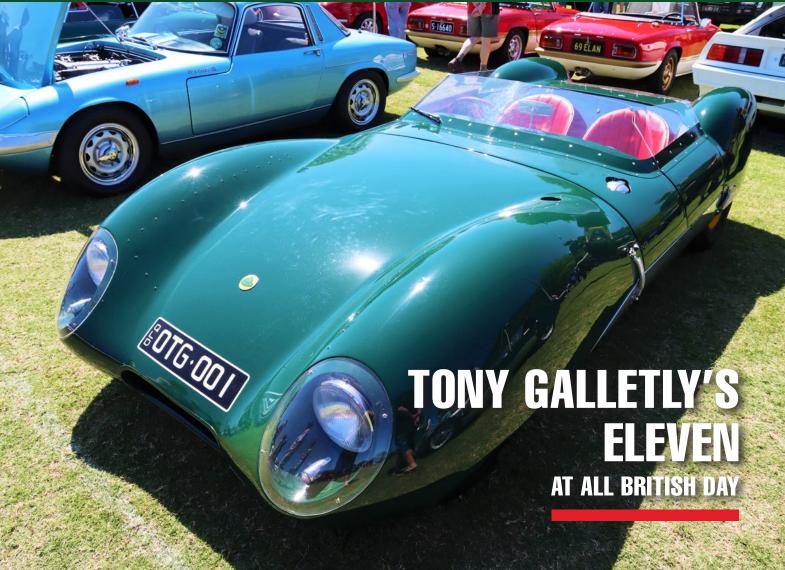
LOTUS MOTES



THE OFFICIAL MAGAZINE OF LOTUS CLUB VICTORIA and LOTUS CLUB QUEENSLAND









ELECTRIC DREAMS TO REALITY HOW TO FIX A TIRED M100 ELAN

QUEENSLAND SUPER SPRINT SERIES



LOTUS MELBOURNE



DEALER AND SERVICE CENTRE

Now managed by Simply Sports Cars

Mark and the team look forward to meeting all your sales, service, body repair, and event needs, so why not drop in for a coffee.

LOTUS MELBOURNE 116 Cremorne Street, Richmond, VIC 3121 lotusmelbourne@simplysportscars.com PH: 03 9046 1440 www.simplysportscars.com

FOR THE DRIVERS



Please 'like' and share the public LCV Facebook page: https://www.facebook.com/LotusClubVic/

LCV Facebook group page:

https://www.facebook.com/groups/599465000503381/?source_id=825446820817917

Lotus Club Queensland Facebook group page:

https://www.facebook.com/groups/469376376509513/?ref=bookmarks

LOTUS CLUB VICTO	DRIA PO Box 7	9, Hawthorn Business Centre, VIC 3122
COMMITTEE		www.lotusclubvic.com
President	Vicky Rowe	president@lotusclubvic.com.au
Vice President	Guy Stevens	vicepresident@lotusclubvic.com.au
Treasurer	Tim Schreiber	treasurer@lotusclubvic.com.au
Secretary	Bruce Wilkinson	secretary@lotusclubvic.com.au
Ordinary members	David Clark Ian d'Oliveyra	
	Lee Gardner (Motorsport)	competiton@lotusclubvic.com.au
	Eddie Lankhorst (Social)	social@lotusclubvic.com.au
Membership Secretary	Rod Nash	membership@lotusclubvic.com.au
Magazine Coordinator	Mike Richards	magazine@lotusclubvic.com.au

LOTUS CLUB QUEENSLAND

70 Granby Street, Upper Mount Gravatt, QLD 4122 www.lotusclubqueensland.com

COMMITTEE		
President	Steve Lennox	president@lotusclubqueensland.com
Vice President	Jason McGarry	vicepresident@lotusclubqueensland.com
Secretary	Carol Moloczynk	secretary@lotusclubqueensland.com
Treasurer	Daryl Wilson	treasurer@lotusclubqueensland.com
Social Coordinator	Justin Goosen Winston Piddington	socialsec@lotusclubqueensland.com
Motorsport Coordinator	Geoff Noble	motorsport@lotusclubqueensland.com
Webmaster	Vyvyan Black	webmaster@lotusclubqueensland.com
Magazine Coordinator	Andrew Row	editor@lotusclubqueensland.com
Motorsport Australia Club Delegate	Shane Murphy	vicepresident@lotusclubqueensland.com motorsportaust@lotusclubqueensland.com
DTC Coordinator	Gideon Street	dtc@lotusclubqueensland.com
Interclub Challenge Coordinator	Shane Murphy	icc@lotusclubqueensland.com

Lotus Notes Magazine Editorial

Lotus Notes is the official magazine of Lotus Club Victoria Inc. (LCV), ABN 75 071 773 306 and Lotus Club Queensland Inc. (LCQ), ABN 56 290 195 876. The views and contents of the articles printed in *Lotus Notes* are those of the authors and do not represent those held by the Editor or by the relevant Club Committee.

Copyright © Lotus Club Victoria and Lotus Club Queensland 2021. All rights reserved. Neither the whole of this publication nor any part of it may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the written permission of the publishers.

Magazine deadline is strictly the 18th of each month. Extensions only by prior arrangement. Send material to your Club coordinator or **editor@lotusclubqueensland.com** as MS Word documents (text only), images/photos/scans as separate high resolution, large jpegs (300dpi minimum).

Magazine co-ordinators: Andrew Row (Qld): editor@lotusclubqueensland.com

Mike Richards (Vic): magazine@lotusclubvic.com.au

Magazine design & layout: Polar Design Pty Ltd: www.polardesign.com.au

Steve Blackie: 0429 424 609 blackiestephen3@gmail.com

Proofreading: Anne Blackwood

CONTENTS >

- 03 All British Day Brisbane
- **06** Glorious EMR6
- 07 Midweek runs
- **08** Two lookouts tour
- **10** Electric dreams to reality
- **13** Breathless with anticipation of Emira
- 14 Shutter & Speed 2
- 16 How to fix a tired M100 Elan
- **19** Queensland Super Sprint Series: Round 4
- 21 The Europa Mann Part 28
- 24 Classifieds

For any last minute updates
check your State's website!
www.lotusclubvic.com
www.lotusclubqueensland.com



Tony Galletly's Eleven at All British Day



by Vicky Rowe





I expect that even our friends from Queensland felt our collective sigh of relief, as Melbournians were finally let out of lockdown. We're soooo happy to be free to catch up with friends and family, drag off the car covers, and hit the road.

The committee has been busy making plans for our release. And then making more plans... and then re-making plans. It's been a bumpy road, but I think we're now settled on what we can offer. Here's a quick rundown:

Virtual Club Night

As there just hasn't been enough certainty to plan anything face-to-face another Virtual Club Night is planned for Tuesday, November 9th. This month member, Alec Spyrou, will tell us about his experience converting his S1 Elise to Honda, which I'm sure will be of interest to anyone looking for more power.

Early Morning Run

Our first EMR for some time will be held on Sunday, November 14th, with a jaunt around the Bass Hills. As it currently stands, a fixed number of participants will be able to book for lunch (at LaProvincia in Corinella), but everyone attending must be booked in for the EMR, whether staying for lunch or not.

MSCA Come 'n' Try Day

The following weekend (Saturday November 20th) we're off to Phillip Island for the Come 'n' Try Day. This is the final leg of driver training which was offered to members earlier in the year. Some spots are available, so please contact me (president@ lotusclubvic.com.au) if you're interested in joining in.

Christmas Party

Christmas is always a busy time, but it was an extra challenge this year to arrange our Christmas party, which will be held on Sunday, December 12th. Luckily, we've managed to secure Killara Estate again, providing a gorgeous backdrop for our Concours. The menu has been tweaked and an extra course added, all for just \$20 per head. Many thanks to Ian for making these arrangements.

Annual General Meeting

Our final event for the year will be our AGM at the Skinny Dog in Kew, on Tuesday, December 14th. We're still working out what can be accommodated, but we hope to have dinner ahead of the meeting, as we did earlier this year.

Keep a look out for further club event communications.

With requirements as they are at the moment it's important that members understand:

- Members need to be fully vaccinated in order to participate in club events.
- Participant numbers will be capped per event, with bookings taken via the new Member Jungle system (MJ).

Congratulations and thanks to Rod and Guy on the successful implementation of MJ and the new website. It looks great, works brilliantly, and is proving to be a valuable asset for the club. If you haven't already, please log in and confirm your details, and while you're there, book in for events. Why not download the MJ app on to your phone for quick access? It's very easy to do.

I look forward to welcoming you back to "live" club events.

November already, the Jacarandas are out in full bloom and, with the early rains Brisbane is having, things are looking fantastic for Spring. As the restrictions ease, we are able to have more events, both planned and spontaneous. A few weekends ago we had an EMR to Mt Glorious for breakfast for some members and others attended Cars & Coffee at Colleges Crossing. It is great that we are active and get together to enjoy these spontaneous events.

At our October meeting it came to my attention that the Morgan Park B series group have taken almost all the honours. LCQ had a clean sweep of the 2 litre Sports Car Class and 3 litre Sports Car Class, plus Andrew and Bridie were 1st and 2nd in the 2 litre Super Modified Class. Overall LCQ were 1st, 2nd and 3rd outright for the year. Sensational results for our club and cars, well done to all.

There is still plenty coming up for club members in November and December. In November we have the last DTC for the year, and we have a new contender for fastest time, with Byron Maxwell doing the FTD last event, and amazingly, his father came fourth. All this is in an Elise. The Noosa Hillclimb has been moved to the weekend of 27th & 28th November. Plus, we have a day run on later in November, this traditionally has been the Fish & Chip run so check the club website.

And don't forget...

LCQ Christmas Party

Saturday 11th December from 6:00pm at The Greek Club, 29 Edmondstone Street, South Brisbane QLD 4101

Yep, we are all booked in and have taken the Acropolis Room, so we now have an airconditioned venue. As in previous years we will have the Greek banquet. The club is going to subsidise the event to the tune of \$50 per member, so members will get a great value night out. Talk to your fellow members and get a table together, it's always an excellent night.

More details to follow, so please lock in this date, and mark it on your calendar.

Keep safe and enjoy your cars, see you at the next event.

WELCOME

New LCV Members for September 2021

Lotus Elan S2 Jon Baker Jonathan Haggett Lotus Exige 390 David Abel Lotus Exige 350 Alex Daniel Lotus Exige S Lotus Elise S1 Alec Spyrou

ALL BRITISH DAY BRISBANE

by Daryl Wilson

photos: Craig Wilson & Cris Johansen



All British Day Brisbane was held this year on Sunday 19 September, and it was a beautiful, sunny, spring Queensland day. As there were few Queensland Covid-19 restrictions. there was the usual large turnout of British cars, of all makes and models, and a big crowd enjoying the cars and the great weather.

We had a good turnout of 32 Lotus and Caterham cars/models and it was very pleasing to see many newer members displaying their cars. We also had several ex-members who brought their cars along to display and it was good to catch up and renew old acquaintances.

All British Day is traditionally also the LCQ Concours, so special thanks to our judges, Glen Battersill, Greg Bray and Alex Molocznyk for a job well done. The judge's task was not easy as all the cars were extremely well presented and it would have been very difficult to decide the winners in each category.

Congratulations to all the LCQ Concours winners, especially Overall Winner,

Greg Bray, for his beautiful 1967 Lotus Elan, which is a much-used and muchloved car that Greg brought with him from the UK when he and Chris migrated to Australia in August 1996.

> ... it was very pleasing to see many newer members displaying their cars.

As well as the LCO Concours winners we also had two LCO members who won their classes in the All British Day Winners Circle. Leigh and Russell Carter won Best Classic Vehicle Post-1980 with their 1991 Lotus Carlton, and George Row won Best Sports Car, with his 1956 Lotus Eleven.

It was particularly pleasing to see Leigh and Russell Carter win the ABD Best Classic Vehicle award for their often underappreciated 1991 Lotus Carlton. This car had awesome performance for its time and was the blueprint for every über-sedan built ever since.

Greg Bray's winning Elan

George Row's Lotus Eleven has been meticulously restored and is a credit to George and anyone who helped him with the restoration work.

Our cars attracted a lot of interest over the day so thank you to everyone who took the time to prepare their cars and display them, you did yourselves and the club proud!

LCQ Concours Winners by Category

LCQ CATEGORY	OWNER	VEHICLE
1950–1962	Tony Galletly	1963 Lotus Eleven
1963–1974	Craig Wilson	1964 Lotus Elan
1975–1995	Russ Carter	1991 Lotus Carlton
1996–2011	Mark Wolton	2006 Lotus Elise
2011-to date	Mike Knowles	2010 Lotus Evora
Lotus/Caterham 7	Peter McEwan	1994 Caterham Super 7
Overall winner	Greg Bray	1967 Lotus Elan













All British Day Winners Circle

CATEGORY	OWNER	VEHICLE
Best Vintage & Veteran	Grant Singer	1926 Alvis 12/50
Best Classic Vehicle – pre-1981	Elizabeth Ralph	1969 Daimler V250
Best Classic Vehicle – post-1980	Leigh & Russel Carter	1991 Lotus Carlton
Best Sports Car	George Row	1956 Lotus Eleven
Best Motorcycle	Jim Allen	1954 BSA Bantam
Best Commercial Vehicle	Qld Omnibus & Coach Society	1948 AEC Regal III
Best British Thoroughbred	Graham Singer	1920 Rolls Royce Silver Ghost
Best Competition Vehicle	Peter Burt	1974 Ford Escort RS2000
Best Off Road Vehicle	Neil Dudley	1954 Land Rover Series I
People's Choice	John Payne	1964 Alvis TE21
Owners' Choice	Peter Poulten	1966 Morris Cooper "S"
Best of British	Graham Singer	1920 Rolls Royce Silver Ghost
Best Club Display	British Ford Car Club	



















GLORIOUS EMR by Andrew Row



pre-run chat. Everything from Clubbies to Esprits. Rob's car looked like he had been out having a bit too much fun in the puddles earlier in the week. Good to see I'm not the only man whose Lotus doesn't always sport a showroom shine. Bit of tyre rubber up the sides adds character.

Phil reliably advises EMRs up Mt Glorious have become less that Dick has become frequent in recent times, with our regular a Spandex man. leader, Dick, taking up a new Sunday morning sport. Since he didn't make it all the way up the mountain for breakfast, there was a little discussion on the matter. Phil reliably advises that Dick has become a Spandex man. Cycling is the new-found sport that keeps him from our Sunday morning runs. Perhaps he is on to something given there were more lads wearing lycra heading up and down the mountain than there were Lotus.

It was all on from the first set of lights, with the Clubbies showing the way. Didn't last far up the mountain before Dick pulled over. Figured he couldn't handle the pace with a bright yellow Exige in his mirrors. Turns out it was his floating axle,

> which he was concerned about at the pre-start chat, it had developed disturbing amounts of float.

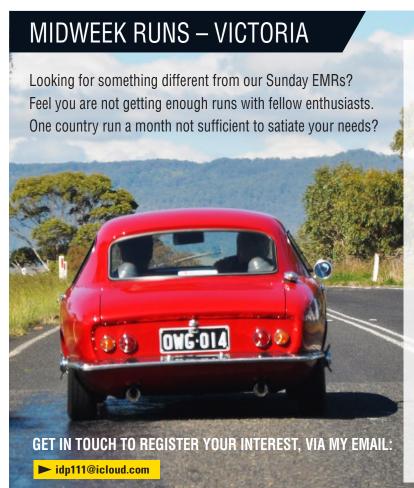
I'm sure he felt the love as we all carried on without him. Texts received advised he made it home whilst we all enjoyed our breakfast at the top of the

mountain. Food was great Dick! All that new-found horsepower seems to be highlighting the more tender parts of the Seven.

A true coming of age moment when Aston arrived in his own P-plate-clad M100 Elan, tucked in behind his Dad's Esprit. Really not much chance he wasn't going to be a Lotus man.

We should do this more often.





I have a solution. We are about to begin a program that may be up your alley.

We have been approached over quite a period of time to try to encourage early Lotus to be enjoyed out on the road.

If you have an early model Lotus this is aimed at you. Let's get them out of the garage and share the experience. Many owners are not working fulltime and so have the time to use their cars during the week. Traffic is lighter and more predictable, so driving can be safer and more relaxed.

So, if you have an Elite, Elan, Europa, 6, 7, Esprit or other pre-1980 Lotus, this one's for you. Even if your Lotus is off the road and you want to come along you are still welcome.

The plan is to meet around 9 am midweek and drive to an early lunch/late morning tea destination with a possible visit to an interesting venue. Driving distance would be around 120-150 km. Navigation is intended to be straight forward with the drive to be a fun, short trip.

Join us when we can get out of lockdown. Hopefully this will be soon and we can again stretch our legs.





Following the brutal Queensland winter and the Covid lockdown incarcerations the first run of spring was eagerly anticipated. Peter and Leanne Drane, having the advantage of local knowledge, put together a great route through the back roads of the Sunshine Coast Hinterland.

The September morning start at Landsborough was overcast with a threat of rain that fortunately did not eventuate. Some of the early arrivals had a hearty, reasonably priced breakfast and coffee at The Steaming Cup while waiting for the start. Along with the formalities of the briefing, every person attending received a surprise goody bag, filled for the trip with sweeties, munchies and a large tube of Soodox Vytal hand sanitiser.

A good turn up of twelve cars was split into two groups and, a short distance after the start, a navigational incident had Greg and Chris's Elan heading along a wrong road and separating from the their group. By the time they realised their situation they decided to go directly on to the morning tea stop. Unfortunately they missed some of the best roads and panoramas of the day. The roads around Mount Mellum and Bald Knob were stages of the Suncoast Rally a number of years ago and were still just as enjoyable at legal road speeds.

> The roads ... were stages of the Suncoast Rally a number of years ago and were still just as enjoyable at legal road speeds.

Overcast skies dulled the otherwise spectacular Sunshine Coast views all the way to the first regroup stop at Howells Knob Lookout, where we had a photo shoot. The route then continued along Lotus-friendly roads, descending to Mooloolah Valley for a morning tea stop at Cafe Mooloolah.

Three cars then left the run, so the two groups combined for the next leg of the drive to the second lookout, and then lunch. The route went to Mooloolah Valley, then along the highway to Noosaville (land of a thousand roundabouts). We then drove on to a regroup stop at Point Arkwright Lookout with a view of the magnificent seascape, extending from the north to the south of the Sunshine Coast. The sea was windblown and choppy with not much happening, but as we were leaving a sea eagle swooped in and hovered over us showing off a sizeable bream it had caught.

Then it was a short motorway trip to the finish for lunch in Palmview at the quirky Banana Bender Pub. The Queensland themed pub had reserved parking at the front and a separate balcony room for the Lotus Club. It has an extensive menu based on locally sourced ingredients and the generously sized meals went down well with everybody.







... he likes to drive alongside

fancy cars on the freeway and

"blow them into the dust".

I have always believed that traction vehicles (cars, trucks, trains etc.) should be driven by electric motors, and of course some are, such as trains and big mining trucks. I am not a "Greeny", I am an electric engineer, so of course this will be biased that way.

The problem is not the motors or the electronics to control them, it is the storage of the energy, which I believe still has a long way to go.

While on a business trip in the USA in May 2015, before I flew out of LAX, I took a short drive down to EV West in Santiago. There I meet Michael Bream who converts cars to electric. Although they mainly do BMWs, they were currently converting a Ferrari 308GTE. Michael took me for a drive in a converted VW Beetle. It was FAST, but original. I asked "why didn't they do things to make it look less original and improve the handling".

He just said he likes to drive alongside fancy cars on the freeway and "blow them into the dust".

Check out some of their performance in the Californian Pikes Peak Hill Climb.

It was there I decided to use the HPEVS three phase electric motors (twin motors on the one shaft) for my vehicle.

First, I did a comprehensive analysis in Excel. This included the mass of all the proposed components and how this would change the overall mass and the front-to-back mass distribution. That looked OK. Also included was looking

coefficients, etc. This also looked OK. The aim was to match my 1 minute

20 seconds around Mallala with the converted Birkin.

I ordered the motor, batteries and controllers. I procured these from EV Works in WA, but I think in hindsight I probably should have purchased direct from the USA.

The vehicle was then taken to The Old Farts Garage where Alan Austin did an engine-ectomy on it (and kept the engine). However not without drama. I told Alan that the only way to get an engine out (or into) a Birkin was from underneath. Alan, of course, being an expert (which he still is) looked at the situation and, against my advice, attempted to take the engine out from above. Anyway, some hours later the engine was out (from underneath). Also removed was the gearbox and fuel tank and a few other things ICE-related.

> The electric motor was installed by Solid Engineering at Lonsdale. This was first tested with 3D-printed parts, and then when deemed satisfactory, solid aluminium plates were machined to hold the motor in place with some

extra bracing to the main chassis. They also made up and installed the tail shaft from the motor directly onto the diff (the original Subaru 160 with a 1:4.11 ratio).

To my knowledge, there has been only one other conversion like this and that was done by Conrad at Jindabyne NSW on a "Sonic" exoskeleton clubman. He used a cush coupling between





the motor and the diff, destroyed two M3 BMW diffs and, in the end, had to put in a racing M3 diff. I believe the release of the stored energy (electric motors have full torque at zero revs) in the cush coupling did the damage, so that is why I have done direct drive.

I then had some foam cut to the size of the 46 Winston 160Ahr LiFePO4 batteries to work out the installation arrangements. It was a very tight squeeze, but I have managed to fit them in, with some loss of boot space.

A lot of aluminium fabrication work needed to be done to secure the batteries in place, and this work was carried out in my shed by Ryan Penley. At this stage I got Stuart Croser, from Tonkin Consulting Engineers, to check out the construction so far. All good.

Then the big job of finding a place, installing all the little bits and doing all the wiring. This took about one year. The high current cables (some needed to be good for 1,100 Amps) I had hydraulically crimped by Rawsons, who did a great job.

I needed to cover the batteries at the back, because they protruded a few centimetres above where the original boot cover was. I decided on a dual "tail" type design, and obtained some technical advice from Norm Clements. Later, after I had fashioned the shape in general, I took this to Norm's place and

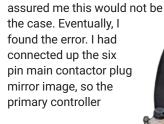
he made the cover from fibreglass (what else from Norm?) with a carbon fibre section behind the headrests. This was finished off and painted orange by Edwardstown Custom Body Repairs who did the original paint job on the car.

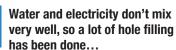
I also got a small piece of flat carbon fibre from Norm and cut it round to cover the original fuel tank hole. Norm asked me how I would get the fuel in, having covered this hole. A few seconds later he realised.

Water and electricity don't mix very well, so a lot of hole filling has been done, including all the vents and throttle body holes in the bonnet, gaps in the chassis underneath (should be a ground effect car now), and exhaust hole, among others.

The two controllers for the motors are best water cooled (they automatically de-rate over 85 degrees C), but I could not find the space to do this, so I have tried to maximise air flow to them and maybe water cooling is something I will do later.

Upon first power up, all I got was error messages. It seemed to me that the primary and secondary motor controllers (programmed differently and connected by CAN bus) were labelled wrongly. I contacted HPEVS in the USA, and they





CHECK OUT THE FOLLOWING LINKS:

Sonic EV testing:

► https://www.youtube.com/watch?v=yIC5FdssgCo

Electric kit car Sonic 7 EV testing on driveway:

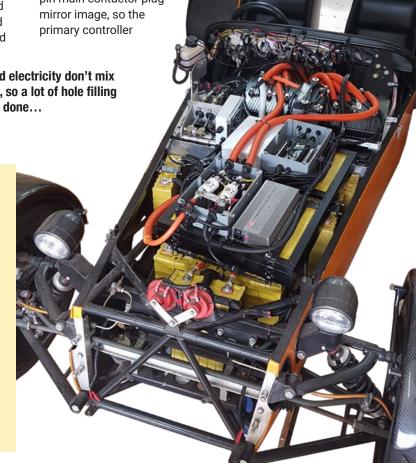
► https://www.youtube.com/watch?v=kaqrUI_AUCc

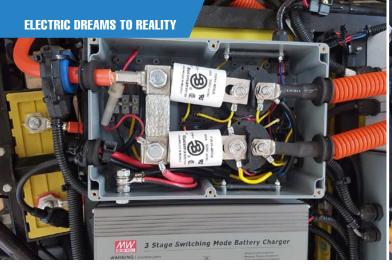
Cooma Hill climb electric Sonic 7:

► https://www.youtube.com/watch?v=xGewcjNL2cE

DeLorean electrification project

https://www.abc.net.au/news/science/2021-10-18/ converting-classic-cars-to-electric-vehicles/100533104







was turning on the secondary contactor, so the millisecond pre-charge timing was in error. I fixed that and while the car was up on its axle stands the wheels turned, but only in idle. The accelerator pedal did not work.

I was led to believe the accelerator box was a potentiometer style system and I had wired it up as such to the 12-volt system. After I pulled it apart, I discovered it was a Hall Effect sensor system. This is a 5-volt chip and I had destroyed it. A new accelerator box is hundreds of dollars, so I found out the supplier of the Hall Effect device (only made in Singapore) and ordered some. They are \$0.68 each, so I got ten. Soldered in the new chip and re-assembled the box.

On December 11th 2020, at 11am, I drove the car down the street for a test run. It accelerated very smoothly and seemed about as quick with the ICE, but this was just a short run.

I had checked out all the legal requirements (lights, flashers etc.), but the brake lights from the motor re-gen signal did not appear to work (probably because the re-gen is not programmed in very hard at present), so I have put a switch on the brake pedal, so now all three things can operate the brake lights, hydraulic pressure, re-gen signal and brake pedal movement.

My wife, Sally, says she will not go out in the car with me unless it makes some noise for safety reasons. So I have put in a sound system which emulates a standard V10, V12, V8 or a

Harley Davidson. I don't like Harley's, so I'm going to replace that with a Ducati sound when I have time. This system can also have the sound speed up as the car does, but I haven't put the Hall Effect sensor in place to do that yet.

People often ask how far it will go on a charge. I think it should travel about 100Km. The shape and size of a clubman limits the volume of batteries.

If I had known it would take so long, I don't think I would have started the project, but I am pleased with how it has turned out. What drove me on was the thought that I did not want to be someone who started down this path and did not finish it.

I now have Stuart's tick of approval (and his invoice) and next it's off to Regency (again!).

Now it is mobile I will invest in a programmer for the motor controllers. This will enable me to control the initial acceleration

rate, and allow a small (millisecond's) delay to take up any backlash in the diff gears before full torque is applied.

I have also been told by the supplier in Perth that the code in the battery management

system for changing the 150-volt, 20 Kwh battery pack (this is a separate system to the motor drive system) has been updated, so this is also a future task.

So now it is back to a normal "work in progress", just like any other clubman.



My wife, Sally, says she will

not go out in the car with me

unless it makes some noise...



The long-awaited Lotus Emira was officially launched in July 2021, with the official, public unveil during the **Goodwood Festival of Speed.**

This last gas-powered Lotus was an instant hit. People literally lined up to put an order in, or just get their name on the 'pre-order' list, as you couldn't even order a Lotus Emira, and the 'pre-order' list was for RHD models only. But at the end of September, Lotus finally released full specifications and the RP on the Emira V6 First Edition, a car loaded with technology, infotainment and comfort features.

Lotus plans to start building the Emira V6 First Edition in the northern spring, with the 'i4' (the 4 cylinder version) arriving in the autumn. Pricing in the UK has been fixed at £75,995, while in Europe this car will set you back €95,995. The Australian RP hasn't been released yet, but a quick currency check leads somewhere north of A\$150,000, based on current exchange rates. Simply Sports Cars commented:

"We expect a range from A\$145,000 to A\$150,000 plus on-road costs for the AMG (4-cylinder), and A\$175,000 to A\$180,000 plus on-road costs for the V6."

The accompanying statement expressed their intention to lure customers away from Porsche sales. We wish them the best of British luck.

The Emira V6 First Edition will come equipped with the supercharged 3.5-litre V6 engine, delivering 400 hp through either the standard 6-speed manual or the optional 6-speed paddle-shift

automatic transmission. For the first year of production the customer has a choice of six colours, with Lotus intending to offer more shades the following year. The list of available colours has been deliberately kept exclusive, from the press launch car in Seneca Blue to Magma Red, Hethel Yellow, Dark Verdant, Shadow Grey, and Nimbus Grey. They all match with the titanium exhaust and the Lower Black package that includes a gloss black finish on the air blades in the front bumper, front splitter, side sills, and the rear diffuser.

While the exterior is limited to six colours, you can choose from seven different shades for the interior - red, black, grey, or tan in Nappa leather, or black Alcantara with either red, yellow, or grey stitching on the 12-way adjustable, heated seats, that even come with a memory setting that also includes the door mirrors.

...the Emira V6 First Edition. a car loaded with technology, infotainment and comfort features.

First Edition is packed with options that come as standard, including bespoke badging. It also comes with diamond cut 20-inch, ultra-lightweight wheels. A silver or black finish is available at no extra cost, while Lotus branded calipers are standard fitment. To keep those expensive wheels safe, there is a Tyre Pressure Monitoring System fitted as standard.

Lotus aims to offer a comfortable ride in their new Emira, so this car comes complete with climate control, cruise control, keyless start and selectable drive modes, Apple CarPlay and Android Auto, while an integrated satellite navigation system is available on most markets, all available through a 10.25-inch, centrally mounted touch-screen and a 12.3-inch TFT instrument cluster ahead of the multi-function steering wheel.

Apart from the Lower Black Pack, you'll get three more packs as standard on these First Edition models. The Drivers Pack offers a choice between Tour or Sport suspension with Goodyear Eagle F1 Supersport tyres, or Sport suspension with Michelin Pilot Sport Cup 2 tyres. The Design Pack comes with dark tinted glass, sports pedals and painted brake calipers, in either black, red, yellow, or silver, and just so you don't scratch those beautiful bumpers, the Convenience Pack adds parking sensors to the front and a camera to the rear.

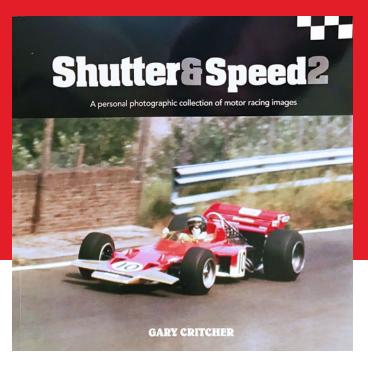
There are still a few options left to tick on that order sheet, but those will come on top of the base price for these Emira V6 First Edition models. For example the £1,800 automatic transmission, or the Black Pack, which contrasts the roof, cantrails, mirror housings, the Lotus badge and the exhaust tips, for £1,200.

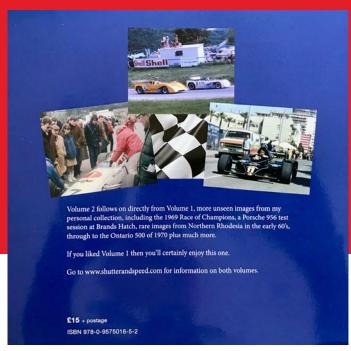
As mentioned earlier, production of the Emira V6 First Edition will start mid-2022, with the 4-cylinder version following later in 2022. If you're looking to add a more base-level Lotus Emira to your driveway you'll have to be patient until 2023 when Lotus plan to release a £59,995 entrylevel version with fewer options.





SHUTTER & SPEED 2





As the title suggests, this is the second book of a "personal photographic collection of motor racing images" compiled by Gary Critcher.

Gary is a collector of photographs and film. He has a background in television with ITV, Sky, Discovery, the BBC and with Formula 1, when Bernie Ecclestone initiated his digital TV project for F1.

This neat, card-covered book, contains 122 pages of previously unseen images that Gary has accumulated over many years. The black and white and colour photos are from the 1950s through to the 1980s.

Although not specifically a book about Lotus the author's bias shows through. From the lovely cover shot of Rindt, to the author's own favourite, the Lotus 72, in both its red and gold and black and gold liveries, featured over sixteen pages with various drivers including Rindt, Wisell, Fittipaldi, Peterson and John Miles. The chassis numbers are included in the captions. If you are a Ronnie Peterson fan there is a lovely informal shot of him, in civies, walking through the Crystal Palace paddock at an F2 meeting.

Towards the end of the book there are three photos of Lotus 93s. The author has, with the help of mechanic Bob Dance, author Michael Oliver and Dylan Michael, attempted to unravel which driver raced which car. Elio de Angelis and Nigel Mansell were the drivers at that time.

Critcher enlisted a couple of race mechanics from the period to provide their thoughts and comments, adding further interest — Pete Briggs who ran Ronnie Peterson in an F2 and Lotus mechanic Doug Garner who, amongst other things, looked after Emerson Fittipaldi's Lotus 72.

What makes this book special is the diversity of content. We are treated to everything from 500cc racers, hillclimbs, Formula 1, sprints, saloon cars and Indy cars. Other F1 content contains excellent



shots of the early McLaren days with Bruce McLaren, Phil Kerr, Tyler Alexander, Denny Hulme and the M7A. Images of the '62 and '83 British Grands Prix, plus the '69 and '71 Race of Champions events are included.

The photos I find the most interesting are the off-beat ones, like the weird and not-so-wonderful 1966 twin engine Stein Porsche Indy Car. A brief write-up is included in the 6-page spread. The late '60s shots at Shelsley Walsh and Prescott hillclimbs also captured my attention, as did a photo of two Studebaker Avantis, resplendent with white stripes, that were used as course cars at the 1962 British Grand Prix. The creator of James Bond, lan Fleming, owned an Avanti. An unusual sight on British roads.

The author has gone to a lot of trouble to ensure that all the photos have detailed captions, and although the image quality varies, it is generally very good.

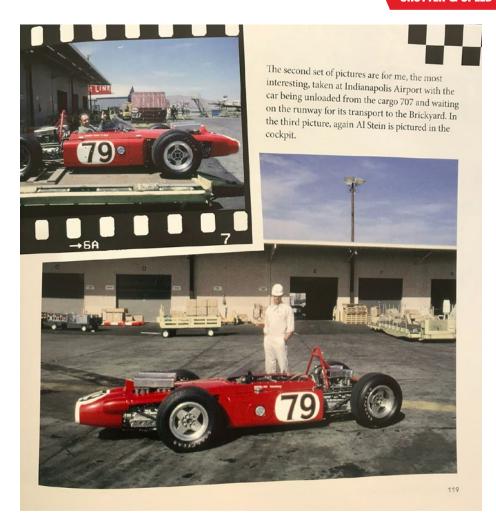
SHUTTER & SPEED 2

Available from:

www.shutterandspeed.com

Price: £15 plus postage

Size: 230mm x 210mm, 122 pages.





The safest way to make old parts look new!

Unlike many traditional methods of removing contaminants from parts for restoration purposes, Vapour Blasting does not cause harm to the part's surface. By using a precise amount of pressure, the parts will return to their original form with no damage.

Part Sizes

Most disassembled motorcycle/car engines, suspension and other components can be handled in the 1200mm blast cabinet, up to a weight of 150kg. (Internal Dimensions: H 1200mm, D 700mm, W

1150mm)

Dimensions & tolerances

The most important part of any restoration is that the dimensions and tolerances of the individual part stays

The benefit of vapour blasting is that all critical surfaces and dimensions of components remain unchanged.

Phone: 0448 584 341 • E-mail: jimmi@gcvapourblasting.com.au • Location: Ormeau, Gold Coast, Queensland

HOW TO FIX A TIRED M100 ELAN

by Mike Richards



Ride Height and Suspension

All these cars suffer from a drooping front suspension due to damper failure and sagging springs. It is surprising how forgiving the car is to drive in this delapidated state.

The worst consequence is damage to the sump from bottoming-out at speed. All Elans get their sumps smashed in and some get the sump plugs knocked out. I fixed this by fitting fully adjustable Protech dampers and new springs 20 per cent stiffer than the originals. The ride height is easily adjusted with a C-spanner and the stiffer springs prevent damage to the sump without the need

to fit a bash plate. The bounce is fully adjustable from zero to totally locked in 36 steps so the sweet spot is obtainable. I also fitted the same dampers to the rear suspension.

Take note in the image that I fitted braided brake lines and EBC green stuff pads. The braided lines are functionally cosmetic, but the pads are brill.

Turbocharger

The Elan gets a big boost from a load sensitive turbo but there is no provision to prevent turbine stalling on the overrun. I fitted a plastic Bosch blow-off valve to the large rubber pipe on the inlet manifold.

The actuating line is plumbed into the system by fitting a three-way connector as in the image. This simple and cheap BOV works well. Note that it is illegal to vent a BOV to atmosphere and it's on my long term (maybe never) to-do list to plumb the vent back to inlet air.

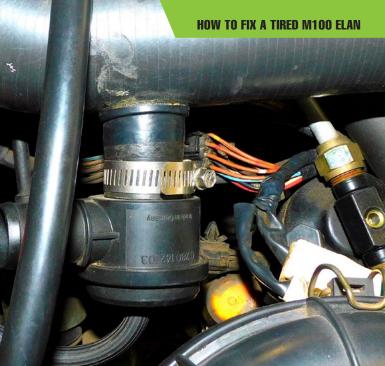
Exhaust System

The first section of pipe housing the catalyst is stainless steel but Lotus didn't see fit to complete the system









in this indestructible material. The most difficult part of the job was finding stainless pipe in the correct size.

The job entailed stainless pipe through to the muffler, which is a stainless unit of modern construction, using baffles which do not constrict the gas flow, an essential step to getting the turbo charger to work properly. The Lotus-designed, flattened section of pipe through the suspension raft was eliminated so the exhaust is free-flowing.

The muffler is exactly the same dimensions as the original and the oval tail pipe likewise. The original hangers were recycled.

Battery drain

The bane of all Elan owners is it's strange habit of draining the battery charge in short order. I fitted a cheap isolator to the positive terminal.

Hood bows

The forward hood bow has a habit of moving so that the hood sags. I designed and fitted a simple stay to connect the front bow to the rear one which does not move. It's made from the stainless steel strip fitted to windscreen wiper blades.

Front spoiler

Another part which gets scraped off is the front spoiler made from rubber extrusion.

A length of rubber weather seal which is exactly the correct size can be modified to fit. The U-shaped section has one side sliced off to give an L-shaped extrusion exactly matching the original.

Once the ride height is corrected you don't scrape the spoiler strip.

Jacking

The jack supplied with the car is designed to not damage the body around the jacking point. If you use a conventional

workshop jack you'll damage the underbody. Hence my gizmo which fits securely on the jacking point acting as a distance piece on a conventional jack.

Red-hot mechanic's secrets

Replacing the cam belt is reputed to be an eight hour job. Not so for the thinking man's mechanic who removes both engine brackets and shoves the engine over to the left thus making enough room to do the job. Easy-peasy.

After breaking plastic components in the badly designed series 1 gear cables I fitted the indestructable series 2 cables. If you are able to fit new cables to an Elise then you can fit the Elan cables with one hand behind your back, it's that easy.

The headlight jacks are GM parts in which the plastic gears disintegrate over time. Being Chev. Corvette, replacement kits are readily available. In USA replacement gears in metal are available.







Replacement sumps are available from SJ Sports Cars in UK. They are made double-skinned and further reinforced around the sump plug so can withstand a severe knock. Subsequent repairs ultimately result in separation of the nested pressings.

Every Elan has hydraulic fluid leaking from the power steering. It's not a problem but makes an awful mess. Removing the steering is not a job you'd wish on your worst enemy. But there is a cheap, simple fix not involving any spanners. Fill the fluid reservoir according to the instructions on a bottle of Lucas Power Steering Stop Leak available from Repco stores. Absolutely no leakage.

I replaced a cracked windscreen with a Star Glass unit fitted by Windscreens O'Brien. The rubber insertions are difficult to source and the metal corners on the top rail are irreplaceable. The screen is fitted identically to the GM cars so O'Brien has good expertise.

Series 1 Wheels and tyres

These wheels have soft alloy rims which are easily damaged. Neway Wheel Repairs in West Heidelberg are the only

place in Victoria which can correctly repair damaged wheels. I've replaced the original Michelin Pilot tyres with Yokohama Neova Advan AD08R, which are better if you don't mind a tad more harshness.

A popular modification to the bell crank on the gearbox cured the sloppy action of the gear lever.

By fitting a crank with a shorter arm the throw was considerably reduced at a cost of higher load on the fragile series 1 cable. I would guess that this modification would be successful using the series 2 cable. Maybe a project for extended lockdown.







QUEENSLAND SUPER SPRINT SERIES

by Joe Arico



We had a few no-shows this round for various reasons, but most of the usual suspects were there. Not surprisingly Lotus did very well, with Elises and Exiges dominating the podiums.

Congratulations to George Row for achieving a points tally that put him in third overall for the year. Consistency pays off!

The award for sheer tenacity goes to Andrew Row and Bridie Moran. I lost count of the number of issues they ran into with their Dominator race car over the weekend. But they never gave up and kept the car going.

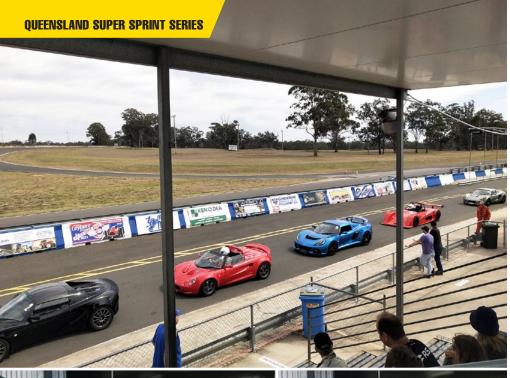
Bridie is now known as "Speedy". She was so pleased with her PB in run 5, but then proceeded to better it by

some 4 seconds on her last run! Well done Bridie! And well done Andrew for showing some genuine ingenuity to keep the car going. I'm not sure I could have done the same!

There was only minor drama over the weekend. A Subaru decided to destroy its turbo on Sunday morning, and dumped oil over the back of the circuit











Bridie is now known as "Speedy". She was so pleased with her PB in run 5, but then proceeded to better it by some 4 seconds...

on the racing line. It was the run before all the Lotus went out so thanks for that Mr WRX. We all came through unscathed though, so that's the main thing.

Garry had what we thought was a CV joint issue, but to his delight it ended up being a loose wheel spacer, which was easily fixed.

On a personal note I had a trouble-free weekend and managed a PB so very happy with that.

RESULTS:

Sports Cars 3001cc and over

	Name	Fastest Time	Total Time
1	Geoff Noble	1:16.829	5:11.750
2	Matt Plowman	1:22.209	5:32.491
3	Tony Seymour	1:24.277	5:41.178

Sports Cars 1601-2000cc

	Name	Fastest Time	Total Time
1	Garry Pitt	1:22.735	5:35.778
2	Barry Mather	1:25.159	5:44.588
3	Joe Arico	1:27.200	5:53.724

Super Modified 0-2000cc

	Name	Fastest Time	Total Time
1	Andrew Row	1:30.629	6:09.945
2	Bride Moran	1:36.559	6:33.615

Overall Outright Position (out of 85 cars)

	Name	Fastest Time	Total Time
1	Geoff Noble	1:16.829	5:11.750
4	Matt Plowman	1:22.209	5:32.491
5	Garry Pitt	1:22.735	5:35.778
6	Tony Seymore	1:24.277	5:41.178
9	Barry Mather	1:25.159	5:44.588
10	Martin O'brien	1:25.081	5:46.204
11	Darryl Ringuet	1:25.979	5:49.863
13	Joe Arico	1:27.200	5:53.724
19	Cris Johansen	1:28.730	6:02.855
22	Des Hill	1:29.338	6:05.145
28	Andrew Row	1:30.629	6:09.945
39	George Row	1:34.485	6:26.888
46	Bride Moran	1:36.559	6:33.615
56	Mike Goodfellow	1:40.678	6:47.937



After my previous reference to Thermomix, I decided to check out what a TM6 is. I can tell you it is NOT a Triumph GT6, or TR6, but a mega-expensive kitchen plaything, at a bargain price of \$2359.

According to the website, these little beauties can "can chop, beat, blend, whip, weigh, mill, knead, mince and much more at the touch of a button." I reckon I can do all those things with a cheap whisk, a \$5 set of kitchen scales, and a glass of fizz from Aldi to keep my strength up.

I did note that the TM6 has Wi-Fi connectivity, so I'm guessing you can dial 000 (hands free) when the frigging thing removes your right arm up to the elbow, "with a touch of a button", and prepares a fab family-sized pie with the offcuts. With COVID you would be unable to bring the pie to hospital for the recent amputee. Dang.

None of the following vital functions were included in the Thermomix paint removal, degreasing, grinding, wire brushing, Dremeling and ultrasonic cleaning. These functions are vital in the kitchen, as rebuilding your Europa transaxle in the shed during winter is not as much fun as rebuilding it in the kitchen, which is warmer than the shed. closer to a source of food, and the mandatory glass of red (after a specified time).

> ...rebuilding your Europa transaxle in the shed during winter is not as much fun as rebuilding it in the kitchen...

So I bought a Twin Cam Europa instead. It was a bit of a to-and-fro exercise and I clearly stated I would make an offer once I'd seen it in Adelaide. Well lockdown 5.0 (or was it 4.0 or 6.0) threw that idea out the window and I bought it sight unseen. Now I can't even drive to Adelaide to retrieve the darling thing, and visit my good friends, and sample a glass of Barossa red. Double dang!

In my head I keep saying the Europa is the first mid-engine production car, but Mrs. Google keeps correcting me. It was time to do some exhaustive research (about 5 minutes) and uncover the truth.

It seems the first recognised mid-engined car was the Matra Djet. Built around some meagre Renault drive train, thankfully without its swing axles, it is quite a fetching wee thing.





About 1700 built. Never seen one in the flesh, but I guess there might be one or two private imports in Oz. Production started around July 1963. It had a backbone chassis of sorts.

A curious contender in the production, mid-engined car "fun facts" race is the De Tomaso Vallelunga. It predates the Mangusta and Pantera, and it is far more delicate in its design. I'm guessing the gaspy Ford 1500 didn't give it wildly exciting performance, but it looks fab to me.

The chassis is quite like a backbone, but fabricated from a million and one bits, space-frame style. About 90 were built, and production started in late 1966.

The Lamborghini Miura. What can I say? A gorgeous car! The exterior design is arguably the best in the world, but it had a rather curious chassis made out of spotwelded 0.9mm steel. I'm guessing it was

I'm guessing the gaspy Ford 1500 didn't give it wildly exciting performance, but it looks fab to me. probably pretty bad torsionally, but with such an expensive car, no one was going to be driving it to the limit, and putting it into a tree. Even less so now. Regularly advertised for around AU\$2,000,000 today, it certainly makes the Thermomix look like a bargain. About 750 built. Production allegedly started in 1966.

Finally, onto the Europa. The S1 Europas started production in early 1967, and after a few iterations, finally ended in 1974, with 9000 cars being built. That's an astonishing number given the above competition, and only outdone by the Esprit, where 10,675 cars were built in an endless number of iterations up to February 2004.





"NO ONE KNOWS YOUR PASSION LIKE SHANNONS."



The passion, the pride of ownership, the sheer emotional attachment - no one understands it better than Shannons. So when it comes to insurance for your special car, daily drive, bike or even your home, there's only one person you should talk to - a fellow enthusiast at Shannons. And remember, you can pay your premium by the month at no extra cost.

So call Shannons for a 🍎 🆚 👚 quote on 13 46 46.

SHARE THE PASSION

Shannons Pty Limited ABN 91 099 692 636 is an authorised representative of AAI Limited ABN 48 005 297 807, the product issuer. Read the Product Disclosure Statement before buying this insurance. Contact us for a copy.

CLASSIFIEDS FOR SALE



■ MYELIS PERSONALISED PLATES \$650 + postage

Contact Jon Hagger: 0418537222 or email: jonhagger8@gmail.com.com

CLASSIFIEDS ADVERTISING FOR MEMBERS

All advertisements are free for members, and run for a period of three months in both Lotus Notes magazine and on the website.

Sale price and vehicle registration (or engine number if not registered) must be included.

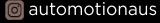


Log Book Servicing | Timing Belt Replacement | Mechanical Repairs Track Preparation | Restoration & Modification | Minor & Major Overhauls

00000

Phone: (07) 3855 1644 1/60 Pickering Street, Enoggera, QLD 4051

info@automotion.com.au www.automotion.com.au



Go further Go Gulf



Available at gulfoilaustralia.com.au and selected elite workshops Contact Mike on 0411 404 594 for workshop enquiries





03 9415 8181

PRESTIGE CAR REFINISHERS

www.filefinish.com.au

Your Lifetime Partner in Prestige Vehicle Repairs

180 Christmas Street, Fairfield, VIC contactus@filefinish.com.au



f you own a Lotus then you know you own a truly exceptional machine which provides you with an incredible motoring experience. No other vehicle gives you the feeling you get when you're behind the wheel of this iconic car.



So when your Lotus needs body repairs or refinishing, it deserves the exceptional

care and experience of File Finish. Only File Finish has worked extensively in Australia for many years and we believe we still offer the best Lotus repairs in the country. Our knowledge of composite and fibreglass Lotus repairs is second to none. We always use exactly the same techniques we learnt in the Lotus factory for bonding, repairing and spraying. When File Finish repairs your Lotus you can be certain it will get the exceptional care it deserves. Call us today for an obligation free quote.











VINTAGE VETERAN HOT ROD & KIT CAR MOTOR TRIMMING

Highly experienced in all types of projects old and new All Makes and Models

Ask us about our ADR approved seats

Contact us or call in for an obligation free chat

Ph: 03 9431 4070 Mobile: 0448 880 784

Email: info@classicandsportseltham.com.au

www.classicandsportseltham.com.au

Follow our work on Facebook - Classic & Sports Auto Interiors











