

# E31news

THE VOICE OF NORTH AMERICAN E31'S

BMW Car Club  
of America  
E31 Chapter



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BMWCCA **E31**.com

## *E31 Chapter*

### *BMW Car Club of America*

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[newsletter@bmwccae31.com](mailto:newsletter@bmwccae31.com)

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**SoCalEights Rally, May 20**

[fern.mora@socaleights.com](mailto:fern.mora@socaleights.com)

**The Vintage, May 19 – 21, Asheville, NC**

[www.atthevintage.com](http://www.atthevintage.com)

**Bimmerfest 2017, June 3 – 4, Fontana, CA**

[www.bimmerfest.com/bmw-events/Bimmerfest-2017/](http://www.bimmerfest.com/bmw-events/Bimmerfest-2017/)  
[fern.mora@socaleights.com](mailto:fern.mora@socaleights.com)

**48<sup>th</sup> Annual BMW CCA Oktoberfest, July 11 - 15**

New Orleans, LA

[bmwcca.org](http://bmwcca.org)

### *E31 Tech Advisors*

This is a list of E31 Chapter members who have volunteered to serve as E31 Technical advisors. Please call them for technical assistance, but also call at reasonable hours. If you would like to be added to the list, please let the Editor know.

**Tom "Wuffer" Carter (reasonable time PST) 604-530-6609**  
general information

**Zach McCoy (any reasonable time EST) 317-506-7990**  
trouble shooting for transmission, ignition, top end engine

### *On the Cover*

E31s driving into the Redwood Forest during the 2013 Left Coast 8 Fest



by Roger Wray  
President, BMWCCA E31

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Happy Spring Fellow 8ers! April is here, it is time for elections! It has been my pleasure to serve as the Chapter's President. As my term comes to an end this summer, I have elected to not seek re-election, and feel it is time for the next phase for our chapter and elect a new President. We have accomplished much since becoming BMW CCA's first non-geographic chapter in 2013, and I am proud of the Board's work.

As per our by-laws, for continuity the President is nominated from sitting board members. I've served as President since our formation, and helped get us up and running. I think it would be a good time for someone else to step up and take over the reins. New blood in a position is always a good thing.

As I stated above, the President position is nominated from sitting board members. This is in line with BMW CCA by-laws and guidelines for chapters. I am pleased to announce that Steffen Staiger stepped up and notified the Board of Directors his desire to run for President. Steffen has served as our Vice President for the

past year, and has some great ideas to carry the club forward. As no other board member submitted a request to be President, on April 18<sup>th</sup> the board voted unanimously to accept Steffen's nomination.

As Steffen will be moving up to the President's position in August, this opens up two board positions. Tom "Wuffer" Carter has informed the board that he will not be seeking re-election for Secretary. Therefore, up for election will be Vice President, with the term running until 2018, and Secretary, with the term running until 2020. To run for office, one must have been an active E31 Chapter member for at least the past 12 months prior to being nominated for office. An email has been sent out to Chapter members with specifics. If you wish to run for office, I encourage you to do so. Please follow the instructions provided in the email.

I am also pleased to announce that Janice Hauser has accepted the position of Membership Chairman. If you have any questions regarding chapter membership, please give Janice a call. She is listed on our information page.

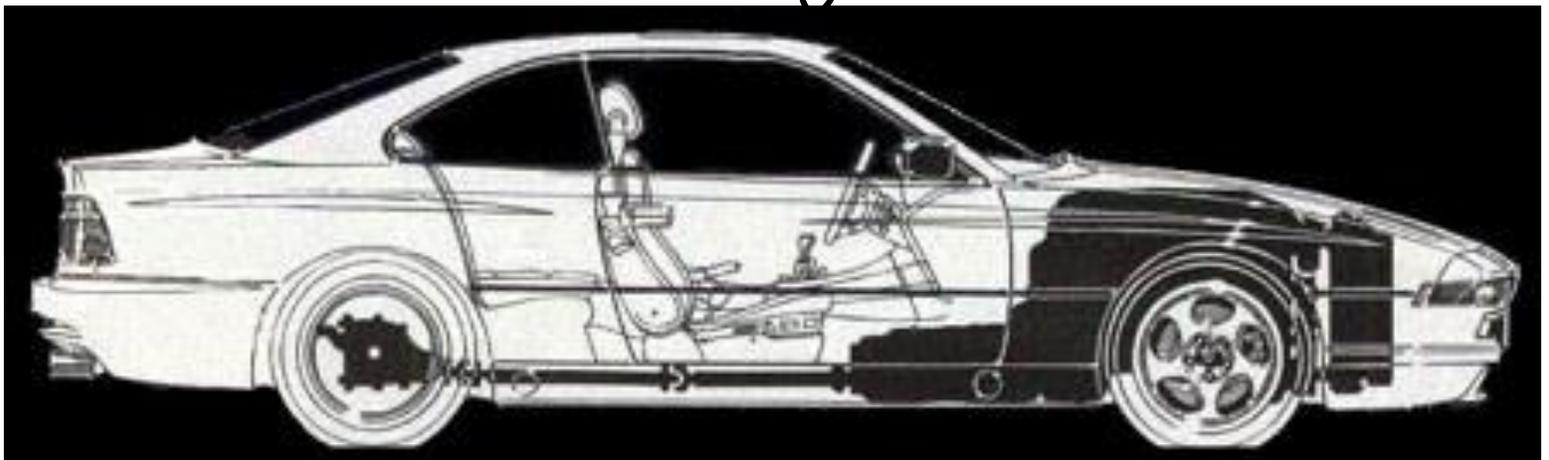
A handwritten signature in black ink that reads "Roger".

There are some great upcoming events this summer. The gang at SoCalEights has again organized a group attending Bimmerfest West. Additionally, they are going on a Rally in May. Please see their contact information in the Events Calendar here in the newsletter and on the website, BMWCCA E31.com.

If you are here on the east coast, the Vintage is again being held in Asheville, North Carolina. Lots of cool cars will be there, but if you are interested in attending I suggest you log onto the website and register, as they expect to completely book their 500 slots soon. See the Events calendar above with contact information.

If any of you are interested in hosting a local or regional E31 event, please let us know. The chapter is here to help in any way we can.

Enjoy your summer and your Eight. Don't forget to vote in the election this summer, as this is YOUR chapter. Always remember – it is the car that brings us together, but it is the people that make us who we are



By Roger Wray

March in Florida – time for 8's to gather for some well-deserved fun in the Sun. 2017 marked the 10th anniversary of the original Southeast 8 Gathering in 2017. Over the years many friendships have been made on the porch and lawn at the historic Lakeside Inn in Mount Dora, and this year's event rekindled those friendships and added new names to the list.



Although the weather up north was cold, the temperatures were in the 70's for the attendees, who came from as far away as New York, Texas, Virginia, Mississippi, and Switzerland.



Due to various reasons, several flew into Florida this year instead of driving, but once we were together, it was as if we had just seen each other. John Fuston received the long distance award, coming all the way from Switzerland. Several people asked John if he had modified his 8 into something similar to James Bond's Lotus Esprit which could drive underwater to make the trip over from Europe, but alas he just flew over.

New attendees included Ramon Ruiz and his wife Odalis, who drove up from Miami in their beautiful 1995 Oxford Green CSI, Jorge Benavides from West Palm Beach brought up his



black 1997 840ci, and Joe and Carol Komanecki came up from Naples. LaMar Brown from Rockledge attended for the first time. Lamar is a reservist in the Air Force in addition to his day job, and provided excellent information on electronics and stereo systems.

James and Carolyn Saunders made the trip down again from Virginia in their 1992 Calypso Red 850.



Marcia loved James's beautiful ostrich cowboy boots and kept trying to trade him out of them all weekend long. Richard Davis drove down from New York in his X5 to keep his 8 out of the snow, and Jay and Mitzi Botsay arrived in of all things....their Cadillac. They unfortunately are currently without an I as their white 850 had recently done its best impression of flaming crème brulee

when the gas line located on top of the fuel tank sprang a leak after a drive, and the car turned into a crispy critter right in their drive way. **NOTE TO ALL** – make sure you check those fuel lines under the right rear seat access cover!

Greg and Sherry Habel flew in from Texas, as his Dinan Twin Turbo is currently being serviced. Sumra Manning was in attendance again from Pennsylvania. Bob Bennett, the BMWCCA E31 Webmaster drove over from Tampa.

Several who registered unfortunately had to miss the event due to illness, and we wished them well when we gathered.



Friday evening started off with some heavy appetizers under the tent on the Tennis Courts of the Lakeside Inn, where the cars were parked. Lakeside Inn has recently reseeded the lawn in front of the hotel, so this year's parking was moved.



As the evening progressed, we moved into the Tremain's Tavern lounge where we were treated to Jazz music and everyone continued to get caught up with each other.



Saturday morning started with a driver's meeting on the Veranda in front of Lakeside Inn. Then we formed up and took a drive around Lake Dora under the moss lined trees on Lakeshore Drive on our way to our lunch destination at Yalaha Bakery.

Yalaha bakery is a well know German bakery, and is the destination of many car club drives in central Florida. After we arrived, the Central Florida Mini Club came rolling in. We were treated to a wonderful lunch of Bratwurst with Kraut, Bauernwurst, German Salami, Turkey and Ham Crusty Rolls. Live music of Classical Guitar was played in the background, and everyone enjoyed the meal and time together.

After a relaxing lunch we rounded up everyone and headed back to the Lakeside Inn to for the afternoon outing.



At 2 pm we all headed to the dock in front of the Lakeside Inn and boarded our Premier Boat Tour where we enjoyed a guided boat trip across Lake Dora.

Along the way we were guided to an Eagle's nest, and were treated to quite a show by the parents and two young off springs.



Can you see the Eagle?

Then it was on to the Dora Canal. The Dora Canal follows a small river between Lake Dora and Lake Eustis, and is like stepping back in time. Egrets, Hawks and Blue Heron's flew overhead.

Our Captains knew exactly where to pilot the E31 party boat, and after coming around a bend there about 10 feet off the side was a 9 foot mother Gator with all of her baby gators lined up on her back. They provided quite a show, and were happy to pose for the many pictures we took.



On our trip back through the Dora Canal, we went past the famous Gnome village which has greeted guests since the 1950's, and local's having as much fun watching us as we were watching them. All of this was combined with a narration and constant jokes by our Captain, which kept us constantly laughing.



After a trip back across Lake Dora, we disembarked and spent a relaxing time sitting out on the lawn, enjoying the camaraderie and catching up with everyone.



Saturday evening was the Southeast 8 Gathering Banquet in the Alexander Room at the Lakeside Inn. Complimentary cocktails were served before a wonderful meal of Grilled New York Strip Steak, Mahi-Mahi, and Boneless Breast of Chicken topped with Crabmeat in a Fresh Herb Beurre Blanc Sauce, complete with all the trimmings, followed by the 10<sup>th</sup> Anniversary Southeast 8 Gathering Cake.





everyone's company into the late hours of the evening.



Following the meal, everyone gathered for the raffle for prizes donated by our sponsors.



One of the wonderful things about the group is no matter how long we are apart, when we get together it seems just like it was yesterday. 2017 brought new attendees into the fold, and they were welcomed with open arms.



Sunday saw everyone's departure to various destinations, and it was bittersweet to see everyone go, but we always know....there's next year!



The aim of this year's 10th Anniversary event was to bring everyone back together to enjoy each other's company, and catch up on the years we have missed. We believe we accomplished this, as we all had a wonderful time.



Special thanks to our sponsors who donated prizes to the banquet. Sponsors included Griots Garage, Gault BMW, California Dusters, Zymol, Meguiars', Dr. Colorchip, Bavarian Autosport, BMP Design, Mother's and Pelican Parts.



After the banquet concluded, it was out onto the Veranda to relax in the rocking chairs and simply enjoy



## E31 charlie spear receives "friends of the 8" award

by Roger Wray

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On February 14<sup>th</sup>, Charlie Spear retired from Gault BMW in Endicott, New York. Charlie has tirelessly served the E31 Community during his time at Gault BMW, and recently celebrated his 65<sup>th</sup> Birthday. After learning of his upcoming retirement, the BMW CCA E31 Chapter Board of Directors unanimously decided to award the BMW CCA E31 Chapter "*Friends of the 8 Award*" for his years of dedication to the E31.

Gault BMW has long supported E31 enthusiasts with wholesale pricing, and Charlie's unique and thorough knowledge of the E31, just like his predecessor at Gault – David Belknap – has been a godsend to owners over the years looking for that specific part. Even with the ability to look up part numbers online at such sites as REALOEM and others, Charlie was still able to figure out those difficult parts which were muddled in the BMW parts maze.



Dave Belknap presenting Charlie Spear the *Friends of the 8* award

Charlie's expertise will be missed, but he has assured us that his replacement, Steve Brown, will continue in both Charlie's shoes, just as he assumed Dave Belknap's position after Dave moved up in the Gault organization.



The E31 Chapter, as well as E31 enthusiasts everywhere wish Charlie the best in his retirement.

## E31 dragon850 enjoys an afternoon drive



Taken April 20<sup>th</sup> in Benicia, California by Edward Ratkauskas (dragon850)

By Tom Jacobsmeyer

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Alec brought his new-to-him CSi to get some electrical issues sorted out.

The EF1 shop is really a gem. Great place to get to the stuff you couldn't get to at home.



As usual we than Fab at EF1 Motorsports for his help in repairs and the use of his outstanding facility.

Mike brought his 840Ci to sort out some steering issues and found out it wasn't what he thought. We had some new members and some old members that hadn't been around for a while.



Ok, so it's not ours...but it could be

WrenchFest is great fun! Our winter editions are always pretty temperate and Saturday was no different. Sixty-eight degrees in Long Beach with puffy clouds...nice! About half the guys just come to yak and see what mods or problems other people have.



Gary giving his "pointing" lecture. The car in the pic is Gary's current restoration project. A 1991, 6 speed, 92K+ miles, runs great and with the new paint, and nice shiny wheels, looks brand new.



It was a meet and greet and re-greet. The damage was two Starbucks coffee boxes, two dozen Krispy Kreme's and 5 pizza's with extra for some that night. All in all another great one on the books.



by Andrew Murphy

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The BMW E31 8 Series - Rare and beautiful



Effortless in design and function, and ahead of its time when introduced in 1989, the E31 BMW 8 Series is currently enjoying a resurgence in global popularity after the last car was produced May 1999.

### General information

The BMW 850i was the continuation of a great tradition and a new beginning at the same time: a new model series, technical novelties, optimizing all aspects of modern car design and the fact of living up to the highest standards created the coupé's unique aura.

Unfortunately, the 8-series was introduced in a difficult time for cars of its kind, so sales figures were below expectations. In fact the situation was so bad that the decision was made not to produce the top-of-the-line model, the M8, as there was no market for a super sports car. So the 850CSi marks the upper end. Because the number of sold units dropped rapidly, production of the 8-series, which was assembled in Dingolfing (GER), ceased quietly by the end of 1999.

### Numbers

The following amount of 8-series cars has been manufactured from May 1989 until May 1999:

<u>Type</u>	830i	840Ci	850i	850Ci
<u>Amount</u>	18	7803	20072	1218

<u>Type</u>	850CSi	Total 8-series
<u>Amount</u>	1510	30621

Alpina B12 5.0	Alpina B12 5.7
97	57

The Alpina B12 5.0 and 5.7 coupés are modified versions of 850is and 850CSis and do therefore not add to the total of 8-series cars built.

### The ultimate driving machine

Driving a BMW 850CSi is relaxing as in no other car. The knowledge about the tremendous power of the twelve cylinder engine does keep you cool. Overtaking is a piece of cake and if you had to brake again on the motorway, you just accelerate to cruising speed - and be it 155 mph (250 kph) - the car simply does it. The engine itself is barely audible. No roaring, no screaming, just a soft, pleasant hum.

And should there be a critical situation, you can rely on the unbelievable brakes and the grip of the tires.

The two-ton-monster wriggles around corners so that the automatic stability control is almost unnecessary.

But not only the driving experience makes the car special. It is nearly more fun to look at the car than to drive it. The 850CSi looks rather elegant not aggressive. But the front and the rear let you guess what's beneath the bonnet...

On the Autobahn (the German motorways, sometimes without speed limit) you really seem to be something special. Like it is natural, other cars are going out of your way, even if you are still far away. They are also waiting before beginning to overtake when an 850CSi is spotted in the rearview mirror. Drivers seem to back away respectfully of the flat, wide and possibly red something

behind them. Because of the appearance of the BMW 850CSi you won't need the flasher at all. As a driver of an 850CSi you feel sorry for those driving an M5. They are just as fast - in theory - but are underestimated dramatically by others and get stuck behind them.

Very special indeed is the space offered. The trunk is enormously big for a car of this type (320 liters) so that people won't laugh for long about it. The back seats allow persons of up to a little over 5 feet (1.70 m) to feel comfortable. And even fully loaded the driving experience is almost the same as with an empty car. The BMW 850CSi is a complete car for everyday use.

The car doesn't lack a luxurious equipment. Not at all! In fact a new category called 'luxury sports car' should have to be invented for the BMW 850CSi because you can get all the extras you want. Electric seats, electric sunroofs, electric shutters and many other gimmicks normally not to be found in sportier cars.

A car that's sporty, safe, luxurious and practical all in one - you cannot want to have more, because there is nothing more!

### The reality... Engine power

Unfortunately one gets used to the performance of the car in normal life, such as driving in high gears at low speed. Only after driving a normal 120 hp car again, you'll be really aware again of the 850CSi's potential and know what you've got.

Pushing the throttle provokes no reaction at all in other cars and around 55 mph (90 kph) you are looking desperately for a sixth gear. Even middle class cars seem somewhat fragile, starting with the clutch that offers no resistance in an

average car. Then there are the indicators which are in constant danger of being ripped off or the gearstick which in the 850CSI makes a lovely (but not metallic) noise when shifting gears.

Impressive is that the engine runs so smooth that a German five-Mark-coin placed upright on the running engine will stay upright!

Something like a disadvantage in city traffic is that the engine has its maximum torque at relatively high rpm. But the impression of the car being not so quick at low rpm is really just an impression. You involuntarily compare it to the inferno that happens above 4000 rpm. At 45 mph (70 kph) in top gear you are as quick as a normal car in normal gears!

Passengers have said that the 850CSI accelerates at 125 mph (200 kph) even better than their cars do at the traffic lights. And that says it all!

#### Fuel consumption

The fuel consumption differs quite a lot, depending on standards and interpretation. 15 litres of unleaded super per 100 kilometers are used in real life, mostly even less. On empty country roads fuel consumption can sink below 12 litres - if you don't play around with the throttle, of course. In city traffic, however, only the sky is the limit. Fuel consumption over 26 litres are absolutely normal.

On the German Autobahn, where the 850CSI feels really at home, the car uses about 17 and 18 litres. Using more than 20 litres is already quite difficult (because of speed limits and building sites). But if there are no limits and the autobahn is straight you can exceed of course 25 litres per 100 kilometers.

But even if you're trying to drive carefully and economically, you have to practice first. Common rules for driving at low consumption rates are not applicable to vastly powerful twelve cylinder engines. It says: "Shift into high gears early and use as much engine power as possible."

Applying this strategy to an 850CSI will leave you with staggeringly high consumption. You should still shift as early as possible into higher gear but driving at full throttle shouldn't be done at all!

#### Sports car...?!

After all that has been said here, it should be made clear that the BMW 8-series is no sports car and was never intended to be one.

The 850CSI is closest but still a Grand Tourismo, a car with a huge front engine, luxurious without compromise and with even weight playing a minor role. This car should never be an ultra-high performance car (and the older it gets the less it can be), it should get people from A to B. And this task is fulfilled so perfectly like barely another car is capable of.

Don't be a fool, nothing that weighs two tons and has an engine on the front axle will ever match a true sports car. You are able to annoy mid-engined Ferraris or rear-engined Porsches, but to beat them will only be possible if the other driver is not as good as you are.

But in being what it was intended to be, the undisputedly most Italian of all German cars is after even more than ten years still top of the line: It's a car with a tremendous shape, it is outstandingly comfortable and features superior dynamics and handling. It's simply a feast for your senses.

#### Specific Design Details

As BMW Designs continues to draw polarized opinions, the E31 is seen as a zenith of excellent BMW Design under former design Chief Claus Luthe. The world is NOW just catching up to the BMW 8 Series.

When introduced at Frankfurt in 1989, the 8 Series was leading edge in technology (which today is commonplace among BMW's):

-- First to use a Local Area Network (LAN) in an automotive application;

the 850i uses 50% less wires than comparable vehicles

-- First in the world to have a 6-speed manual transmission mated to a 12 cylinder engine. That's right, Ferrari was not first!

-- First BMW Coupe to fully utilize "fly-by-wire" for the accelerator. Today everyone's talking about "fly-by-wire" with acceleration and braking. The 850i was first Coupe to incorporate its full usage. ...and much more.

#### Development

The idea of an upper class coupé was there in 1981 already, green light for project E31 was finally given 1984. Internally the decision wasn't undisputed because it wasn't clear if in six years' time people would buy a car that costs DM 140,000 (EUR 70,000). The 850 wasn't just an improvement of another car, it was designed from scratch which made the decision risky.

The 6 series was used as a testbed for E31 components like chassis, drivetrain and steering



Two years later, 1986 and four years before mass production started, the design phase was over and construction began. This took place

at CAD workstations, back then still almost unusual.

In 1987 BMW began to assemble the first metal prototypes after design and aerodynamics changes were as good as finished. This first prototype that was actually able to drive cost 2 million German Marks (1,000,000 Euro).

Every other test vehicle - and there were 100 - wasn't much cheaper either, they were all above 1.5 Million Marks (750,000 Euro) because they were all built by hand out of specially handmade parts. Many of those very expensive prototypes ended their life at a concrete wall. Crash testing.



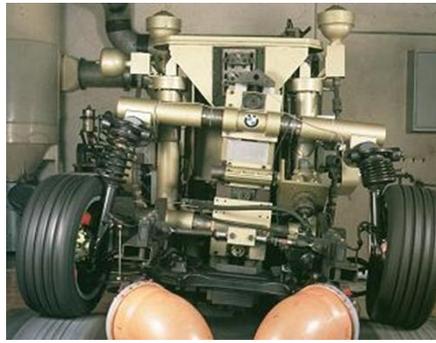
The first styling model of an 8 series



Crash testing a car worth a million

One of these prototypes was presented to the BMW staff on June 15th 1989 in Munich's 'Bayernhalle'. At that point about 2000 people were taking part in the development of the E31.

After much simulated test bench running (see pictures), the first real test drives (still with a cloaked car) started on July 4th 1989 on the Nürburgring Nordschleife. The 8000 test kilometers (5000 miles) covered there equal 150,000 kilometers (93,000 miles) of daily use.



Computer controlled test benches simulate the Nordschleife circuit and test the body for stiffness.



By the end of August 1989 the first tests in the USA were conducted in order to test the car under extreme temperatures and with American fuel. One, if not the biggest target group was living in America.

So tests in polar regions followed tests in Death Valley at 50°C, going full throttle for hours. But that is not all. After that the black painted car had to stand still in the heat for an hour with running engine. Driving up and down mountain roads with extreme changes in temperature and air pressure have been done also.



An early test car with lots of measuring systems (take a look at the headlamps)

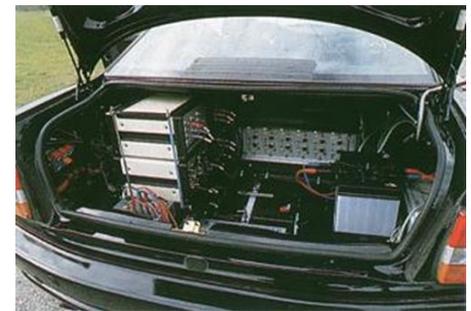


Tyres, wheels, engine management and many other values were constantly checked and documented



While the tests were still in progress, the BMW 850i was presented to the public in the beginning of September 1989 on the IAA in Frankfurt/Main, Germany - with stunning success. 5000 orders have been placed within the eight days of the motor show alone, before the car was even ready for production, which started in the beginning of February 1990 in Dingolfing (14 days later as planned). If you had ordered a car back then you would have to wait three years for it to be delivered.

The cost of development for the BMW 850i alone were one billion German Marks (500,000,000 Euro)!



The following is excerpts written by Andrew at BMWblog.com:

BMW has a very long history of building big, fast coupes. Some of the more notable big coupes to roll out of Munich over BMW's 80 year automotive history are the pre-World

War II 328, the classic 3.0 CS, the 6 series of the 1980's, and the marvelously underrated 8 Series circa the 1990's.

The 8 Series began life in the mid-1980's as a vehicle not to succeed the E24 6 Series but more to surpass it as a more expensive, faster, technology-laden vehicle, namely BMW's future flagship model. With this newer, larger coupe, BMW intended to take direct aim at the tankish Mercedes Benz S-class coupes of the day and they only knew how to do that through sheer horsepower, displacement and, of course, as we left the Wall street Era of the 1980's – price.

Debuting in September of 1989 at the International Autoshow in Frankfurt, the E31 850i came in at a price of roughly \$100,000 USD, immediately making it one of the most expensive BMW 's ever produced at that point in time. Keeping in mind that was in 1989 – today \$100,000 can net you a fully-loaded M5 or well-sped Porsche 911, but I digress. The 850i came equipped with the 5.0 liter M70 V12 mated to either a 4-speed auto box or a 6-speed manual putting out approximately 300HP – so it was definitely quick despite its curb weight of just over 4,000 pounds.

In terms of the new technologies introduced on the 8 Series, the car was equipped with everything. Electric sunroof, power memory seats, onboard data computers, but most importantly, especially in terms of today's technologies, European models of the top-tier E31- the 850CSi version came with an interesting little performance feature known as Active Rear-Axle Kinematics(AHK). AHK was a system that provided hydraulically assisted steering to the rear wheels as a means of better handling for a car sporting the kind of girth the E31's possessed. What's

interesting is that this was a one-of-a-kind system in the days of the early to mid-1990's and now; after a 14-year absence, we see the reintroduction of a very similar system through the new F01 7 Series' Integral Active Steering system that also allows active control of the steering angle of the rear wheels.

While most of the technologies, aside from AHK, were standard on the 8 Series, buyers did have a variety of engines, namely the M70 V12 along with a 4.0 liter V8 option from the M62 block. BMW toyed with the idea of an 830i with a 3.0 liter engine but the prototypes were scuttled before ever reaching production. However, despite overall poor sales in the United States – mostly due to pricing and fuel costs, the 850i was handed off to M Division and they got to work on what would become the 850CSi.



The 850CSi proved to be the range topper of the E31 series in that it came with a tuned S70 V12 engine( S denotes an M Division-constructed engine) good for 380HP mated to a 6-speed manual along with an M-tuned suspension, steering and brakes. As such, this was a force to be reckoned with.

The 850CSi was a great car, however, BMW wasn't fully satisfied with the S70 V12 or the E31 body. BMW toyed with the notion of building the ultimate BMW in what would have been deemed the M8 – a fully

prepared M car based on the 8 Series. The test mule for M Division had a tuned version of the S70 producing near 550HP. With the M8 BMW had intended to move the supercar fight from Mercedes in Stuttgart to Ferrari in Maranello. However, due to the already high cost of the E31's, BMW killed off the M8 while still in the pre-production phase. The test mule of the M8 was originally rumored to have been destroyed – but eventually surfaced and has been displayed at numerous events celebrating the 8 series.

Despite the groundbreaking technology, outright speed and luxury of the 8 Series, it never sold particularly well within the United States – the expected primary market. There were a number of contributing factors that hampered sales of the 8 Series, namely the United States finding itself in a steep recession following the stock market crash of 1987 and the slow economic recovery over the next few years didn't help persuade buyers to spend \$100,000+ on a car. These factors, coupled with the Gulf War in late 1990, just before the early 1991 release of the E31 in the U.S., that caused a spike in gas prices made a V12 option even less attractive and consequently led to the introduction of the 4.0 liter V8 models in the United States.

However, the U.S.-spec 8 Series would not see its way to the end of the 1990's as BMW expected as E31's were no longer imported to the North American market after 1997 due to lagging sales, less than 8,000 units were sold in six years. BMW did continue to manufacture the E31 for the rest of its markets through 1999 for a worldwide production of just over 30,000 units over its near-nine year production life – a relatively low number compared to a current BMW model.

# BMWCCAE31.com

by Jud Spencer  
with permission from 8er.org

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*Editor's Note: The following information has been taken from 8er.org, with permission. It was originally entered by Jud Spencer, whom many of us know as one of the founding fathers of the E31 group worldwide. Special thanks to Jud for the information.*

## General Production Changes

The following is a timeline of introductions and changes during the production lifetime of the E31 8 Series.

### 1992 850i

- Optional Electronic Damping Control gained a more pronounced differentiation between its Comfort and Sport modes.
- Phonebook scroll feature - cell phone's stored numbers, place a call, or end a call.
- New remote Alarm System
- Seat heating controls moved from seat to console
- Auto-ventilation option available

### 1993 850i

New Designation: from 850i to 850Ci (Coupe Injection)

Standard Equipment:

- Automatic Stability Control Plus Traction (ASC+T was optional)
- Shift lock for automatic transmission - now requires that selector be in Park before ignition key can be removed. Continues to prevent shifting out of Park or Neutral unless engine is running and brake pedal applied
- Passenger's-side airbag; Supplementary Restraint System (dual airbags now standard)
- Newly designed automatic dimming inside rearview mirror (sensitivity adjustment now automatic)
- More deeply gathered leather seating upholstery
- Upgraded materials textures throughout interior and trunk
- Upgraded carpeting
- Bird's-eye maple interior trim
- New center-console design
- Chrome inside door handles and door sills

- Upgraded trunk lining
- Split fold-down rear seats
- Trunk-to-interior pass-through and ski bag
- CFC-free refrigerant in air-conditioning system
- BMW Maintenance Program

### 1994-95 840Ci - 850Ci - 850CSi All E31 Models

- New ABS 5 antilock braking system (refined ABS operation, integration of All Season Traction system, reduced weight)
- ASC+T system renamed All Season Traction ; standard in all models
- New front spoiler design (different designs for 840/850Ci and 850CSi)
- New Keyless Remote Entry Security System with controls in head of master key
- Driveaway Protection
- For 1994: 10x25-watt (250-watt maximum power) audio system replaces former 4x25-watt (100-watt) system; 12 speakers retained
- For 1995: 10x20-watt audio system
- (new rating for 1995 Anti-theft audio system with 12 speakers The 8 Series audio system has equalization custom-tailored to its interior, and 12 speakers. 10 channels of amplification at 20 watts each mean 200 watts of total power.

Please note that this differs from the 250 watts quoted in 1994, which was a maximum power rating.

The new rating is quoted at 10% total harmonic distortion (THD) and is by definition a more conservative figure.

The system has not changed since 1994 models were introduced.)

- Diversity antenna system

Added New Colors for all Models:

- Bright Red (314)

- Orient Blue (317)
- Oxford Green (324)

Added New Colors for 840Ci ONLY:

- Artic Silver (309)
- Cosmos Black (303)

Deleted Colors for All:

- Brilliant Red (308)
- Laguna (Lagoon) Green (266)
- Glacier Blue (280)
- Mauritius Blue (287)

### Specific E31 Models Changes 840Ci (1994-95 model)

- 4.0-liter DOHC (4-cam) 32-valve V-8 engine
- 5-speed electronically controlled automatic transmission
- Side directional lights on front fenders
- New steering-wheel design, similar to that in new 7-Series except without audio/cruise/phone controls; diameter increased from 385 to 395 mm (15.2 to 15.6 in.)
- BMW Cellular Phones, CD player and BMW Maintenance optional

### 850i (1994 model)

- 4-speed electronically controlled automatic transmission only
- Aluminum front brake calipers
- Bird's-eye maple interior trim

### 850i (1995 model)

- SOHC 5.4 liters V-12 engine, 322 hp
- 5-speed automatic transmission with Steptronic and Adaptive Transmission Control
- Dynamic Stability Control
- Power lumbar support on both front seats
- Automatic recirculation control
- Refined security systems.

### **850CSi (1994-95 model)**

- New model, developed by BMW M (formerly BMW Motorsport)
- Larger V-12 engine: 5.6 liters, 372 hp, 402 lb-ft. torque
- Variable Throttle Linkage
- Variable rpm limiting
- All Season Traction plus 25% limited-slip differential
- Sports-calibrated Servotronic (vehicle-speed-sensitive) power steering
- Lowered and specially calibrated BMW M suspension
- Aluminum front brake calipers
- Wider tires and wheels, different front and rear sizes, unique wheel design
- Specially designed front and rear spoilers
- Four round, polished exhaust outlets
- Premium Yew wood interior trim
- Specially calibrated instruments with red pointers

### **1996-97: 840Ci-850Ci**

#### **All E31 Models**

- Electronic Damping System (electronically controlled suspension system) newly standard; updated technology, functions basically unchanged (optional on 840Ci)
- Automatic-locking retractors on passenger seatbelts to accommodate child restraint seats
- Servotronic power steering: vehicle-speed-sensitive variable power assist (which appeared on limited-production 1994-95 850CSi) replaces former engine-speed-sensitive system. Reduces parking effort without any negative effect on road feel.
- Exterior colors; all 8 colors were offered on both 840Ci's and 850CSi. Added New Colors for both 850Ci and 840Ci ONLY:
  - Artic Silver (309)
  - Cosmos Black (303)

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- Diamond Black (181)

### **840Ci (1996 model)**

- 4.4-liter DOHC (4-cam) 32-valve V-8 engine, 282 HP
- 5-speed automatic transmission with Steptronic and Adaptive

#### Transmission Control

- Dynamic Stability Control
- Forged-alloy wheels are the only factory option available

### **840Ci (1997 model)**

- Scheduled maintenance for 3 years/36,000 miles included; upgrades to scheduled maintenance for 4 years/50,000 miles or full service for 3/36,000 or 4/50,000 available

### **850Ci (1997 model)**

- No changes for 1997

### **USA E31 Year to Year Changes 1992-1997**

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##### 850Ci (1997 model)

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## E31 electronic control units

### Electronic Control Units

#### Important When Disconnecting Battery

Location: Two batteries in trunk, one each behind left and right wheel housings.

Disconnection will erase the fault memories of control units, so that fault memories must be read and, if applicable, faults printed first.

Always disconnect both ground leads to prevent short circuits!

#### Important After Reconnecting Battery

Re-initiate front power windows: shut doors, raise windows with switches, hold switches pressed at least 3 seconds.

Re-initiate power sun roof: close sun roof with switch, hold switch pressed at least 3 seconds.

Checking Initiation: automatic tipping in closing direction must work. If not, repeat the procedures.

#### Important With Connected Battery

Working on components, wire connections, etc. could cause faults in the fault memories of concerned control units.

If repairing instructions specify disconnection of the battery, this is absolutely necessary in the interest of safety.

#### Windshield Wipers (Wiper Motor)

Intermittent wiping and wipe speed 1 are switched off by an Interlock In case of disturbance.

This Interlock remains effective even after elimination of the fault.

Switch off the Ignition (terminals 15 and R) for 3 minutes to cancel Interlocking.

#### ! IMPORTANT !

Disconnecting the car battery will erase fault memories of the control units.

Consequently always interrogate fault memories and, if applicable, print faults with the printer of a BMW SERVICE TESTER before disconnecting the car battery.

The ignition must always be switched off before control unit plugs are disconnected or connected.

Faults could be stored in the fault memories of control units with self-diagnosis by removing and installing components, relays, fuses, etc.

Consequently always Interrogate fault memories after working on the electric system. Investigate and erase stored faults.

## E31 service interval light system

### Normal Conditions



Up to five green lights illuminate depending on vehicle use since new or last maintenance. Reduction of illuminated green lights is a countdown for the next service due.

### Oil Service Alert



All green lights are off and only the

yellow light is illuminated along with the "Oil Service" sign, alerting you that oil service is necessary.

### Inspection Service Alert



All green lights are off and only the yellow light is illuminated along with the "Inspection" sign, alerting you that this service is necessary.

### Overdue Inspection Service Alert



The red light will illuminate along with the yellow one to serve as a warning that service is overdue; and in the interest of road safety and reliability, avoid driving your BMW. Schedule an appointment immediately.

### Re-set to Normal Condition



Once the required service is performed, the technician resets the service interval indicator to "normal" conditions to compute the next service / maintenance interval.

In 1996, BMW lowered maintenance guidelines due to their introduction of the scheduled maintenance service. This upgrade in service extends your BMW's longevity and performance.

The BMW service intervals consist of three main service groups.

- Oil Service: Engine oil and filter change and additional

preventative maintenance services.

- Inspection I: Major vehicle maintenance as specified in your Service Booklet.
- Inspection II: Additional major vehicle maintenance as specified in your Service Booklet.

Also, there are additional services that are required annually, which consist of: (These are excluded from the main service groups.)

- Brake fluid flush
- Coolant fluid flush
- If your BMW is equipped with a timing belt (M20 engine), the

timing belt should be replaced every 4 years or 50,000 miles whichever occurs first.

- Oxygen sensor replacement

Here is a table you can use to determine when maintenance is required:

- You should follow BMW's factory guidelines step by step to meet all BMW factory warranty requirements.
- Always refer to your owner's manual for a detailed description of the services for your model year.

Mileage Range	Service Intervals
Recommended between Service Intervals	Intermediate oil change
7,500 to 10,000*	Oil Service
Recommended between Service Intervals	Intermediate oil change
15,000 to 20,000	Inspection I
Recommended between Service Intervals	Intermediate oil change
22,500 to 30,000	Oil Service
Recommended between Service Intervals	Intermediate oil change
30,000 to 40,000	Inspection II
Recommended between Service Intervals	Intermediate oil change
37,500 to 50,000	Oil Service
Recommended between Service Intervals	Intermediate oil change
45,000 to 60,000	Inspection I
Recommended between Service Intervals	Intermediate oil change
52,500 to 70,000	Oil Service
Recommended between Service Intervals	Intermediate oil change
60,000 to 80,000	Inspection II
Recommended between Service Intervals	Intermediate oil change
67,500 to 90,000	Oil Service
Recommended between Service Intervals	Intermediate oil change



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