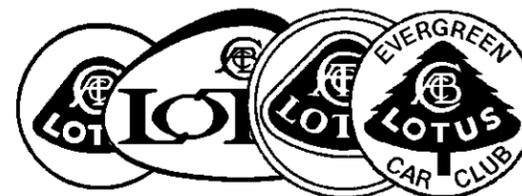




Evergreen Lotus Car Club
P.O. Box 40481
Bellevue, WA 98015-4481



Lotus Lines

Newsletter for the Evergreen Lotus Car Club
 January 2004

U.S. Elise Formally Launched

The U.S. version of the Elise was formally launched at the Los Angeles International Auto Show on 30 December. Details like pricing and options packages were announced. Several pilot production cars were on display.

Including air conditioning, ABS, power windows, dual airbags, the car weighs in at 1975 lbs. As previously announced, the engine is the Toyota 2ZZ-GE 1.8L engine with variable valve timing and mated to a six-speed Toyota C64 gearbox. The power output is 190 bhp at 7800 rpm and 138 ft.-lb. of torque at 6800 rpm. The gear ratios used are the ones found in the European version of the gearbox. The standard tires are Yokohama Advan Neova AD07 tires mounted on 175/55R16 wheels in front and 225/45R17 in back.

The MSRP for the base car is \$39,985, a bit higher than the \$37,500 price mentioned last year, but far less than some rumors had it priced at. Most of the increase can probably be attributed to the fall in relative value of the U.S. dollar.

There are option packs available. The Touring Pack includes full leather seats, electric windows, upgraded stereo, stowage net, double insulated top, sound deadening and a full carpet set for \$1350. The Sports Pack includes larger, lightweight, forged alloy wheels, a track-tuned suspension and Yokohama A048 tires designed for the Elise for \$2480. The hardtop is \$1475.



The car will go on sale in May. Lotus will initially be bringing in between 2000 and 2400 cars per year. There were 38 dealers in the U.S. at the time of the launch. More than 17,000 Elises have been built since production started in 1996 and it is the best-selling Lotus in the history of the company.

Tour Of Dennison International

When: Saturday, January 31st, 10:00am to noon
 Where: 11203 Benston Drive East, Puyallup, WA
 253-435-9143
 Host: Gerry Foley, 253-565-2715

Butch Dennison, after a long association with Pete Lovely, has bought out and taken over operations of the race preparation, transport and trackside services, storage, and restorations that were formerly known as Pete Lovely Racing. As part of the transition, they now inhabit a custom built motorsports complex. Still located in Puyallup, the changes are dramatic, providing greater storage and work space for the expanding operation. It's been several years since our last visit, and Butch has kindly accepted our invitation to host us for another tour. Those who have been there will know they don't want to miss this. Those who haven't should trust us when we say it's a "must see" for any Lotus, racing or vintage car enthusiast.

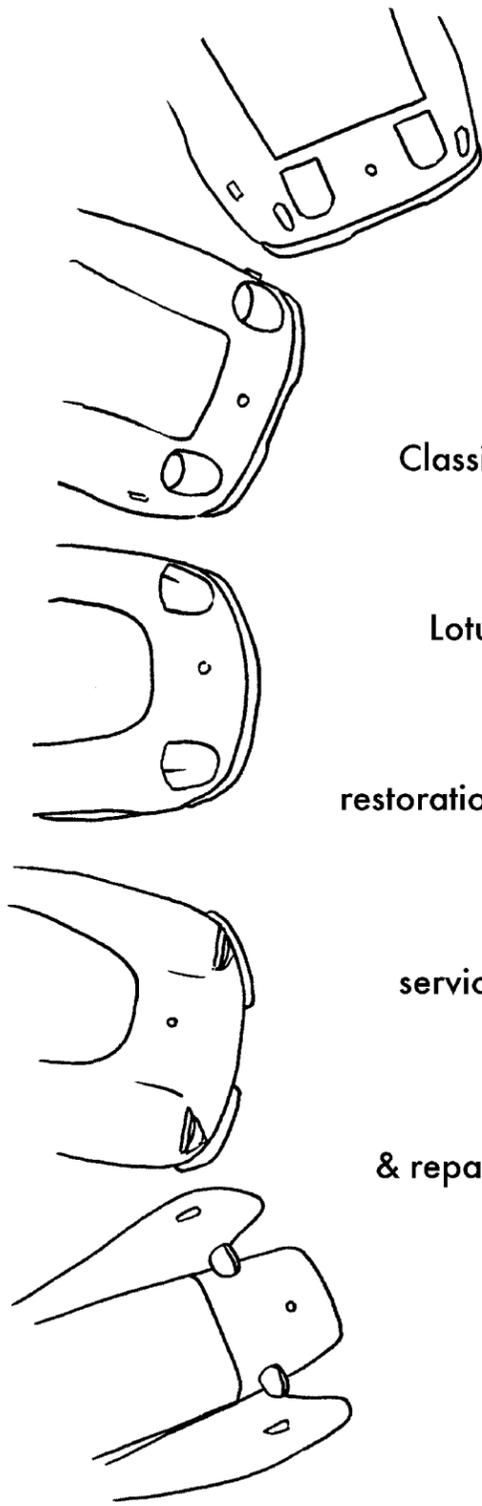
This is a great way to kick off 2004. Come out and meet Tom Miller, our new chairman, and re-acquaint yourself with the rest of the club. Minor munchies will be provided.

Directions:

- From I-5 North or South, take the 54th Ave. E exit in Fife.
- Proceed South on 54th Ave. E. to Valley Ave. E.
- Turn Left (roughly East) on Valley Ave. E. and proceed to Milwaukee Ave. E.
- Turn Right on Milwaukee Ave. E. and proceed to Benston Drive E.
- The shop is on the left on Benston Drive.

For those interested, some club members plan to meet at the Denny's in Fife at 8am for some "together" time before heading to Dennison's. No RSVP required, just show up and hope there is room at the table. The address is 5110 Pacific Hwy E., just west of the 54th Ave. exit off I-5.





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Editor's Note

Happy New Year!

Y'know, it is either feast or ...

In November, I didn't have enough material to fill a newsletter and it was a struggle to fill a combined November/December newsletter. This month, I have to defer material that I had specifically requested for this issue (sorry, Dave).

Look for the treasurer's report and the officer's meeting report in the next issue.

So, I have been thinking about the newsletter and what it needs to do. At best, only 25% of the club participates in events. Either this newsletter is what the majority of the club views the club as or the majority of the club just renews their membership on autopilot. I am going to presume the former.

What should be in the newsletter? Most of the tech articles about the Sevens, Elans, Europas and early Esprits have already been written, right? Most of us are too busy with other things to be working on our cars anyway, right? There is no Team Lotus or factory-sponsored race teams to follow. Is the only thing to write about Elise news and club events?

I am trying a couple of things. First, I am putting more effort into the Member Notes section. Don't be surprised if I call or e-mail you to see what's up. Second, I am writing book reviews, starting with that lame Chapman biography that I briefly held at the Holiday Party (story next month).

If you have any ideas, let me know.

Lotus Lines is the official newsletter of the Evergreen Lotus Car Club. Opinions expressed in *Lotus Lines* are those of the author and do not necessarily represent those of the ELCC or its officers. Use all technical information at your own risk. Please submit all articles, art work, advertising, and photographs to the Editor. All other official business should be directed to the Chairman. Other Lotus clubs are welcome to use the material printed in *Lotus Lines*, provided that the ELCC, *Lotus Lines* and the author are duly credited. The ELCC is not affiliated with and does not represent Lotus Cars Ltd., Group Lotus, Team Lotus, or any Lotus related organization.

Membership in the ELCC is \$20/year, with the membership year starting in January, and is prorated in three month increments. Membership includes a club roster and a subscription to *Lotus Lines*.

Contact the Editor for business ads rates in *Lotus Lines*.

Contact ELCC at:

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Bellevue, WA 98015-4481
<http://www.elcc.org>

The ELCC officers are elected bi-annually and those officers are currently:

Chairman:	Tom Miller labtrm@vmcc.org	(206)528-8141
Membership:	Jim Taylor jimtaylor@seanet.com	(206)232-2237
Treasurer:	Dave Billings dave@bilcoh.com	(206)241-2116
Editor:	Alan Perry alanp@snowmoose.com	(206)855-9464

Book Review - Colin Chapman Wayward Genius

Mike Lawrence's book is one of two biographies of Colin Chapman (as opposed to Lotus histories) that I know of, so the book should catch the attention of Lotus devotees. It tries to be a "warts-and-all" story of Chapman and his impact on racing. Unfortunately, it can't decide if it wants to bash him or praise him, to credit him with innovation or claim he merely took credit for the work of others. While I was initially drawn into it, I ended up really disliking the book.

What did I like least about the book? Two things. First, as the book progresses, it becomes a history of Lotus, not the story of Chapman. It seems like he only had good material

for the beginning of Chapman's life, but still wanted to make a point about Chapman's death and padded the book out. Second, in its later parts, it doesn't get its facts right. For example, details on the S1/S2 Esprit that would have been easy to verify are flat out wrong. I found it hard to believe the details that I was less familiar with when the details that I am familiar with were so wrong.

What did I like about the book? I liked its interviews with Nigel and Mike Allen, the guys who Chapman started the first Lotus company with. I haven't seen much first-hand info on their side of the Lotus story.

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Classified Advertisements

Classified advertising for ELCC members is free. Pricing for non-members is available on request. To submit ads and for business ad rates, contact the Editor. Also, please remember to inform the Editor when you no longer want the ad to be run.

Parts Wanted: for 1968 Series III Seven. Engine brackets for crossflow, front lower a-arms, handbrake lever, Caterham reprint of Seven Manual. Andre, 206-528-8141, ags58@earthlink.net.

For Sale: From 1976 Mk 4 1500 Spitfire. L&R front uprights with stub axles/steering arms/hubs/brake calipers and discs, L&R rear brake assemblies, i.e., drums with complete backing plate assemblies. I believe these interchange on some Lotus models. Bob Scheib, 509-783-3126, ROBERT.SCHEIB@gte.net.

For Sale: Motorsports Elise. Red. Alignment & ride height changed. Gel cell battery. Spare splitter. Spare alternator. Custom exhaust with optional Supertrapp tip (for quiet days). Custom lower motor mount (lighter and stronger). Set of rain tires. Fuel container and filler. \$67500. Colin, 425-417-3862 or <http://www.lotussource.com/lscclassified/MotorsportElise/summary.htm> for more information.

For Sale: 1969 Elan S4 DHC. White daily driver. 122,500 mi. rebuilt engine and transmission by Schlossnagel racing at 116,568 mi. in 1995. Full service records since 1982 purchase at 66,3887 mi. and can be e-mailed as attachment. Never wrecked or restored. Always garaged. Stock except Crane Cams optical ignition system, adjustable ZC needles, thermostat electric radiator fan, Michelin X 165/70R13. Factory Service Manual. Black top (never used). Black Tonneau. Felt car cover. Hemmings list good as 14K, CPI list at 12K. Chuck Botts, cbotts@san.rr.com, 858-292-1480, San Diego, CA.

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Tacoma, WA 98499 USA
1-253-584-2033

For Sale: 1963 Lotus Elan Series 1. 45700 miles. Red with original gray top and gray center console. Original teak 3/4 dash. Original style steel wheels and hub caps. A great example of the earliest Elans with low miles. Would prefer to sell to a good, local home. \$20,000/Make offer. Maury Montag, 425-391-5359.

For Sale: 1962 Jaguar Mk 2. British green, 3.8 liter, AT, power steering, power brakes. \$23,000. Scott, 206-723-5094, Seattle, WA.

For Sale: 1979 Eclat, Black, 40k miles, Automatic, \$7000 obo to good home. Joe Terry, 425-885-0637.

For Sale: Two Solex carburetors for Series One or Two Europa, \$85 for the pair. Bob Cross, 360-652-9260.

Parts Wanted: for Type 14 Elite. Any spares you have. Building a car from a bare shell. John Schneeman, 206-854-6706.

For Sale: 1997 Caterham Super 7 Live Axle, 1700 cross-flow/150hp, Quaife 5-spd, Quaife LSD, 4 pt harness, Scholarship Adjustable Suspension, Clamshell Wings, Green/Yellow/Aluminum, Tonneau cover, Some spares. See www.unibrain.org/forsale for more info. \$25,000 negotiable. Jim Boone, 503-246-7541, forsale@unibrain.org

For Sale: Parts for Series 2 Elan. Engine block and rotating assy. All engine acc. Cyl. head with cams. One Weber DCOE side draft carb. Complete manual transmission. Clutch assy. Flywheel. Drive line. Complete differential assy. Rear swing arms, axles, hubs, brake assy. Front swing arms, hub, brake assy, rotors. Starter. Alt., Air cleaner assy. dazriel191@yahoo.com.

More Photos From The L.A. Auto Show



Event Calendar

ELCC events are listed in **BOLD**

January

13 Officer's Meeting Wedgwood Alehouse, Seattle, 7pm

31 Tour of Dennison International

February

24 Hours of Daytona - Florida

Lotus Elite Brunch, Newport Beach, CA, 949-497-3443

28 ELCC Movie Night, Randall Fehr's house, North Ballard

March

ELCC Kart Racing at SyKart, Tukwila, WA

April

ELCC Visit to the SOVREN Defrost Kickoff Races, Pacific Raceways - Kent, WA

May

20-23 West Coast Lotus Meet, Lake Tahoe

Car Clubs

BMWCCA: BMW Car Club - Puget Sound Region

425-481-9571

<http://www.bmwpugetsound.com>

CMCS: Corvette Marque Club of Seattle

425-486-2309 <http://www.corvettemarqueclub.com>

NWARC: Northwest Alfa Romeo Club

360-766-4405 <http://welcome.to/nwarc>

WWSCC: Western Washington Sports Car Council

206-255-0658 <http://www.wwscc.org>

Racing Clubs

BSCC: Bremerton Sports Car Club

360-697-1761 <http://www.bscc.net>

CSCC: Cascade Sports Car Club, Portland, OR

503-543-8161 <http://www.cascadescc.com>

IRDC: International Race Drivers Club, Seattle, WA

206-781-8199 <http://www.irdc-racing.com>

ICSCC: International Conference of Sports Car Clubs

425-226-1338 <http://www.icsc.com>

SCCA: Sports Car Club of America, NW Region

206-292-0500 <http://www.nwr-scca.org>

SCCBC: Sports Car Club of British Columbia

604-824-7277 <http://www.sccbc.net>

SOVREN: Society of Vintage Racing Enthusiasts

206-232-4644 <http://www.sovren.org>

TC: Team Continental, Portland, OR

503-645-9058 <http://www.teamcontinental.com>

From The Chair

Greetings to all members of ELCC, it's time I introduced myself. My name is Tom Miller and I'm your new Chairman. The election results were announced at the annual Christmas party and, even though a few of the districts still had not finalized their returns, it was decided the club could wait no longer for firm, iron-fisted leadership and direction.

I've been a fringe member for only about 3 or 4 years and never an officer so consequently Andre Samson, the previous chair, knew he had someone just ignorant enough to fall for the offer. When added incentives were dangled (Andre, get back to me about that salary we discussed, your phone seems to have been disconnected.) the position was bewilderingly accepted and now you're stuck with it, or rather, me.

What are my qualifications? Simply, I have none. No one else wanted the job. I am not a whiz at motor vehicle repair or restoration. I do not race cars or collect them. What I do

Member's Notes

Compiled from members

Submit your notes to the Chairman or the Editor.

MARK CLEAR continues to keep himself busy with raising kids and remodeling his current house. He just finished redoing interior doors, millwork and painting and is working on bathrooms and kitchen this spring. Plans to build a new house with a bigger garage is also in the works.

JESS MARKER has been working on his cars: "I've got a few bits for the 'Esprit Project' most recently a set of turbo style cam carriers and flat covers, a set of 107 cams and belt sprockets and a 2.2 crankshaft. Hoping to start tear down and

Club Lotus President Graham Arnold Dies

Graham Arnold, long-time president of Club Lotus and Sales Director and Board Member for Lotus Cars in the 60s and 70s, died suddenly after a brief illness while attending a car show last November.

Arnold reportedly met Chapman while selling tires for Firestone. He joined Lotus in 1963. In the late 60s, he was renown for providing the press with test cars with extraordinary capabilities and posing the cars in front of water (Chapman referred to the photos as "bloody duck shots"). At Chapman's request in the 70s, he restarted Club Lotus and

have is a life long love of automobiles and that focus began to zero in on Lotus cars about 10 or so years ago. No, I don't know all of the racecars and couldn't tell a 49 from a 59, (if there is such a thing) but I do have my 4 or 5 favorites, plus a deep appreciation of the genius that was Colin Chapman. I suppose that's qualification enough until the next election or impeachment.

Am I going to change the club at all? Nope. Not really. It's been running fine for quite awhile without me. I do have a few tweaks in mind but nothing earth shattering. There is, however, one crazy thing; I don't have a Lotus! My sports car at the moment is a Mazda Miata. But, as David Caley kindly said to me one day, "Why, that's not a Miata, it's a Lotus Elan series VII ". Thanks David and I hope I do a great job for you all.

Tom

measuring for pistons and inserts soon. The Elite is about ready for this year's Copperstate except...I had a new set of mild race compound brake pads put on it and they squeal like crazy so, back to the shop for some 'adjustment'. They do have a terrific feel to them though, compared to the old pads which took a whole lot of foot to even start slowing down. And the Elan is sporting a new Momo steering wheel, slightly smaller than the big lumpy airbag-filled GM wheel it used to have. Love the feel of it. A custom fit piece of black tape is covering up the airbag warning light."

continued as its president until his death. He left Lotus in 1981.

Mike Causer, who worked with Arnold on a large Lotus meet in 1988 noted "Although a lot of people thought he was pure bullshit and didn't get on with him, once you got to know him he was actually very honest and was a good organizer. I enjoyed working with him on the big multi-club Lotus meeting at Donington, and thought he brought a great deal of solid practical experience to counterweight the flights of fancy of people with less experience."



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Details of The U.S. Elise by Alan Perry

At the Los Angeles Auto Show, Nick Adams, Vehicle Development Manager for the U.S. Elise, and Tony Shute, Project Manager on the original Elise and now Head of Product at Lotus, spent a lot of time with *Lotus Lines* explaining various aspects of the new car.

Overview: The U.S. car is basically the S2 Elise adapted to take the Toyota motor. Another major addition was dual airbags.

While the longerons (rear extensions off of the chassis) have been changed to accommodate the Toyota engine, the majority of the chassis has not been changed. The car has been through U.S. crash-testing (including side impact testing) and has passed with a wide margin.

Lotus will be seeking two DOT waivers in order to meet FMVSS (Federal Motor Vehicle Safety Standards). One concerns the headlights, which do not meet the letter of the very complicated lighting rules with regards to the headlight cover or the lights themselves. The other concerns the car's lack of bumpers. This is not an issue of occupant safety; it is an accident repair cost issue. Both of these issues will have to be addressed in a future version of the Elise.

It appears that Lotus' work with the DOT to certify the car is going well.

Engine: Despite reports of Lotus enhancements, the Toyota engine and gearbox is actually installed with no modification to the drivetrain itself. The installation of the engine in the Elise allows Lotus to use more efficient plumbing between the airflow meter and throttle body as well as a better downpipe design.



Lotus has designed their own ECU (working with another manufacturer), so aftermarket parts for Toyota cars using the same motor are not likely to work in the Elise. A new instrument cluster from Stack is used. To meet requirements that the engine systems be tamper-resistant, the software for the ECU as well as the CANBUS link between the ECU and the instrument cluster is encrypted. Access through the OBD-II port is limited to reading and clearing

error codes. This is supposed to limit aftermarket performance enhancements, but this might not be the case.

To help cool the engine, two front-mounted oil coolers are installed. Each are located behind separate intakes along the lower front of the car.

Brakes: Controversially, the U.S. Elise has anti-locking brakes. The primary reason appears to be that the market segment that the Elise will be sold in requires it. Since Lotus had to do it, they intended it to be the best ABS system they could develop. They have brought in racing drivers to give their impressions and their responses have been positive. The ABS apparently starts to engage just after initial tire chirp is heard.

Wheels and Tires: The factory tires are listed in the article on the first page of this newsletter. The base wheels are cast alloy. The sports wheels are made in Russia by RimStock from a spun disk that is then machined. These wheels are very strong and very light.



The hubs have been changed to use the more common 4x100mm bolt pattern from the obscure 4x96.25mm pattern used on the original Elise.

Interior: The interior of the U.S. Elise is very similar to the S2 Elise, with the cut-down sills and parcel tray. The passenger seat is still in a fixed position, but it is more forward in the U.S. car. The reason for this is the airbag. The passenger is located at the optimal distance from the airbag for a 90th percentile individual.

The arrangement of the soft top is different. As opposed to the early cars, the ribs that support the soft top from front to back. Also, the cant rails that attach the ends of the soft top to the car are incorporated into the soft top and are more simple to operate. The interior side of the soft top is nicely finished on the Touring Pack soft top.

Another detail of the interior is that the space behind the seats is more finished than on the earlier cars.

Exterior: The exterior of the U.S. Elise is very similar to S2 Elise. Side marker reflectors and lights (LEDs) are added to the edge of the fenders.

The doors latches open through the same style push button as on the original car, but the engine compartment opens by a

key in the center of the hatch and has the Federally required release inside of the compartment. The front compartment does not open.

As on the S2, the air exit for the radiator is not as deep as on the S1. This is necessitated by the addition of brake servos. This allowed the radiator to be larger and improved cooling by a significant margin.



The rear diffuser was redesigned from the S2 Elise to be lower in the middle and have the exhaust exit through the diffuser. The exhaust on the S2 Elise exited in a more aesthetically pleasing way through the rear valance. Unfortunately, the new exhaust would require additional plumbing adding additional weight to achieve the same effect on the U.S. car.



The left side duct feeds a cold air intake and provides engine bay cooling. The right side duct just provides cooling.

As far as the general appearance of the U.S. Elise compared to the original Elise, Nick Adams notes, particularly to those who claim to prefer function over form, that while the original Elise was styled first, then run through the wind tunnel and modified, the aerodynamic parameters for the S2 and U.S. Elise were determined first, then the car was styled.

The bodywork on the U.S. Elise is aerodynamically balanced and generated about 25 kg of downforce in both the front and back of the car. The rear spoiler incorporated into the bodywork is located at the precise height to optimally reattach the airflow coming off of the top of the roof, so additional spoilers should appear on the car in the future.

A Trip To L.A. by Alan Perry

After I found out that the Auto Show was going to give me a pass to the Media Days when Lotus would be doing the Elise launch, I went to book a flight to L.A. Then I got a call from my friend Jon Rosner, who lives in the Bay Area and was going to be covering the launch for British Marque magazine, as well as Golden Gate Lotus Club's Chapman Report and Pistonheads. He didn't want to drive down to L.A. by himself, so I flew to Oakland instead.

I rented a Compact, but got a Premium car, so we had a cushy sponge-mobile for the drive. At a food stop, we got word that the Grapevine (the hill on I-5 going into the hills around L.A.) was closed due to an accident. This forced a detour through Bakersfield and Palmdale and added an hour to the trip.

When we arrived at the show, the Lotus display was amazing. It was themed around the Elise pedal arm extrusion, using them as supports for the railings and signage. It was very impressive for Lotus.

I spent two days examining the cars, talking with Nick Adams and Tony Shute about the details for the adjacent story and brainstorming ideas for my Elise rally car project, talking with Arnie Johnson and Clyde Shepherd from Lotus Cars USA plus a bunch of other folks from Lotus Cars (including felt-tip fairies Russell Carr and Steve Crijins), hanging out with Tony's son Robin. The launch itself was kinda anti-climatic.

And then we drove back to the Bay Area and then I caught my 7am flight back to Seattle.

Last month, the following appeared in *Lotus Lines*:

Looking at the chassis photo that appeared in *Road&Track*, the following was noted: The adhesive used to bond the aluminum extrusions together is now red, instead of the blue/green stuff used on the early cars. The pick-up point for the upper damper (shock absorber) mounting is much more robust than on the early cars. The aluminum extrusion that forms the sill now has a section cut out of it, maybe a quarter to a third of the height of the sill, to increase the size of the door opening.

Since then, *Lotus Lines* has discovered a) the change in the color of the chassis adhesive resulted from a change in source (the original blue/green adhesive was supplied by Ciba and the current red adhesive is supplied by Dow), and; b) what I referred to as the pick-up point in the photograph was not actually the pick-up point, but was the point on the chassis that the pick-up point attaches to (and is roughly the same between the old car and the new car). The sill has had a chunk cut out of it though. According to Lotus, the effect on the structural rigidity of the chassis is minimal.