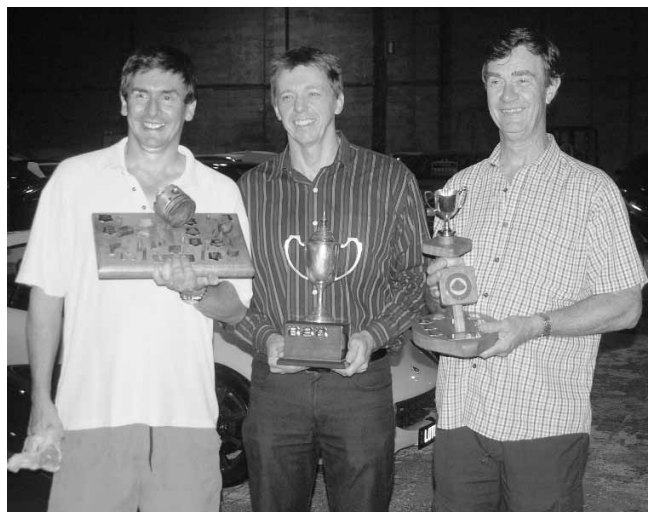
As this was the last meeting for the year the annual club awards were presented by el presidente Geoff and the winners were;

- Achievement Award Patrick Mewing
- Competition Award Geoff Noble
- Clubman Award Giles Cooper.

Congratulations and well done to all the winners.

Rather than an Achievement award, Patrick's was more for the most Damage incurred during the year, as he managed to blow up his Lotus Elan engine at Bathurst at Easter 2009 and also stripped a gear in his Mini Cooper S at All British Day September 2009!

A great night was had by all and a good start to the festive season.





## LCQ EMR – January 2010 - by Garry Pitt.

Just two weeks into the New Year, was all it took for the first EMR of 2010 to come together. These impromptu gatherings loosely organised in cyberspace are beginning to gather momentum as the number of Elise's grows in Queensland.

On this particular day we had 14 cars; 11 Elise/Exige variants, a Mini (ironically huge compared to the Elise), a Honda S2000 and a Porche Carrera S.

Even as an owner and active member of the Lotus community, it's hard to keep up with all the variants of the modern models. Lindsay a newbie on the EMR (have to get him in the Club Geoff), had a well turned out "Club Racer" Exige, with a hard top, stripes and Hethel Track layout sticker on the rear and stitched into the seats, nice.

A great turnout and special mention has to go to "PeeJay" for travelling up from Northern NSW for the 5:45am start!

I won't bore you with the details of the run, only to say it was a beautiful day, on a clean and dry twisty road, broken only by a fabulous breakfast with great company.

On the way back down the mountain I must have had a huge smile on my face, this is what a Lotus is built for and why we have these cars! The thought came to me that even though I'm getting old; these cars make you feel Forever Young ;-)

Enjoy the Photos...







# *Visit to the Australian Motorcycle Museum Haigslea Qld*

by Garry Saunderson.

Wybe and I recently went to the motorcycle museum at Haigslea Qld about 15 klms west of Ipswich Qld on the road to Toowoomba Qld.

There are about 230 bikes on display from all over the world and 30 more under restoration out the back and they are waiting for another 2 containers to turn up from the USA full of bikes.

They are thinking of extending the shed or building a new one as they can not fit all the bikes in. Even if you are not a bike nut it is well worth a look at \$15 each to get in with free tea coffee and bickies inside.

Times are 9.30am to 4.00pm daily and email address is [mcmuseum@gil.com.au](mailto:mcmuseum@gil.com.au)

or Ph (07) 5464-4938.

Their web page is [www.australianmotorcyclemuseum.com.au](http://www.australianmotorcyclemuseum.com.au)

That's it for now see ya

Saundo





**AUSTRALIAN MOTORCYCLE MUSEUM**

**NIMBUS**  
**1950 Sport**

Engine 750 cc, 4 cylinder, OHC  
22 hp @ 4500 rpm.  
5.4:1 compression

Gearbox 3 speed

Performance 60 mph, 63 mpg, 190 kg

Production started in 1919 and ended in 1960.  
Manufactured by Fisker & Nielsen, makers of the Nilfisk vacuum cleaners. 12,000 bikes were produced of which 4,000 are still registered for road use in Denmark today, very few bikes were exported, most sales went to the Army and Postal services.  
They were the first bikes to have telescopic forks, beating BMW by a few months





# DIY Hinge your Elise S2 Rear Clam by Rob Stevens.



What is really annoying with the Elise design? Well, from a maintenance point of view, the number one gripe is the lack of room to access the engine. Normally, the rear clam has to be removed – which means finding 22 bolts (yes, 22), which in turn means removal of the seats for access. Normal time to achieve this is about 2 hours.

Although an Elise-owner in the USA had designed and sold a 2-bar hinge mechanism for the rear clam of the US-spec Elise, the hinge location and design was never going to work on my Rover-engined S2, because of major differences in the boot design and longeron measurements between the UK and US versions of the Elise.

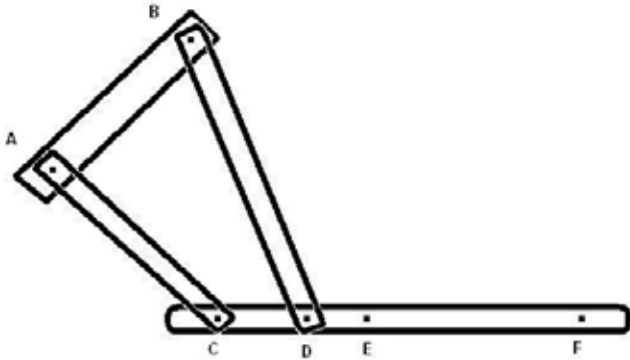
After many paper mock-ups, I re-modelled the 2-bar hinge idea to work on my car by changing the dimensions and attaching it to the outside of the chassis rail, fastening it to the rear of the clam, behind the wheel arches. (Incidentally, this version should work with any model of S2 Elise (and Exige...)).

The result – fast, full access to the engine bay area - is definitely worth doing.

However, there is quite a list of things to do:

1. Construct the hinges,
2. Construct a rear diffuser support,
3. Remove clam,
4. Cut the wheel arch liners (and reinforce them),
5. Fix rear diffuser support to chassis,
6. Re-locate battery to boot,
7. Fix hinges to chassis,
8. Fix hinges to clam,
9. Lengthen rear lighting wiring loom,
10. Fit cable to hold clam when raised.
11. Modify fuel cap surround to allow clam movement.
12. Test fit the eight thumb knobs to hold clam.

**Step 1:** The 2-bar hinge allows a hinged surface to rise up almost vertically initially, then "flip" backwards later in its travel. This action is particularly suited to the Elise clam, as the clam needs to lift to clear the roll bar about 150mm before tilting back. The following diagram shows the hinge dimensions.



Dimensions:

A-B: 80mm

A-C: 110mm

B-D: 150mm

C-D: 40mm

D-E: 30mm

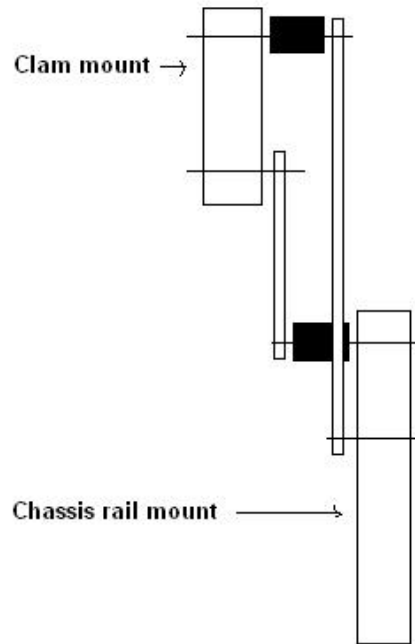
E-F: 120mm

All bolts are in double-shear, to reduce the stress on any part of the hinge mechanism.



The hinge folds in on itself, when collapsed flat. This required each arm to be separated from the other using spacers, and required countersunk bolts.

■ = Spacers (washers)



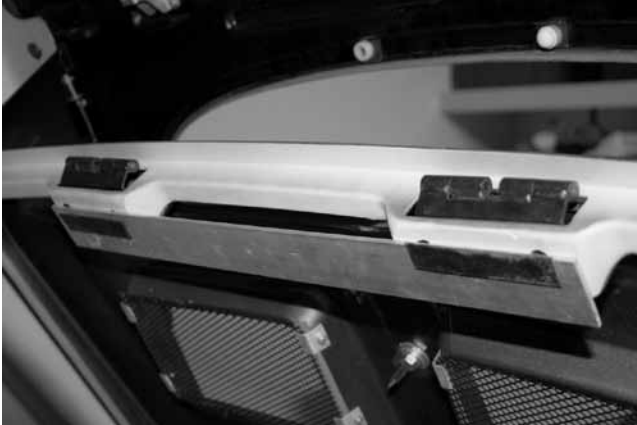
**Step 2:** The rear diffuser was originally attached to the rear clam, via the numberplate mount. After complete removal, de-riveting, and disassembly, I had to construct a replacement mounting from aluminium that incorporated the number plate mount, now attached to something other than the clam (as it had to tilt independently).



**Step 3:** Now to remove the clam - remove the seats and rear bulkhead to gain access to two annoying bolts just behind the shoulder of the driver and passenger and the 4 bolts holding on the boot/engine lid. Remove all 8 allen-key bolts surrounding the fuel filler cap, and then remove the fuel cap and prise off its surround. Using two people, finally the clam came free - lifting it up and then moving it backwards out of the way.

The engine/boot lid was reinstalled so that its hinge was only attached to the clam (not to the bulkhead as well, as originally set up). A flat aluminium plate between the mounts kept the fibreglass from bending.

A future change is to attach the lid hinge using quick-release R-clips, so I can completely remove it prior to clam lifting, as it is in the way at present.



**Step 4:** The wheel arch liners were now exposed in all their glory. I cut across them, approximately in line with the chassis rail, so that the cut-off piece could be re-attached separately to the clam. My early 2002 model had fairly flimsy wheel liners, requiring a little reinforcement with aluminium, as they were no longer supported by the clam's fixings at the rear.



**Step 5:** Now there was room to see how to fit the diffuser support. The bolts holding the exhaust to the chassis rails looked an ideal location. It all fitted together and was (happily) rock solid, too!

**Step 6:** Relocation of the battery to the engine bay was optional, however since I had the space, I did so, and since this meant being able to use the existing cabling, it was an added bonus. I placed the battery upright in a custom-made aluminium tray bolted to the plate that normally supports the air filter. I had removed the original filter years ago, so there was just room for the (half-size) AGM battery there. Note – a standard Elise battery just won't fit here – only an Odyssey or Deka (or similar) half size/weight unit. Thermal sheeting stopped the battery getting too hot.



**Step 7:** Measuring where the hinges should be attached to the rear chassis rails, (ensuring that the hinge fitted the clam when closed) I drilled two holes in the hinge and two matching holes in the side of each longeron rail. This allowed each hinge to be securely bolted to the chassis rail. These were the only holes drilled in the car itself.

**Step 8:** Now to fix the hinges to the clam: I rested the clam back in position, and then marked (looking upwards in the wheel well)



where the hinges should be bolted to the clam. Off with the clam, drill four holes in the clam to line up with the hinge holes, and replace the clam. Surprisingly fiddly to get it right – head stuck upside-down in the wheel arch, trying to mark the underside of the clam, however eventually the clam was attached to the hinge, and all was well.

At this point I felt the need to have something cold to drink, to celebrate the hinge attached to both the car and the clam. I could now ensure the clam moved up and backwards without scraping something!

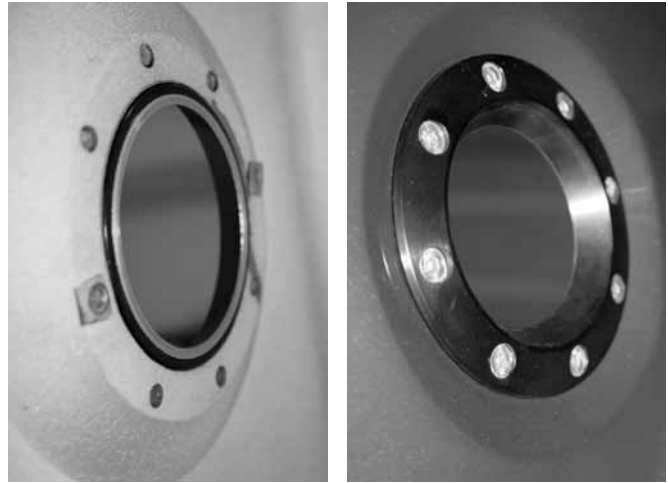
**Step 9:** I then used a metre of trailer cabling (7-core) to lengthen the wiring loom for the rear lights. The existing wires were cut and the new cabling was soldered in and then heat-shrunk.

**Step 10:** Some thin stainless steel braided wire from a marine shop (Whitworths) acted as a stop for the rearwards movement of the clam. I was going to let the hinge be the stop at the limit of its travel, but it put too much stress on the clam in this position. The wire was attached between the chassis cross-member and the boot release plinth.

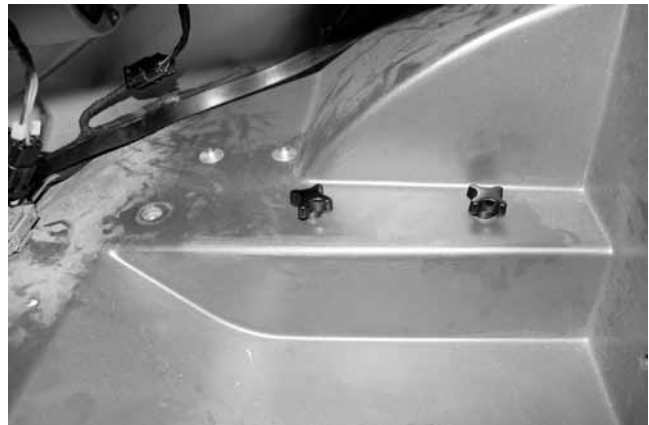


**Step 11:** I had to cut the existing fuel cap surround flush with the inside of the clam, so that it could slide over the inner fuel cap mounting when raising the clam. I went to a metal fabrication place, and 1 minute later on a lathe, the cap was sliced in half. I then used just two cut

off hex head bolts to secure the thin surround to the clam. The other six are cut off and just glued in to the surround, for appearance. When lifting/replacing the clam, I have to remember to remove the fuel cap first! The fuel cap actually sandwiches the clam to the inner fuel cap mounting now.



**Step 12:** I used six thumb knobs to quickly tighten the clam to the chassis via the interior of the boot, and two smaller knobs for the side air intakes. These are available in Australia from a company called RS Components ( <http://australia.rs-online.com> ) with stores around Australia.



The clam is therefore held to the car using 14 bolts/knobs, 10 of which are removed when lifting the clam – and there is no movement or squeaks at all. I attached foam tape where the clam might rub when lifting, just in case.



And...that was it...time for another celebratory cold drink. Total cost: less than \$200. Aluminium from Bunnings/Mitre 10 bolts from any specialist Bolt shop, and thumb knobs from RS components.

normal two hours!

I'm happy to answer questions – Contact me via the Aussie Elises forum:  
<http://aussieelises.com/>

Time to lift the clam – about 3 minutes. Just a little faster than the

