

CLUB ELITE

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Dear Members,

Your newsletter editor this month is a novice at the business of putting words on paper but I have found at least one characteristic which may be common to the great writers of prose. It takes me many, many minutes of fussing and getting in the mood - getting thoughts together - before a single word reaches the paper. For introductions then:

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Assistant Editor, Typist, Secretary, Coffee Maker, Printing Assistant, Proofreader, Post Office Co-Ordinator and Chief Stamp Licker:
Laurienne Goodman.

My hometown is very close to Elkart Lake, Wisconsin, and the Road America race track so it was natural to become interested in sports cars and racing cars. In the early days the races used the natural roads around the lake and through the town and it was here that I was introduced to the sport. I recall admiring the Jaguar 120's but the most striking introduction was some years later after the new track was built. Many people were crowded around a huge car transporter admiring a very strange looking race machine with the engine behind the driver. Its lines were far from pretty being rather squarish and it was very small. The round, yellow and green emblem read L-O-T-U-S. Very strange. Just one year later I was roaming through the Paddock area which had many good looking cars parked on the grass when I spotted it. A little jewel, completely new and so different somehow, but a very pretty automobile. I approached slowly with camera in hand but ---- damn, a woman was sitting in the passenger seat. I took a long route around, approaching now from the front, not daring to be too conspicuous and walking my "uninterested stroll". The woman was properly striking but the car had my attention and you can imagine my surprise when my eye caught the small round badge on the the nose - Lotus. walking past I thought, "How fantastic and how incredible that the ugly duckling of last year - obviously a pure race machine - would share the marque of this beautiful road car". The possibilities were delightful. It took some time but I didn't mind returning and waiting until the car was alone and I got my photo. It is on page one of my Elite scrapbook.

#1775 I purchased my Elite in January 1964 from the original owner who had put 13,000 well-cared-for miles on the car which included a round trip to Michigan. The mileage now stands close to 50,000 and the car has been very good the whole time and has covered round trips to Sebring and twice to Wisconsin. It does get pampered somewhat and generally rests through the winter. I have been enjoying the car more than ever since the Club was formed and particularly enjoy reading about others experiences and problems.

Just the mention of one item, the rubber universal on the steering shaft to the rack. The newsletter had included this part on the interchangeable parts list and one article mentioned an owner's breathtaking experience when old age caused the part to partially fail. Well, I inspected mine and sure enough the telltale signs were there; cracks in the rubber. I was able to purchase a replacement quickly and cheaply and felt pretty good after doing this bit of preventative maintenance.

I have enjoyed doing this newsletter partially as a way of saying "thanks" to Bill and all the contributors which have made this club such a real success. This was especially evident as I thumbed through the stock of preaddressed envelopes Bill sent me. One hundred and fifty envelopes, a personal and very good looking design and addresses from all over the world! Also though, I have enjoyed the last few weeks because working on the newsletter has put me leafing through my Elite photo album, scrapbook, past newsletters, and magazines reliving old experiences and making new plans for the future. I sincerely hope others will continue to do this newsletter from time to time. I would also like to suggest that we have some "contributing editors" who would sign up for a year to help with articles of specific nature. For example a "technical editor" for a question and answer column, a "California editor" to keep us posted on the going activities on the West Coast, and an editor to continue the "7" and "11" features. Possibly you will have additional categories. This could be done on a free dues basis (for Incentive?) and would not have to be formal with print deadlines etc., but could be, say, 6-10 articles per year submitted as completed. The names could be carried on the heading of the newsletter and members could submit questions, comments, etc. directly to the expert. Hopefully most editors would receive more than enough mail to keep his, or her, own writings to a minimum. What do you think, any comments?

This past Saturday was a clear and sunny but blustery cold November day here and I was up early to bring the Elite out. After a little fussing I was on the highway and headed for Marblehead, Massachusetts. You will recall reading in the August newsletter about Bill's trip there when he visited Doug Frazer of Doug Frazer Racing Engines and Karl Kurz both club members with Elites. When I arrived Doug's car was standing tall on all four wheels and he was quickly out the door to see me before I got past the Mk. 11. He owns the eleven also, and we spent some time over it. It needs some work but this is progressing and it is a project which we will have to keep track of. Doug's Elite is a Series I, chassis no. 1113 which has recently completed a thorough mechanical rebuild and looked particularly neat and clean under the bonnet. The Alfa Romeo 5-speed gearbox is no longer attached to the engine since it required moving the engine 2" forward and this would have required cutting the bonnet and other fittings of difficulty. The body is sound and Doug is now doing the interior and had his refurbished door panels ready for installation. We looked at the the other Elite which is being cared for now by Skip Kurz

and is under cover. An Elite under cover still has a good looking and unmistakable shape. This car has had the front subframe straightened and repaired and the fiberglass extensively repaired. The engine compartment was empty but freshly painted and neat just waiting for the pieces. The two Elites then drove to Salem to see Skip who was at work on a winter home for his car. Skip has warehouse space available and is building a small room in the corner to complete the restoration. Many parts are standing by and we looked at a ready block assembly which featured Jahns pistons having a raised section for increased compression. The cylinder head is ready for assembly, the transmission is ready, and four new wires (14" MGB) had new tires mounted so we know this is an earnest project. The target date is next Spring and it would be great if we could get both of these cars to our annual meet next year.

Well, I've been pretty wordy and you will note that the following articles are the same way so I have not completed the intended article on rear suspension as promised. I will complete this and send it to Bill, perhaps, for the January issue. Please write me if you have had any experience with this as I will put it to good use. We would also enjoy hearing from or seeing other local Elite owners.

with best wishes,

Jim and Laurie Goodman
150 Hoffman Road
Ellington, Connecticut, 06029
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TECHNICAL FEATURE

Tachometer Drive Gearbox
Smiths BG 1507/02

This little unit which has some characteristics of a fragile jewel has caused me no small amount of grief. The original one failed abruptly at about 17,000 miles on the way back from a trip to Sebring, when the Elite was still quite new to me. A quick inspection with the unit in hand showed that the shaft which engages the generator had sheared clean off. This cast certain suspicions which were confirmed when I could not turn the unit using a narrow screwdriver placed in the cable end. I put the unit away and obtained a replacement from Lotus East in Millerton, N.Y., however I do not recall the cost.

Just about two years ago the tach began acting irregular and finally stopped completely; mileage about 45,000. I removed the unit and found the shaft intact and, in fact, it turned easily but had a small amount of binding. This seemed a bit of a mystery but closer inspection showed that the shaft which engaged the generator could actually be turned through thus spinning in the the generator shaft. Yes, apparently the first failure had done some machining on the generator shaft making the hole oversize. I was beginning to feel a little helpless. I put a crude fix to the gearbox shaft which I do not recommend. A hacksaw was used to cut a slot in the end of the shaft to which a fitted length of metal was placed. The metal strip was long enough to engage the slots in the generator shaft and was held in place by a small rivet. The shaft is quite hard and it was extremely difficult to saw and drill. In fact, it split when doing the rivet but the fix worked. A new gearbox was ordered again this time from a local foreign auto parts dealer. Very painful these devices, the price with tax came to \$35.70.

Lesson #1. Remove your tach drive periodically and check for free rotation. There should be no binding. Also, if the tach needle begins to bounce quite a bit there is a good chance that trouble is on the way. In either case don't take a chance on complete failure which could damage the generator shaft. Remove the unit and install a new one.

I dug out some old newsletters and noted Dick Buckingham, Jr's comments (Vol. 2 No.6, September 1972). "The tach drive unit

on the back of the generator has no provision for periodic lubrication. Mine was bone dry and was very difficult to get apart, but it can be done."

Well, I have laid out both my damaged units on the table in front of me and hope a few comments will be helpful. The unit can be disassembled by removing the cotter pin first. Then use a drift (a medium large nail can be used - the head should be the size of the hole on the cable end and the point can be struck with a hammer) placed in the cable end and tap lightly with a hammer. The bottom cap (brass) is only a light fit and the gear and shaft can be tapped out quite easily if the gear is not yet damaged. Removing the driving gear is more difficult as Dick Buckingham has noted. The gear and shaft has a large bearing on the outer end and a smaller bearing on the inner end and once the cover is removed the shaft can be pulled out complete with the bearings. The removal is more difficult because the bearing outer races have a close fit to the casing. Perhaps a vise would help this process.

Both my failed units were dry with little or no lubrication present. On the first both bearing were tight and could be wiggled but did not rotate. On the second unit the small bearing had a very rough motion but the large bearing still turned very nicely. The driving gear was worn in both cases but not too badly while the driven gear was in much worse shape and on the second unit the teeth were pretty well gone. Very likely the gears wear (mostly the driven gear) and the debris gets to the bearings compounding the failure.

Lesson #2. Proper lubrication would greatly increase the life of this unit.

I received some helpful comments from Bill Hutton who writes:

"Regarding your mention of the tach drive unit which gives you so much trouble, I noted while at Cosworth that the Formula II engines all had these supplied. I noticed that the plug in the end of the installed drive units had been epoxyed to prevent any of the grease from coming out. This may be the cause of your problems. By the way, I purchased several from Cosworth and can sell them for \$20.00 each."

A very good comment and ----

Lesson #3. Next time I need a part I'll try Bill first. What an advantage to have good info and good prices.

I couldn't resist taking my brand new unit apart and found that it had just a small amount of very light grease (similar to Vasoline) inside. This I wiped off and liberally applied a multi-purpose auto grease (Lubri-Plate Auto-Lube "A"). Additional grease can be added to the gears quite well, and quite easily, by removing just the cable drive gear. I believe that I will make this a yearly habit.

One last item, I still had the problem of the oversize generator shaft hole. A friend has a drill press and put a nice clean 1/16" diameter hole through the gearbox shaft-in the long direction. A starting point must be made with a prick punch and the hole carefully drilled because of the hard material. Into this I installed a rod (broken from a 1/16" drill) not quite twice the length of the hole. It had a good snug fit and I applied Loctite "red" (for studs) to help hold things in place. Since then I have seen split pins this small and this would be preferable but at the time I could not find the size in hardware stores.

I would be glad to hear any comments on your experiences or ideas regarding the above. Also, I wonder if it is possible to buy replacement parts to repair two broken down units????

TORQUEING THE CYLINDER HEAD

Not too long ago I had the cylinder head off our Cortina for a valve job. The gasket set included an interesting note attached to the head gasket which you may find helpful as I did.

"Cast Iron Heads/Blocks: It is essential that the cylinder head nuts must be re-tightened to recommended torque pressures immediately the engine is hot."

"Aluminum Heads/Blocks: After initial running and when engine is cold cylinder head nuts should be re-tightened to recommended torque pressures."

WATKINS GLEN 1973

Fall is one of my favorite seasons and the highlight, certainly, is the first week in October and the Grand Prix weekend at Watkins Glen. This year as always we packed the camping gear, tent, sleeping bags, air mattresses, extra sweaters and rain parkas. In recent years we have been camping at the State Park which has excellent facilities including hot water showers, electrical outlets, and mirrors, but even so our wives have gradually abandoned this spirited adventure. My trip this year was made with another friend and the possibility of frosty mornings and crisp winds seemed a natural challenge which added to the anticipation we felt.

Delicate maneuvering got us out of the plant at noon on Friday and it wasn't long before we cleared Hartford and Waterbury into western Connecticut. From this point on the drive is really a joy. The road is good four lane highway which sweeps through some very pretty and rolling countryside. Western Connecticut's hills are the southern end of Vermont's Green Mountains and the roadside sign claims a modest 960 foot elevation before a descent begins. The view here stretches for miles and our day was clear and blustery with a bright sun. A very perfect Fall day. The descent ends with a long bridge set very high over the Hudson river which is especially wide and imposing at this location. Shortly after crossing the Hudson River we picked up route 17 which was named one of the most scenic highways in the country some years back. It crosses lower New York through the Catskill Mountains an area dotted with lakes, resorts, and ski areas. From here the highway follows winding river valleys first along the Delaware River and later along the Susquehanna. These rivers are lazy and wide and at this time of year the low water is free to choose its path over the shallow stone bottom. It would be hard to imagine a more carefree path for a road to follow. With the wooded hillsides at their prime of autumn foliage the whole of it is something to stir fresh feelings.

This race is more than a mark for record books. It has the flavor of many ingredients each having a measure of perfection. The coronation of Spring and Summer as host, the final round of an international championship, and ultimate machines which capture the limits of mechanical power with precision and control. The wide gum tires have an association with pavement that defies physics and the

springs, dampers, and links find a geometry never seen in books to superbly manage them. The control of the whole requires skill and concentration of the highest order that spectators seldom appreciate so smooth is the final appearance. And yet, each turn is a long difficult slide that starts well before the corner. That slide is a committed motion, the final outcome of which is decided in the delicate balance and positioning at the very beginning - a trajectory, actually, that once started pays little if no attention to the direction the wheels are steered but responds to small changes in power. And if the speed is at maximum the trajectory is so finely balanced that the disturbance of corrections must be kept very small indeed. The powerful forces in the cars balance are not resolved until the final six inches of pavement where the long slide ends. Perhaps another two miles per hour would reduce that margin to three inches.

A small red car darts by on the left, the front drops somewhat then rises before the road bends right. The rear window is well blocked with gear. Must be going our way. Numerous curves are marked down to 50 mph and it is not unusual to find another car along side and feeling "sporty". The highway department, perhaps realizing they lack the full flavor of olde English countryside lanes, has spiced things up by adding parallel rain groove cuts in the best of the curves. This, of course, immediately makes the car feel 500 pounds lighter and produces that "driving on tippy toes" sensation.

The first car around on Saturday is always a thrill. We were at our favorite spot, a downhill section through a cut in the woods. This follows a fast right at the end of the straight and has a left turn, downhill, going out. The first engine sound pierced the quiet morning and broke through the woods behind us before the car was in view. It would be three or four laps before that song was up to full pitch and soon more cars were out until the scream of power seemed to come from all directions. On some cars one could see the drivers hands and some very quick movements gave evidence to their activity setting up for the corner. It would take some time for the drivers to get the twitches out and get down to really smooth lines. Some with troubles never quite did and Emerson was one who never seemed quite comfortable. Ronnie Peterson though appeared very good right from the start and, judging from results, things must have been right. When they have it down and start going for the fast laps the braking gets more dramatic. The front of the car which has been easing down coming in now waits noticeably longer; then suddenly it is down almost

touching the pavement. The car trembles rapidly shaking from side to side. Occasionally a small puff of blueish smoke appears from the tires possibly with a short screech indicating that the limit of braking has been exceeded. All this in an amazingly short time and even from our head on viewpoint the rapid decrease in speed is incredible.

The first ten grid positions:		<u>TIME</u>	<u>MPH</u>
1. Ronnie Peterson,	JPS Lotus-Ford,	1:39.651,	121.990
2. Carlos Reutemann,	Brabham-Ford,	1:40.013,	121.556
3. Emerson Fittipaldi,	JPS Lotus-Ford,	1:40.393,	121.096
4. James Hunt,	March-Ford,	1:40.520,	120.943
5. Mike Hailwood,	Surtees-Ford,	1:40.844,	120.555
6. Peter Revson,	McLaren-Ford,	1:40.895,	120.444
7. Denis Hulme,	McLaren-Ford,	1:40.907,	120.479
8. Carlos Pace,	Surtees-Ford,	1:41.125,	120.220
9. Jody Scheckter,	McLaren-Ford,	1:41.321,	119.987
10. Arturo Mezario,	Ferrari,	1:41.455,	119.828

The suspense that builds up before the start is quite intense. There is no practice on Sunday but one hour before the start the cars are allowed to warm up and this serves as a last minute check of any changes that may have been made overnight. This is limited to 30 minutes and all the drivers seem to try very very hard. It is something of a free for all and many people begin to wonder if the race has started. Peterson stayed out most of the time and looked very steady while Emerson was in and out of the pits a number of times which reinforces my guess that he was not yet happy with the car.

The race was superb. James Hunt chased Peterson the whole race and both were near flawless. Only once did I see Peterson get the tail hung out a bit and that brought Hunt from a car length to 1/2 length going through the corner. Emerson on occasion would appear to intentionally twitch the car while accelerating straight from the corner as if trying to feel something. He finally did make a pit stop while in fifth place and I believe the front tires were changed. This allowed Peter Revson into fifth. Peter got away last on the start because of trouble but drove extremely well and finished fifth. Emerson finished sixth and all in all I think he must have given it a very good effort. I doubt if he will be with Lotus next year and I hate to see him go.

The top ten positions:

- | | |
|-----------------------|-------------------------|
| 1. Peterson, Lotus | 6. E. Fittipaldi, Lotus |
| 2. Hunt, March | 7. Ickx, ISO |
| 3. Reutemann, Brabham | 8. Regazzoni, BRM |
| 4. Hulme, McLaren | 9. Beltoise, BRM |
| 5. Revson, McLaren | 10. Beuttler, March |

The trip home left us with many emotions, reflections, and of course a sadness for Francois Cevert.

"Somewhere inside all of us there is the spirit of adventure, a thrill of sport that was born when man hunted with flint. It is in the hearts of small boys who climb trees, of men who climb mountains; of those who ski, sail, race, and run.....

The spirit of sport has no one definition. It is the prospect of standing where few others have stood, of seeing sights that few others have seen. It is the pleasure of watching the drama, sharing the spectacle, being part of the victory....

Long after the score is of no importance, we remember what the game was like. Long after the day has faded, we remember the adventure. The feeling, we remember....

The heat, the mist; the clamor, the calm; the roar of the crowd, the empty grandstands...the speed, the style, the grace, the courage, the fatigue, the challenge....

These we will never forget...."

Watkins Glen Program, 1972

FINAL POINT STANDINGS
1973 World Driving Championship

	<u>POINTS U.S. G.P.</u>	<u>TOTAL POINTS</u>
1. Jackie Stewart, Scotland Tyrrell	-	71
2. Emerson Fittipaldi, Brazil Lotus	1	55
3. Ronnis Peterson, Sweden Lotus	9	52
4. Francois Cevert, France Tyrrell	-	47
5. Peter Revson, United States McLaren	2	38
6. Denis Hulme, New Zealand McLaren	3	26
7. Carlos Reutemann, Argentina Brabham	4	16
8. James Hunt, Britain March	6	14
9. Jacky Ickx, Belgium Ferrari	-	11
10. Jean-Pierre Beltoise, France BRM	-	9

Chassis No	Engine No.	Invoice No.	Date	
1361	1007	ELC 850	1/13/60	Jay Chamberlain
1362	10835	ELC 1143	23.10.62	Genie Shiles
1363	10332	ELC 1135	14.11.62	Mr. T. H. ...
1364	8243	ELC 946	19/6/61	Harri Moses Service
1365	10249	RK 50343 EK 50230	14/1/61	F. A. Hastings
1366	10634	ELC 1120	17/10/62	Kenie Service
1367	9375	ELC 966	24/4/61	Beaudoin
1368	10971	ELC 1143 RK 50672 EK 50436	23.10.62	Genie Shiles
1369	10481	EK 50436	3/5/62	Mr Hodgeson
1370	10846	ELC 1144	23.10.62	Genie Shiles
1371	9056	ELC 870	31.1.60	Jay Chamberlain
1372	8768	ELC 804 ELC 1168	2/10/60 10.1.63	Jay Chamberlain Genie Shiles
1373	9206	ELC 877	15.1.61	
1374	10009	RK 50241 EK 50359 RK 50570	30/3/61	P. J. de ...
1375	10509	EK 50379 RK 50429 EK 50232	10/4/62	EB Kay
1376	10387		6/3/61	W. Griffiths
1377	8973	ELC 858	20.10.60	Jay Chamberlain
1378	10124 10488	RK 50165 EK 50091 RK 50573	18/12/61	R. H. Todd
1379	4051	EK 50381 RK 50245	11/4/62	HE won Coy
1380	10391	EK 50240	8/2/61	J. B. Blair
1381	9352	ELC 987 RK 50248 EK 50162	2/6/61	Edo L. Beaudoin
1382	10233		12/1/62	P. ...
1383	8937	ELC 837	26.1.60	Jay Chamberlain
1384	8753	ELC 853	23.11.60	Jay Chamberlain
1385	7035	ELC 860	12.10.60	Jay Chamberlain
1386	7013	ELC 815	14.11.60	Jay Chamberlain
1387	8460	ELC 844	7/10/60	Jay Chamberlain
1388	8081	ELC 825	13/10/60	Jay Chamberlain
1389	7011	ELC 844	7/10/60	Jay Chamberlain
1390	8776	ELC 844	7/10/60	Jay Chamberlain
1391		ELC 1048	2/12/61	Chas. Jay (Hain)
1392	9037	ELC 844	7/10/60	Jay Chamberlain
1393	10227	ELC 1147	6/11/62	Fostano 104
1394	8955	ELC 870	3/11/60	Jay Chamberlain
1395	1062	ELC 844	7/10/60	Jay Chamberlain
1396	8756	ELC 837	26.1.60	Jay Chamberlain
1397	027	ELC 832	12.11.60	Jay Chamberlain
1398	1077	ELC 832	5.11.60	Jay Chamberlain
1399	8912	ELC 834	8/9/60	Jay Chamberlain
1400	8460	ELC 823	4/2/60	Jay Chamberlain

CF

Chassis No. Engine No. Invoice No. Date

1401

1402

8745

ELC 800

8/7/60

Jay Chamberlain

1403

8772

ELC 800

8/7/60

Jay Chamberlain

1404

9008

LC 1472

16/11/60

Sports Motors Ltd

1405

8939

LC 1402

2/10/60

David Buxton Ltd

1406

8913

ELC 824
ELC 836 ELC 857

8/27/60
20/10/60 20/10/60

Jay Chamberlain

1407

9000

ELC 800
ELC 800

11/11/60

Jay Chamberlain

1408

10230

ELC 800
ELC 800

12/11/60

H. Jones

1409

9067

ELC 1072
ELC 1072

4/4/62
12/12/62

Alton S.A.
E.L. J. P. Monters

1410

10734

ELC 800
ELC 800

12/11/60

Jay Chamberlain

1411

9187

LC 1503

9/12/60

David Buxton

1412

8930

LC 1452
ELC 907 ELC 908

14/11/60
12/11/61

Chaqueval Fay Camp

1413

8961

ELC 899

20/12/60

David L. Jones

1414

8943

LC 1479

21/10/60

Frost's (Cars) Ltd

1415

8964

LC 1465
ELC 1167

10/10/60
10.1.62

Elite Cars
Eddie Shreeve

1416

9256

ELC 800

11/11/60

Jay Chamberlain

1417

9068

ELC 800

1.10.60

Jay Chamberlain

1418

9037

ELC 976

24/3/61

Chaqueval Fay Camp

1419

9000

ELC 800

12/11/60

Jay Chamberlain

1420

8931

ELC 818

26/6/60

Jay Chamberlain

1421

8965

ELC 800

28/10/60

Chaqueval Fay (C.C.) Ltd

1422

8901

ELC 800

12/11/60

Jay Chamberlain

1423

8967

ELC 800

12/11/60

Jay Chamberlain

1424

8968

ELC 809

21/10/60

Jay Chamberlain

1425

9007

ELC 805

1/10/60

Jay Chamberlain

1426

8939

ELC 829

14/7/60

Jay Chamberlain

1427

8970

LC 1400

21/7/60

David Buxton Ltd

1428

8974

ELC 877

11/11/60

David L. Jones

1429

8937

LC 1443
LC 1471 ELC 899

26/7/60
11/5/60

Elite Cars

1430

8963

LC 1455

16/7/60

Chaqueval Fay Camp

1431

9345

LC 1392

10/12/61

Jay Chamberlain

1432

7837

ELC 848
ELC 857 LC 1501

2/10/60
21/11/60

Elite Cars
David Buxton Ltd

1433

8954

LC 1430

21/11/60

Jay Chamberlain

1434

9045

ELC 800

21/11/60

Jay Chamberlain

1435

9080

LC 1477

12/11/60

Chaqueval Fay Camp

1436

8944

ELC 805

1/10/60

Jay Chamberlain

1437

8923

ELC 807

21/11/60

Jay Chamberlain

1438

9010

ELC 800
ELC 857 ELC 805

20/10/60
2/10/60

Jay Chamberlain

1439

8927

ELC 800

1/10/60

Jay Chamberlain

1440

9179

ELC 800

1/10/60

Jay Chamberlain

CSJ only

place 21/10/60