



BMW 8 Series – The Evolving 8



E31 Chapter BMW Car Club of America

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2016 E31 Upcoming Events

SoCalEights WrenchFest, August 6

fern.mora@socaleights.com

E31 at Monterey, August 19 - 21

fern.mora@socaleights.com

BC 8's Fall WrenchFest, September 10

wuffer@shaw.ca

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.

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

On the Cover

BMW 850 CSI (CC00212) owned by BMW Classic in Munich with the current BMW i8 on the roads outside Munich, Germany.



*by Roger Wray
President, BMWCCAE31*

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Happy Summer fellow 8ers! As the weather heats up, so do events for 8's. We are in our home stretch for the big 100th anniversary for BMW in Monterey, and it looks to be a great gathering for E31's as well. At last count it looks like we may be approaching close to 30 8s at the event. Fern and the gang at SoCalEights are busy applying the final touches. Please see the expanded announcement in this newsletter.

On July 1st the E31 Chapter officers held our summer board meeting via teleconference. One of the items we discussed was to solicit chapter members who wished to be Tech Advisors for members who like to do their own wrenching, but may not have attempted a specific repair before. An email was sent out to chapter members, and those who have stepped forward to assist others with repair questions are now listed on the second page of this newsletter. Thank you to those who have volunteered, and if there are any of you who would like to assist others via phone, please let me know. We can add you to the list.

By now you should have received your revised window cling stickers. Some members have suggested placing them on the front or back window instead of the side windows, as that

placement would not interact with the windows going up or down. Please place them where ever you wish. All we ask is that you display them and let others know of our chapter. Additionally, Jeff Ivanson, our Brands Manager is having some cards made to handout to non-members who may own an Eight. These should be available shortly, so when you receive them please place them in your glove box and hand them out to other 8 owners you may encounter. This is a great way for us to promote our chapter.

We are in the process of acquiring another manufacturer for our club apparel. We were utilizing a small cottage embroider who was able to provide personalized services to us, but unfortunately due to a fall they have had to close their business. Our new company should be available soon, and we will pass the information along to everyone as soon as things are finalized.

Enjoy your summer and your Eight. If you are are attending the Monterey event, have a wonderful time. Always remember – it is the car that brings us together, but it is the people that make us who we are!

Roger



Ten Reasons Why the 8 Series is Great

By Vijay Pittny
Courtesy of BBC TopGear

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With rumors swirling about a return, here's why the E31 is cool. It was at the 1989 Frankfurt Motor Show that BMW presented a car that would become one of its modern classics: the 8-Series Coupe.



Built for ten years between '89 and '99, the car dubbed 'E31' was a 'clean-sheet' design that could trace its lineage way back to BMW's rather lovely coupes from the 1930s.

And over its lifetime, BMW sold 30,621 8-Series Coupes, with exactly 24 of those hand-built at the Rosslyn plant in South Africa (for tax reasons, assembling the cars there was cheaper than importing them). More than two-thirds - over 20,000, then - were fitted with the V12, and just one in six came with a six-speed manual.

Now, rumors are swirling about a return. We rather like the BMW 8-Series, because it's a big, luxury two-door BMW barge. Here are ten reasons why the ol' girl is great.

1. It's got pop up headlights!



Call us childish, but there's something about pop-up headlights that brings out our inner child. Maybe it was too many years watching Knight Rider, or because they look especially hilarious when one motor ceases to function. Either way, it's a very distinguishing feature.

2. It looks great



The 8er had a low drag co-efficient - 0.29, the same as a Porsche 918 - and was drawn up entirely on COMPUTER (something of a novelty back then) with a lot of wind tunnel testing to get that swoopy, wedge shape. It looks good. Retro-good, but still good.

3. It had no B-Pillar



That's the middle pillar at the end of the front side windows, and BMW designed the 8-Series without it, allowing a clean sweep of glass from front to back. Cleaner, cooler.

850

4. It was only the second post-war German car to be powered by a V-12



Who doesn't love a V12 in a big, luxury barge? BMW certainly does, and equipped the 850 with a 5.0-litre behemoth developing 300bhp and 332lb ft of torque, enough to get the 1790kg heavyweight from 0-62mph in 6.8 seconds. OK, so it's no FF, but this was the Nineties, after all.

5. It had lots of toys inside



A belt system integrated into the seats, an electrically adjustable steering column with memory function, auto-dimming rear view mirror, remote central locking and a 'high-performance' onboard computer were just a few of the luxuries you received with your copy of the 8-Series. Bluetooth not optional.

6. It had a few nice toys underneath



The 8-Series was available with either a six-speed manual or a four-speed auto, and came with five-link rear suspension, stability control, traction control, speed-sensitive power steering and even damper control (EDC) as an option from 1990. By the standards of the day, this made it a virtual visitor from the future.

7. That V-12 came in a more powerful flavor



In 1993, BMW realized that 300 horses in something weighing 1790kg wasn't going to cut it with the Wolf of Wall Street crowd. So they ramped up the capacity of that V12 from 5.0 liters to 5.6 liters, tweaked to produce 381bhp and 406lb ft. Meet the 850 CSI, which was only available with a manual gearbox. That new-found power was enough to cut the 0-62mph sprint down from 6.8 seconds to under six seconds. Much more like it.

8. It came in a V8 too



In 1994, BMW shuffled its 8-Series cards; with the range-topping 850 CSI coming on tap, the old 850 was dropped, its place filled with a new 850 CI with a 5.4-litre V12, 326bhp and a new five-speed auto.

But there was also a 4.0-litre V8 with 286bhp in the 'entry-level' 840 CI. V8s are also nice.



9. It was immortalized by David Hockney as a BMW Art Car



BMW's Art Cars are very cool, and in 1995 this 8-Series was given the full treatment. Hockney added stylized intake manifolds on the bonnet and silhouettes of the driver and steering column on the driver's door.

And, cleverly moving the canine-art genre from the immortal Dogs Playing Poker fresco, the Brit artist painted a picture of his beloved dachshund Stanley onto the rear side panel as if it were a passenger. A dog! The madness!

10. BMW built a one-off secret prototype with 550php – the M8



A hugely powerful prototype with a very important job was finished in 1991: an 8-Series with a 550bhp V12, and bespoke chassis technology to cope with that extra power. This car, co-developed by BMW's M Division and BMW Technik was kept a secret for years, before BMW finally owned up and admitted that yes, it had tried to make an 'M8'. Just imagine.

However, it was never produced, and this M8 was instead used as a rolling test-bed for technology and innovation. One very cool application of this test-bed was the engine: that monster V12 would later be the basis of the monster V12 that powered the McLaren F1. That's cool

The Evolving 8

by Roger Wray

Photographs courtesy of BMW and BMW Classic

As BMW once again contemplates a new 8 series, let's look back at a prototype, at the current reiteration of the 8 series – the i8, how it compares to the original, and update the latest rumors as to a successor.

In 2007, BMW showed the Concept CS, which was rumored to be the reincarnation of the 8. Although it was a beautiful concept, it never made it to production. Said to be targeted at the luxury market more so than to the enthusiast, the Concept CS never-the-less created much enthusiasm for the design.



... In 2008 BMW announced that the concept would go into production in the form of the BMW Gran Turismo. Unfortunately, BMW later cancelled production plans in November 2008 because of financial reasons.



BMW Concept CS - 2007

The current BMW to carry on the 8 name is the i8. Although the similarities to the original E31 8 series are limited, the i8 does have the iconic dual kidney grill. Introduced in 2014, the i8 powertrain is comprised of a 1.5 three cylinder TwinPower turbo gas engine located in the rear, and a hybrid synchronous electric motor located in the front. Originally conceived as a diesel-electric hybrid, the i8 had to undergo engineering changes when that powertrain proved to be impractical. The gasoline engine put out 236 lb-ft of torque and 231 horsepower, and utilizes a 6 speed automatic gearbox which powering the rear wheels. The engine also can charge the lithium-ion battery. This battery provides power to the front wheels, and produces 184 lb-ft of torque and 131 horsepower through a two-stage automatic transmission.



In October 2013 under the cover of camouflage – 8er.org 8 owners in Germany were able to view the new i8.

Although these horsepower and torque numbers do not conjure up thoughts of supercar figures, BMW utilizes this power to its fullest extent to drive the 3267 pound i8. The low center of gravity offered by the mid-mounted battery and car construction result in outstanding agility. The combination of carbon fiber and aluminum results in a very stiff car. With a very low 0.26 coefficient of drag, and a 2.15 square meter frontal area, the i8 almost effortlessly cuts through the air. In comparison, when the 850 was new, it featured an unheard of (at that time) 0.29 coefficient of drag.

Whereas the 850 has “normal” doors, the i8 has lightweight carbon fiber doors that hinge and swing skyward. Although getting into and out of an i8 to some is awkward, there is no denying the “wow” factor of its doors.



850Csi and i8 Figures

| | 850Csi * | i8 ** |
|-----------------------------|---------------------------|----------------------------------|
| Engine | 5576cc (340 cu. in.) V-12 | 1,499cc TwinPower Turbo inline 3 |
| Horsepower | 372bhp @ 5,200 rpm | 231hp @ 5,800 rpm |
| Torque | 402 lb-ft @ 4,000 rpm | 236 lb-ft @ 3,700 rpm |
| Transmission | 6 speed man | 6 speed auto |
| Electric Motor output | N/A | 131 hp @4,800 rpm |
| Electric motor torque | N/A | 184 lb-ft at 0 rpm |
| Electric motor transmission | N/A | 2 speed auto |
| length | 188.2 inches | 184.6 inches |
| Wheelbase | 105.7 inches | 110.2 inches |
| Track: front/rear | 61.2/61.5 in | 64.7/67.8 in |
| Drag Coefficient | Cd 0.31*** | Cd 0.26 |
| 0 – 62 MPH | 5.9 sec | 4.4 sec |
| Curb Weight | 4,240 lbs | 3,267 lbs |
| Weight Distribution | 51/49 | 50/50 |
| US Base MSRP | \$108,450**** | \$135,700 (2014) |

* 1994 North American Version (Test figures provided by May 1994 Road & Track)

** 2014 Euro Version (introductory figures provided by BMW)

*** 850 CSi CD is 0.31. 850i Cd is 0.29

**** Included luxury tax of \$6950 and gas-guzzler tax of \$3000.

Some have stated that with both electric and gasoline powered systems, there is a different feel to the i8, especially when changing from battery to gasoline power. This transition has been described as not quite seamless by some, as the formation and application of power is somewhat different in the two power systems.



An i8 and 850Csi in the Bavarian Alps. The beautiful blue 850Csi is owned by BMW Classic.

As with any new type of drive system, the “feel” of the power application differs than that of conventional drive systems, such as that on the 850. Of course, the E31 cars are not all wheel drive like the i8, so the character of both are different. But, one cannot fault the i8 when it comes to acceleration numbers: 4.4 second 0 - 62 times is nothing to sneeze at.

Now that the i8 has been with us for several years, rumors again are being reported that BMW is considering a new 8 series as their flagship model. According to John McIlroy at UK Magazine Auto Express, BMW is set to bring back the 8.

John has found that trademark applications with the global intellectual property regulators reveal that BMW has applied for a number of 8 Series-related names, including 825, 830, 835, 850, 845, 860 and M850.

| | | | | | |
|--------------------------|----------|-------|---------|---|--|
| <input type="checkbox"/> | BMW M8 | DE TM | Pending | 3 | DE Bayerische Motoren Werke Aktiengesellschaft |
| <input type="checkbox"/> | BMW 850 | DE TM | Pending | 3 | DE Bayerische Motoren Werke Aktiengesellschaft |
| <input type="checkbox"/> | BMW 845 | DE TM | Pending | 3 | DE Bayerische Motoren Werke Aktiengesellschaft |
| <input type="checkbox"/> | BMW 825 | DE TM | Pending | 3 | DE Bayerische Motoren Werke Aktiengesellschaft |
| <input type="checkbox"/> | BMW 830 | DE TM | Pending | 3 | DE Bayerische Motoren Werke Aktiengesellschaft |
| <input type="checkbox"/> | BMW M850 | DE TM | Pending | 3 | DE Bayerische Motoren Werke Aktiengesellschaft |
| <input type="checkbox"/> | BMW 835 | DE TM | Pending | 3 | DE Bayerische Motoren Werke Aktiengesellschaft |

A BMW insider confirmed to Auto Express that the move was not merely a case of the company ring-fencing the badges for possible future use, and that it reflects an imminent reformation of BMW's GT line-up.

According to John, BMW's decision to bring back the 8 Series is due to a change of heart on what the 6 Series needs to be. The Bavarian manufacturer has not considered a rival to the Porsche 911 sports car before, preferring its 6 Series to be a

larger, heavier GT. But the arrival of the Mercedes-AMG GT in the same market as the Porsche 911 has signaled new competition between the big German premium brands, and now BMW wants the 6 Series to be its contender, as a more agile two-seater sports car. It's that move which will make room for the new 8 Series.

BMW has also applied to register M8, signaling the potential arrival of a production car that was originally considered back in the early nineties. BMW created a prototype with a 48 valve V12 engine (the motor that would ultimately end up in the McLaren F1) in the original 8 Series, but canned the project due to a perceived lack of customer demand and expense.

The new M8 would give BMW a rival for the likes of the Mercedes-AMG S63 Coupe. M division would probably choose to use the twin-turbocharged 4.4-litre V8 engine, producing around 450bhp, allowing the 7 Series' V12 engine to be used in high-designation 'regular' 8 Series models like the 850 and M860.

Of course, 8 Series rumors have been floating around since the last one, the E31, went out of production, but everything laid out by Auto Express makes sense.

Editor's Note: Special thanks to BMW Classis for the photographs, members of 8er.org, and John McIlroy at UK Magazine Auto Express for information contained within this update.



8s lined up at DeLeon Springs, Florida

BC 8's Drive to Harrison Hot Springs

By Henry Christoff
Photos by Henry Christoff

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Sunday, June 12th – the weather could not have been better for eight 8's and sixteen folks for the drive beginning at famous Tim Horton's at the Guildford Town Centre Mall in Surrey, to the lake front in the resort town of Harrison Hot Springs. Our drive took just over an hour (at speed) east on Hwy 1, the Trans Canada Highway. What better way to enjoy the design brief of the E31 than on the open road!

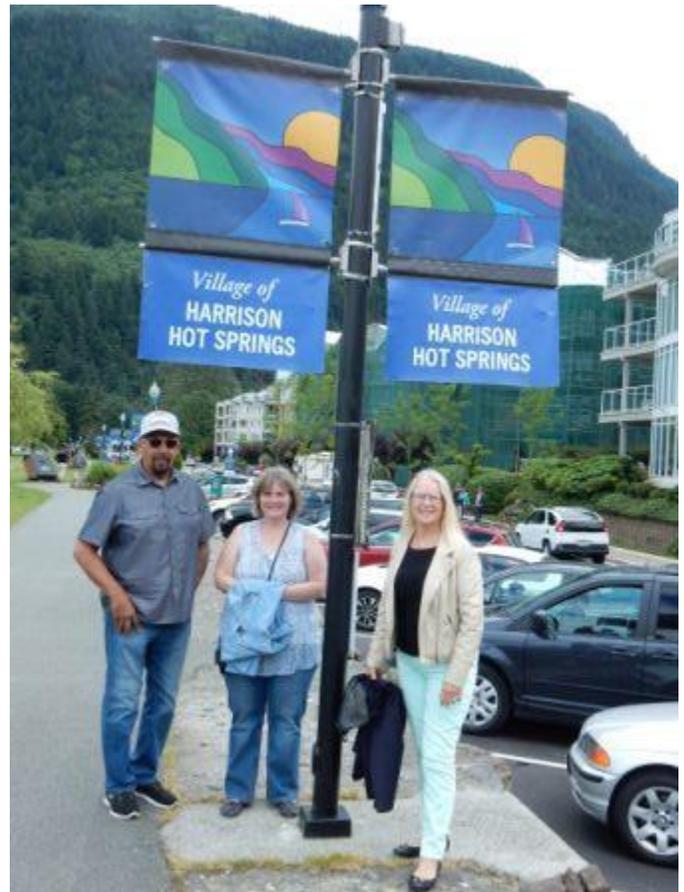


Returning to the cars after lunch, many photos were taken and there was much talk about the up-coming BC 8's WrenchFest on Saturday, June 25th and our local German Car Festival, Sunday, June 26th. There is always a big turnout of E31's for the German Car Festival !

Light traffic made it easy for all eight E31's (seven 850's and a single 840) to stay together during the drive to Harrison. After arriving, we were very fortunate to secure lake front parking where all the cars could park in a single row.



Talk about drawing attention! After parking and ogling the cars, we all walked the couple blocks to the Old Settler Pub for socializing over lunch. John T. even entertained the group with an 8 Series sing-a-long he composed- all great fun!





Thanks to everyone for coming out for the drive to Harrison Hot Springs and making this a successful event that was loads of fun! More driving events are in the planning stages for the months ahead. Stay tuned. See you at the WrenchFest & the German Car Festival!

Attendees and their cars: John and Inky D. – 850, John and Erica T. – 850, Vic and Chris H. – 850, Glen and Sylvie G. – 840, Andrew N. – 850, Alex F. and Guest – 850, Wuffer – 850, Henry and Kirsti C. – 850, Larry L. + Guest- Larry sold his 850 the night before the drive!



E31s on the lawn at Lake Side Inn, Mount Dora, Florida

ALL YOU NEED IS LOVE.

UND BMW ORIGINALTEILE.

CAN-Bus-Leitungssystem, mitlenkende Integral-Hinterachse und 12 Zylinder – der BMW 850i war bei seinem Debüt 1989 technisch State of the Art. Seine aufregende Technik und sein zeitloses Design machen ihn für Youngtimerfans auch heute noch zum verlässlichen Reisesportwagen. Damit er das auch lange bleibt, sichert BMW Classic auch für die Zukunft die Ersatzteilversorgung. Einfach online gehen, die passenden Teile auswählen und bequem nach Hause oder in die Werkstatt liefern lassen. Mehr unter shop.bmw-classic.de



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Freude am Fahren

SoCalEights Attend Bimmerfest 2016

by Fern Mora
photographs by Fern Mora

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SoCalEights rolled into Bimmerfest 2016 with 29 amazing 8s on Saturday, May 28th. Rolling in as a group, they had their own assigned parking space at the venue.



SoCalEights President Fern Mora on point leading the caravan to Bimmerfest



Arriving at Bimmerfest – 29 8s as far as the eye can see!



The E31 Lineup

After putting up their 10 x 10 easy up, everyone gathered together for a wonderful event.



After meeting up at Starbucks, they then took a 3 miles drive to Bimmerfest where they pulled in receiving many admiring looks and parked in a prime parking area in the Heritage Corral.



Chillin'



Staying out of the sun – SoCalEights Style!



Showing cars at car shows is hard work....but somebody has to do it!



E31's are beautiful in Yellow!



BC 8's Busy Weekend – Part 1: WrenchFest

*by Henry Christoff
photographs by Henry Christoff*

The BC 8's held their June WrenchFest on Saturday, June 25th at Wuffer's Garage & Spa. Special guest was 8 Series seat repair guru, Paul Brill. If you have seat issues with your E31, Paul is your man. He sells improved, longer seat cables to repair cars with twisted seats or seats that will not operate properly due to cable issues. With advance notice of Paul's attendance at the WrenchFest, 5 cars were scheduled to have their seats serviced by Paul. He was one busy guy as the rest of us stood back and watched. Along with seat repairs, Dietmar worked on his driver's door, removed the interior panel and made repairs. Vic had his seats repaired by Paul and, as you can see from the photo, seemed to be a satisfied customer.

Andrew brought his very nice Mauritus Blue JDM (Japanese Domestic Market) car and did a Pentosin power steering fluid and filter replacement. Glen arrived in his black 840 which needed a minor seat repair- the driver's side plastic seat tilt lever had failed. A revised replacement component from BMW was easily installed by Wuffer, with Glen assisting and a very happy camper with the result.



Wuffer and Paul discuss E31 seat design, or maybe, who ate all the Tim Horton donuts.....



Vic is pleased with his seat operation after Paul works his magic



Rare sport seats and Paul in action

E31 features and technical items were discussed at the WrenchFest- how to open and close windows and sunroof while using the only the key in the driver's door lock; re-set of the air bag light with the BC 8's GT1. Since our local German Car Festival was the next day, there was much talk about all the dirty cars attending the WrenchFest- with Andrew taking the most abuse. His car is always perfectly clean when attending WrenchFests, but he had not washed his car since the BC 8's drive out to Harrison Hot Springs. Lesson learned!



Like a pro, Dietmar works on his inner driver's door- "It's a piece of cake!"

There was also discussion about using a clay bar on automotive paint finishes after washing but prior to the application of polish. A clay bar demonstration may have to be scheduled for the next WrenchFest as there were some Doubting Thomas's about using clay on paint. Eight cars attended the WrenchFest on Saturday with an additional two cars arriving earlier on Friday for seat repairs.



E31 seat flipper - redesigned (on top) vs broken unit



After the seat tilt lever replacement, Glen is a happy camper

WrenchFest attendees were: John T, John E, Andrew N, Dietmar U, Henry C, Glen G, Vic H, Cary D, Tom C, Ted U, Phil O, and Tony G.



BC 8's Busy Weekend– Part 2: German Car Festival

by Henry Christoff
photographs by Henry Christoff

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We dusted off our 'car show chairs' for the 15th annual German Car Festival that was held on Sunday, June 26th at North Vancouver's Waterfront Park. There were just over 190 German cars in attendance. Just the Sunday before, it was the Italian & French Car Day at Waterfront Park- with an unbelievable 50 French cars on display!



Glen, following a Mercedes, arrives in his black 840

The German show was hosted by the BMW, Porsche, Mercedes and Audi clubs, with a strong showing of VW folks and a single Bitter SC and a single BMW Isetta! All proceeds, \$10 for a vehicle admission coupled with a food donation, going to the Harvest Project. I am happy to report that BMW attendees won the category of "Most Donated Food" compared to the donated food items of the other German marques!



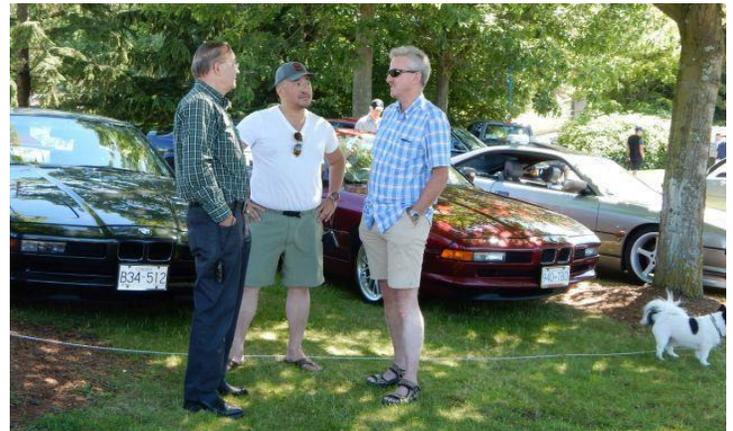
E31's on the show field

BC8's had nine E31's in attendance and Wuffer had once again arranged with the organizers to allow the E31's to park on the hill which overlooked the entire show field and downtown Vancouver in the distance.



8's have it made in the shade

We all enjoyed a perfect summer day coupled with German automotive design. Not to mention talking about 8 Series BMW's!



From L to R: Dietmar, Andrew and Glen discuss the WrenchFest from the previous day





E31's get plenty of attention



The show field with downtown Vancouver across the water

BC 8's attending were: Vic H, Tom C & Dan, Glen G, Henry C & Kirsti, Dietmar U & his brother, John T, John D, Dave B and Ted U

The BC 8's



E31's at the German Car Festival. Photo courtesy Mike Ginsca, www.MGReview.com

MGR
WWW.MGREVIEWS.COM

Headlight Adjuster Fix

By Jeff Moore
Photos by Jeff Moore

When you drive your Beautiful E31 at night do you see the Owls and Squirrels illuminated up in the trees but the road in front of you is dark? Do your headlights flop loosely around inside the plastic housings??

Then read on!

Part 1

I have never seen anything like it before! When trying to adjust my headlights on my 1996 850Ci I literally just touched the plastic headlight adjuster parts (that looked OK) and the plastic adjuster parts crumbled into a million tiny pieces...



So I tried several ideas like using long screws with barrel nuts similar to other peoples solution (MAXLUMENS) which works great but has a cost and time consuming... And you have to wait at least a few days to get the parts delivered in the mail! You no drive your car...

...

But then I tried this.

I borrowed (OK Stole) an old BOSCH and HELLA headlight attachment solution using rubber tubing that was used on headlights on all early VWs and on both 356 and 911 Porsches. BOSCH and HELLA both used this simple idea for almost 40 years with great results. So I thought why not use the same idea on my (5) E31s??

If your car has headlight adjustment issues take your headlights off (I assume you know how to do this? Four 17mm bolts and unplug 2 plugs, it takes about 5 minutes) Very simple read other posts on how to remove...

Then if your rectangular plastic housings are not cracked or warped badly and look OK continue... Look to make sure the gear wheels on the adjuster screws are still in place and they are tight. If Not MAXLUMENS has a solution read his post...

If the gears are tight look even more closely at your headlight where the adjusting screws attach to the glass

Headlight assembly...

Usually with the all plastic E31 headlights the problem is that the BLACK Plastic Ball Socket(s) becomes very brittle and the screw in the middle pulls through and then the screw is doing nothing because it is only attached to the plastic headlight assembly and the headlight flops around and is no longer adjustable... Push the glass back and forth to see where it is moving. If the sockets are still there and intact then this is not your problem.

If any of the (3) sockets are broken disassemble the headlight assembly.

Very simple! Read other posts for instructions...

Then go buy a foot of 3/16 clear plastic tubing at your local hardware store @ \$.35 per foot...

Then remove the Philips screw in the center of the broken BLACK ball socket(s) that are still attached to the headlight assembly. Replace the Philips screw(s) but DO NOT screw it all the way down, leave it up away from the headlight about 1/4 inch. (See attached photos of the broken parts and repair).

Then cut about 3/4 inch of the plastic tubing and warm it up... (Hot water, heat gun, hair dryer etc.) then push the tubing over the head of the Philips screw. If the screws are loose or the screw bases are cracked then use JB weld to fix them.

Next VERY carefully remove the WHITE plastic ball socket on the end of the white adjusting slide... Use high heat (heat gun,

hair dryer etc.) and gently pop the white socket off the ball end or carefully cut it in half with a dremel to remove it. There is another white ball socket on the metal ball ended screw on the bottom that is not fragile because it is steel. Heat it up and remove it also...

Do this on all of the BLACK Ball sockets/adjusters that are broken, there are three. Two for aiming the lights and one on the bottom (the metal one with ball end) used as a positioning point.

Now reassemble the headlight pressing the white plastic ball end and the metal ball end into the plastic tubing. Remember to heat the tubing again and use WD40 or other lubricant.



What you have done is to replace the hard plastic parts that are known to brake and fail with plastic tubing that is flexible and very long lasting. It takes a lot of force to pull the tubing off so it is not likely they will ever fail. The tubing also insulates the headlight from vibration and is a simple proven solution used by BOSCH and HELLA for many years and a simple and very inexpensive cure to an extremely common and expensive E31 headlight problem.

Plus it only cost \$.35 cents and can be reversed if desired...

You will need to readjust your headlights. They used to have kits but are now NLA

Part 2

Class... Class... CLASS!

Repairing the loose adjusting screws in the E31 plastic rectangular headlight housing. Total cost about \$.35 and 10 minutes time.

So you have your headlights apart and you realize that the gear on the top adjuster gear in the housing is gone and the adjusting screw has nothing to secure it from moving in and out. Luckily you only need the bottom gear. (OK not mandatory but much easier to adjust the headlights if it is still there) Hopefully your adjusting gear on the bottom is still there? Will describe repair of the bottom next...

To secure the top screw is super simple!!

Take the adjusting screw with you to the hardware store when you go to buy your 3/16 tubing for the part 1 repair. You will need to also buy a few 8/32 washers. Try fitting a washer over the slotted end of the screw and it should fit tightly but still be able to be pushed on. If not you might have to open the hole just slightly with a file or drill.

Also buy some 10/32 washers and a few 5mm nuts (locknuts if available) for use on the bottom screw repair that will be described next.

Note! Remember to always keep and replace in the same position the little bevel washer and rubber tubing as originally found on the adjusting screws when you took them apart. (see photo)

Now with the top screw you insert it into the hole from the front and cut about 1/4-5/16 inch of the plastic tubing. Push the tubing from the back over the slotted end of the screw so less than a 1/4 inch of the slot is showing then push the tiny washer(s) onto the screw. The washer (s) should be just above the bottom of the slot. If the washer goes in further then you will need more washers or to cut another piece of tubing that is a tiny bit longer. The tubing/washer takes up the slack (end play) so make sure that there is no in/out movement in the adjusting screw. (see photos)

Once you are sure the screw is tight with the washer(s) and tubing in place turn the slot in the adjusting screw so it is Horizontal and lift the screwdriver up to slightly spread open the slot. Turn the screw 180 degrees and lift the screwdriver up again to spread the other side. With the slot widened the washer should now be tight and unable to be pulled off. You are done!



Now the bottom adjuster screw repair is almost as simple.

First you need to get the screw out which requires that you get the gear off. Usually all that is required is to lightly tap the screw in the middle of the gear with a small screwdriver, punch etc and it falls off. Once the gear is off the adjusting screw is out you will need to completely file or grind off the small collar so the screw is smooth. (see Photos)... You did this so the screw can now be installed from the rear with the gear installed.



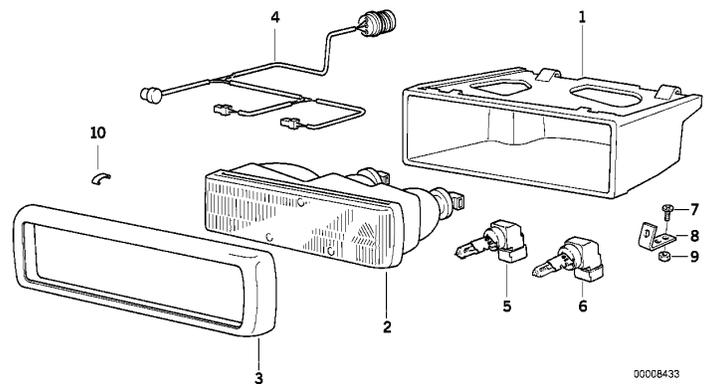
Next screw the 5mm nut onto the adjusting screw almost all the way, then put a washer under the nut and place on a vice with the jaws spread 1/4 inch. Next using a 13mm socket and a hammer tap the gear onto the adjusting screw until the slot end is level with the top of the gear. Don't have a vice? Drill a deep 1/4 inch hole into a 2X4 and tap away! Then using the screwdriver spread the slot like before. With the slot spread the gear can never slide off.

Now push the screw in from the back and install the original bevel washer and the rubber tubing, next put a 10/32 washer and then screw the 5mm nut all the way down to where it touches firmly but is not too tight and until there is absolutely no in/out play. If you used a locknut you are done! But if you used a regular 5mm nut then a little Loctite is a good idea.



You are now finished and can assemble your headlights and they will not rattle around in the housings!

Note 2!! On some of the headlights the screws are NOT machine thread but are sheet metal threads. Instead of using the 5mm nut you will need to use a sheet metal speed nuts or clips. You can also use the plastic tubing as a nut. Cut a 1 inch piece and thread it on. Also some of these adjuster screws do NOT have the slot so a hack saw to cut a 1/4 inch slot is required for your repair. Clamp the screw in a vise and carefully cut the slot. The metal is soft so this is not difficult. Everything else is the same as with a machine screw.



1991 Color Relay Guide

by Scott D'Vileskis

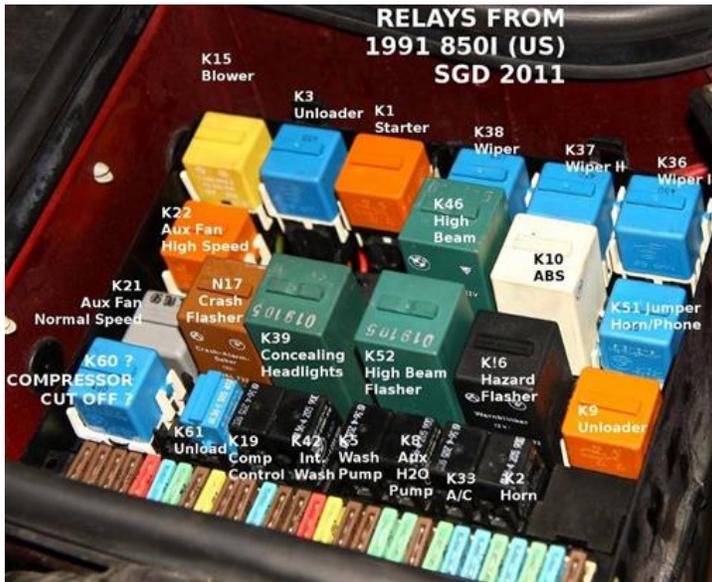
...

Scott notes that there are some comments for this guide...

(1) It is specific for a 1991 US model, other models vary wildly, depending on options; Consider getting some photos of others' relay bokes

(2) Some newer, replacement relays are a different color (no specific example, but a green might have been obsoleted by a purple or something similar)

(3) Some colors were reused... Not all green relays are the same, etc... Realistically, each relay in my guide should have a photo of the side-diagram (or suitable part numbers) to prevent someone from just rearranging based on color



The following is the colors and ETM ID for the following relays:

1991 BMW 850i Relays - Main Box- From the back row

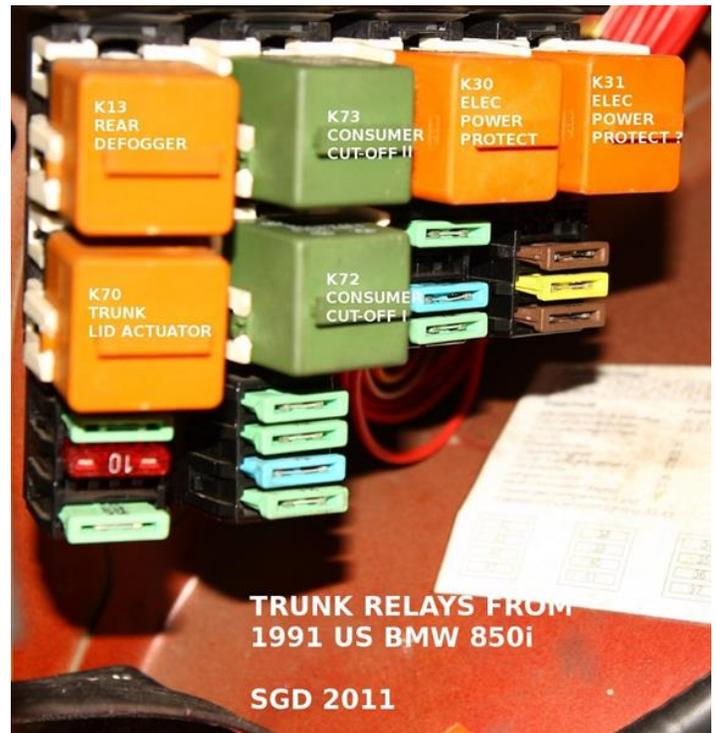
- K4 - Yellow - Blower Relay
- K3 - Blue - Unloader Relay KLR
- K1 - Orange - Starter Relay
- K38 - Blue - Wiper Relay III
- K37 - Blue - Wiper Relay II
- K36 - Blue - Wiper Relay I

- K22 - Orange - High Speed Relay
- K12 - Blank - Wiper Pressure Control Relay
- N6 - Blank - Headlight Front/Fog Light Module

- K46 - Teal - High Beam Light Relay
- K10 - White - ABS Relay
- K51 - Blue - Jumper for Horn/Telephone

- K21 - Grey - Normal Speed Relay
- N17 - Brown - Crash Relay
- K39 - Teal - Concealing Headlight Relay
- K52 - Teal - High Beam/Flasher Light Relay
- K16 - Black - Hazard Flasher Relay
- K9 - Blue - Unloader Relay

- K? - Blue - Unknown? *1
- K60 - Mini Blank? - Compressor Cut-Off Relay? *1
- K61 - Mini Blue - Unloader Relay
- K19 - Mini Black - Compressor Control Relay
- K42 - Mini Black - Intensive Wash Relay
- K5 - Mini Black - Washer Pump Relay
- K8 - Mini Black - Aux Water Pump Relay
- K33 - Mini Black - A/C Relay
- K2 - Mini Black - Horn Relay



Trunk Relays, Going Across, from the top

- K13 - Orange - Rear Defogger Relay
- K73 - Green - Consumer Cut-Off Relay II
- K30 - Orange - Electronic Power Protection Relay

K31 - Orange - ? Cigar Lighter Relay? *2

K70 - Orange - Central Locking Trunk Lid Motor Relay

K72 - Green - Consumer Cut-Off Relay I

K15 -? Orange? - Electronic Power Protection Relay I?
(Missing in my photo) *2

*1 - The ETM says my first mini-relay should be occupied by the compressor cut off relay, mine was blank. The ETM also does NOT show a picture for the first blue cube relay so I think the cube relay must be the "Compressor Cut-Off Relay"

*2 - The layout of my trunk relays also differed from the ETM. The ETM shows 8 relays (including the Norway Fog Lights) yet I only have 6 relays. Since my cigar-lighter is on all the time, I suspect I do not have a cigar lighter relay.

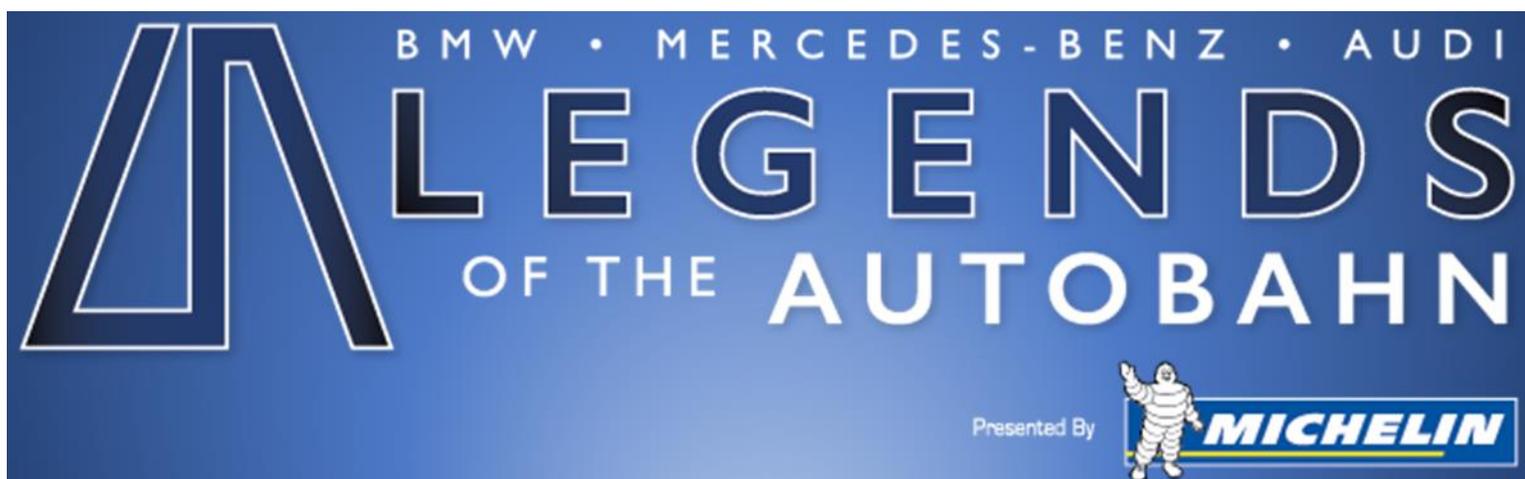
My fuse colors should also be correct, except for the missing phone fuse in the trunk.

EDIT: I will also add for those of your not familiar with REALOEM, that some of these relays have been obsoleted and replacements may be different colors.

E31 at Monterey 2016

BMW CCA E31 Chapter proudly presents

E31 Monterey 2016



Please join the E31 community in celebrating the 100th Anniversary of BMW!

BMWCCA E31, in coordination with SoCalEights, has been working on a special event for the 100th Anniversary of BMW, to be held during the 2016 Legends of the Autobahn, the 2016 Monterey Historic Races, to be followed by the 2016 BMW CCA Oktoberfest. SoCalEights will be the local hosts for this once-in-a-lifetime event. Fern Mora, President of SoCalEights, will be organizing our "E31 Monterey 2016".

BMW Car Club of America, has officially endorsed BMWCCA E31, and we will have a special parking corral at the 2016 Legends of the Autobahn at the Nicholas Club-Monterey. Additionally, BMWCCA E31 has been informed that we will have special parking at the Rolex Monterey Reunion at Laguna Seca. Fern has put together the itinerary for the BMW 100th Anniversary meet in Monterey CA. Here

are the events as scheduled. Please look at the maps for the route and stop locations we will take along the way.

Thursday August 18th

Thursday arrivals in the Monterey & Salinas area are expected to be between 3 and 5 PM. Half will be staying in Salinas and half in Pacific Grove.

- Those who will be caravanning to the Salinas/Monterey area will meet and greet in Calabasas just off Hwy 101 at 9:00AM. If you are planning to caravan with SoCalEights see the map for the location.
- 1st stop: We will make one 15 min rest stop at Buellton, CA
- 2nd, Stop: Top off gas tank in Santa Maria for our remaining drive.
- 3rd. Stop: Lunch 11:30 at Rosa's Restaurant Pismo Beach (see map)
- Arrive in Salinas between 3-4PM

- There may be a dinner get together on Thursday for those who will be in the Salinas area. It will NOT be a formal dinner just a get together that Tom Jacobsmeyer will be locating soon.

Maps with all stop locations will be distributed at the caravan meet & greet location to those who will be caravanning together. Fern must know if you plan to caravan north with us beforehand.

If you plan to meet the caravan along the route please see the maps of the stop locations.

Friday August 19th

- A meet & greet location has been arranged at Mike Kugel Community Clubhouse just off Hwy 68. The meet up time will be 7:00AM. Please see the map and notes attached for the location.
- We will roll out from there to the Legends of the Autobahn location which is about 1.5 miles from there at about 7:30AM. Please respect the speed signs through the area.
- Arrive at the Legends. We will have special corral parking assigned to our e31 group at the Legends so please be on time at the meet and greet location so that you will be able to park with the group.
- The event should be over by 4:00PM. You can return to your hotel or hang around the area. Reservations for 5:30PM dinner have been made at the Red House Café in Pacific Grove. We will have the compete restaurant reserved for our group. Fern will be handing out maps at the Legends to all those who plan to join the group.
- Please let Fern know if you plan to attend so he may notify the restaurant.

Saturday August 20th

- There will be several events going on during the day. Some of us will be attending the Festorics event and some will not.

Therefore, Saturday during the day no events are being planned.

- At about 6:30PM we will meet at the Barnyard Shopping Village & Restaurant in Carmel just off Hwy 1 for dinner. There are 5 restaurants to select from. Those who are interested in joining our group will be given the information and map at the Legends meet. It's a good time to give your farewells before heading home.

Sunday August 21st

- Travel day for those who have to leave for the trip home. Caravanning home is up to each driver.
Special Note:

Our BMWCCA E31 Chapter has secured a \$1,000,000 Insurance Policy for those who will caravan as a group to and from this event. If you need information about the policy Fern will have a copy of the Certificate of Liability with him. There is a waver everyone must sign who will be caravanning or traveling as a group with us.

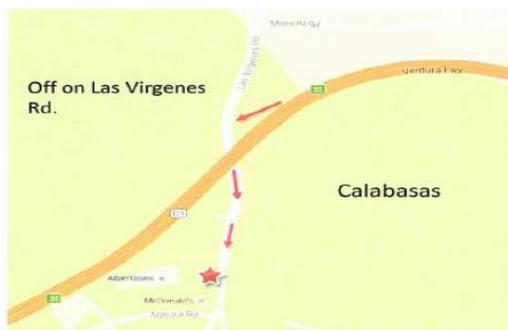
Fern will be in contact with those registered to attend and again as a reminder one week before the event with the Friday meet up location with the code you will need to enter the gate at the meet & greet location we will have on Friday.

Fern adds: "Let's make this a safe and fun event. Looking forward to seeing many of my old friends and meeting new ones. If you require any further information or need clarity, please feel free to contact me. If you have a problem opening the attachments please let me know."

If you are interested in helping Fern, please contact him. If you have any questions, please feel free to contact Fern at: fern.mora@socaleights.com

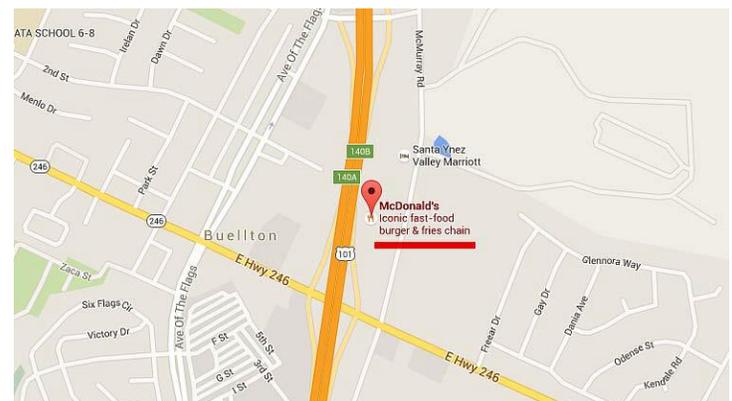
Caravan Meet and Greet location:

August 18, 2016
Time 9:00AM
Leaving 9:30AM



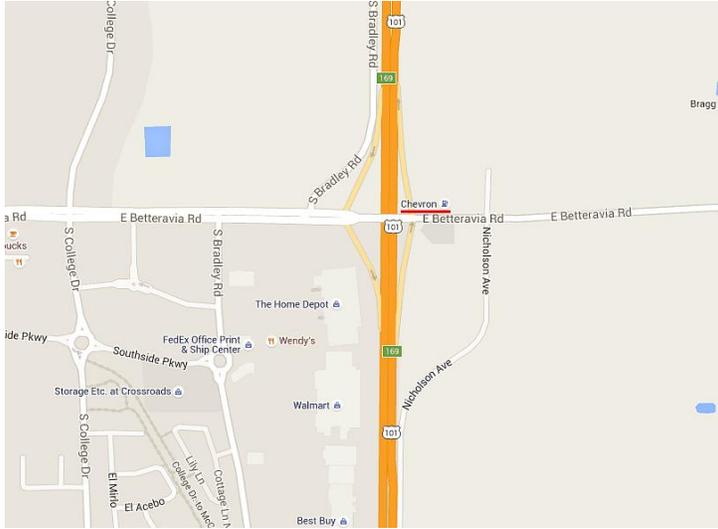
Chevron
4807 Las Virgenes Rd & US-101
Calabasas, CA 91302
There is also a Mobil and Shell Station at This location

All drivers should plan to meet at the Chevron Station to gas up prior to rolling out. Our first stop is Buellton just off Hwy 101 to make a quick 15 min restroom stop. Stop #1 Travel 108 miles and Make a quick 15 min. restroom stop at McDonalds.



Rest and Gas Stop

Stop #2 Travel 30 miles to Chevron Station in Santa Maria take Betteravia Rd off ramp



Stop #3 Lunch: Rosa's Restaurant 491 Price St. in Pismo Beach. North Hwy 101 exit Price St.



We will be 20 Miles from Santa Maria Chevron station to Pismo Beach where we will stop for lunch at Rosa's Restaurant. 11:30-12:30.

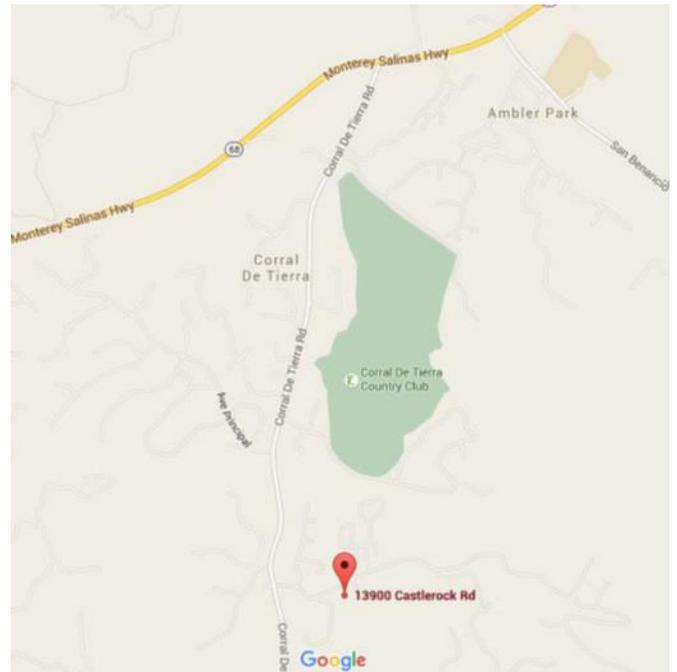
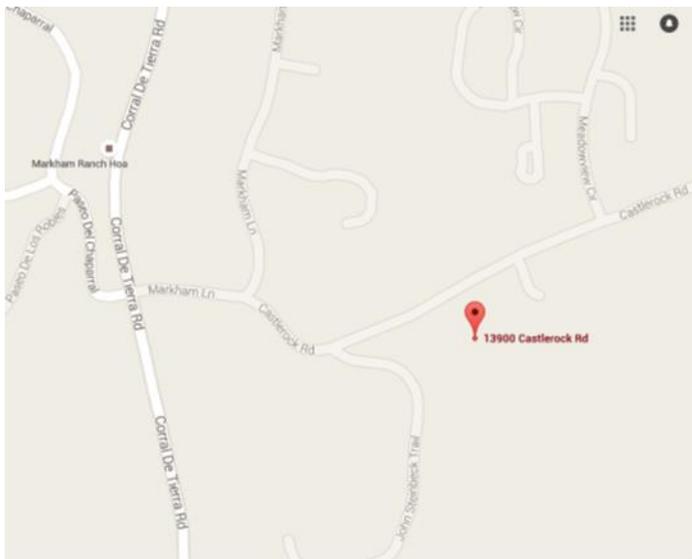
Last stop: Travel 137 miles to Good Nite Inn Salinas, CA expected arrival 3-4:00 PM

Friday Meeting Location Date: 8/19/16 Time: 7:00AM

Directions: From Highway 68 (Monterey Salinas Hwy) take Corral de Tierra Road at signal light south about 1.5 miles. You will pass by Corral de Tierra CC. Golf club on the left. The road will go downhill into an S curve, and then you will see a large sign Markham Ranchon the left. Turn in, if you have the code enter it at the stanchion or call Michael or Fern for the gate code, or carefully follow someone in through the gate, the road bears to the right, over a small bridge, and then left. You will see tennis courts on the right, and a Clubhouse.

Go over the speed hump, and turn right, and you are there! Michael will most likely have his car out early in the Clubhouse parking lot. There are rest rooms in the clubhouse.

Note: 13900 is the Clubhouse address.



MORE SMILES PER HOUR.



**BMW Car Club
of America
E31 Chapter**



**BMW CCA E31 Chapter
P.O. Box 8324
Columbia, SC 29202**