

Pferdestärke

BLUEGRASS BIMMERS CHAPTER | BMW CAR CLUB OF AMERICA

BMW Car Club
of America
Bluegrass Bimmers



VOLUME 11, ISSUE 02 SPRING 2015

BGB NCM Spring Track Day

Everyone Always Remembers Their First Time



also in this issue, Confession

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SOME GREAT EVENTS ARE GOING ON IN 2015, SO BE WATCHING YOUR EMAIL, FACEBOOK, NEWSLETTER AND WEBSITE FOR FURTHER DETAILS. Our 2015 Spring Driving Tour is complete (Story Next issue), Our Car Show/Picnic coming in June, make sure you check motorsportsreg.com for information, and be sure to check our Facebook page at <https://www.facebook.com/groups/213004217599/> this has almost all the upcoming events and some great conversation.

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WORDS FROM THE PRESIDENT

David Nalley, Bluegrassbimmers President

Greetings Bluegrassers!

Another couple of great event in the books, and one more just around the corner! A few weeks ago, we just wrapped up yet another awesome Spring Drive! We had the most glorious weather, and it was great seeing many old friends, and making many more new ones! The route was just a bit twisty, but the company afterwards at Hofbrauhaus was excellent as always!

We just also had our Spring High Performance Driving School at NCM Motorsports Park. We got a LOT more of the April Showers rather than May flowers for the event. Wow - what a lot of rain fell on Saturday! I felt like a Ship's Captain when riding with my students that day! Rain notwithstanding, it was an awesome event. Hopefully everyone comes back for SPEEDtember in the fall. And if you weren't at the Spring School, maybe you can join us at SPEEDtember!!!!

We just planned a Summer Car Show in Louisville on June 13, and we have more events for the remainder of the year, the Fall Bourbon Tour, the Fall Drive (including an overnight) and perhaps some more events on top of those!

If you have any ideas for another event, send them my way - just be prepared for me to ask you to help with the planning! Your board is happy to provide the events, we just need to know what you, as our members, are looking to do as a Club.

Well, gotta run! I still have to unpack the trailer from NCM!

-David Nalley
Chapter President

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Our newsletter title the German word Pferdestärke translates to Horsepower in English, which is something we all want more of and can never get enough of.

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BGB NCM HPDE 2015

Everyone Always Remembers Their First Time *by: David Bufford*

I had wanted to do one of our HPDE events for a number of years. Whether it was at Putnam or NCM, my schedule never allowed me to attend. After looking at the photos and video from the inaugural event at NCM last fall, I knew I had to go to the spring event. So last December, I put it on my calendar. I was committed.

I have done a couple of on-track adventures before. I did a Richard Petty Driving Experience at the Kentucky Speedway.

That's one of those NASCAR events where you get a couple laps behind a pace car. As an all-day event, it left a lot to be desired. While it was fun, the three minutes of track time you get to do three laps doesn't give you the full track experience. And, you know, you're just turning left. I also have put a couple laps in at the Indianapolis Motor Speedway at a private event. So while I have driven on a track before, I don't think those really counted as track day experience.

My planning for NCM started in earnest during the Spring Drive. Once we stopped for lunch at the Hofbrauhaus in Newport, I started talking to more experienced track drivers about what I would need to get to prepare for NCM. The unanimous consensus was good tires and dedicated track brake pads. I had just put on new Michelin Pilot Super Sport tires, so I knew I was good in that department. The hunt for track pads began.



Many people recommended Hawk HT-10 pads. So I got a set of those for my front brakes. While it would be best to run the same pads front and rear, HT-10s are not made in my rear brake size. I bought the most similar pad I could find that was the correct size for the rear brakes, Hawk DTC30s.

Two weeks before NCM, I took my car to get the required mechanical inspection and brake fluid flush. A few days before heading down to Bowling Green, I put my track pads on and bedded them in. You see, brake pads have a couple consid-

erations to balance- stopping power, operating temperature, dust, and noise. Pads for the street try to keep dust and noise down while making sure you have good low temperature stopping power. Pads for the track have different considerations. They are extremely dusty. My freshly cleaned wheels were black by the time I drove to work and back home one day. They are also loud. They squeal loud enough to make people stop what they were doing and look at you when you stop. They also don't have the initial bite you are likely accustomed to when they are cold.

However, once they get some heat in them, they are incredible. While at NCM, you will have to negotiate twenty-four turns on each lap. That constant full power braking would melt stock pads and boil old fluid. The track pads (and high quality brake fluid) I used performed flawlessly.

Friday afternoon, I rush home from work and grab all the items I planned on taking with me. I have a tendency to plan for the worst. So I packed a full toolbox so I would be prepared for almost any issue. I brought my jack, brake bleeding equipment, extra brake fluid, extra spark plugs and coils, and even my quick detailer spray and some microfiber towels to keep the car clean.





As soon as I get to the hotel, I run into some friends and enjoy some of Kentucky's finest for a few hours. This bleeds over to a run to White Castle at one in the morning. While that was a lot of fun, I'm not sure I would recommend it. I would tell you to watch a couple YouTube videos of the track line and get a good night sleep. Do as I say and not as I do, right? Regardless how you spend the night before, don't spend it at White Castle at one in the morning. That always turns out to be a poor life choice.

Anyway, Saturday morning we're up bright and early! Despite all my planning, I notice that I still need a cooler and some water, and a tarp because it is pouring rain. I make a quick run to Walmart to pick up those items and then a trip to the gas station to top off.

I get to the track and it is pouring. This looks like it will at least be an interesting experience. Everyone heads up to the

initial driver's meeting where we discuss the track, flags, and the schedule for the weekend. After that, I head out and unpack my car (good thing I bought that tarp) and set out to find my assigned instructor.

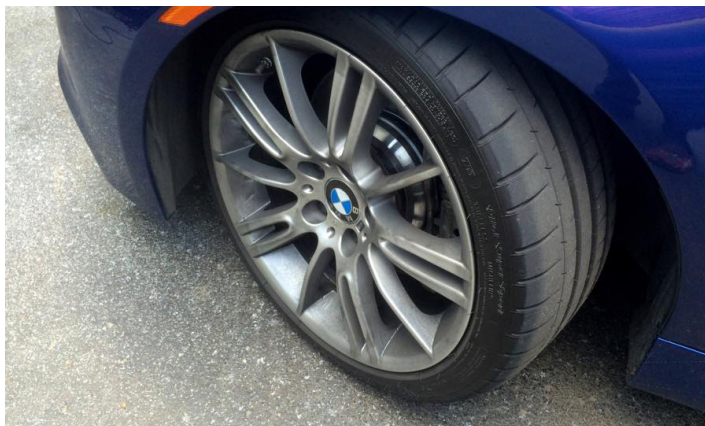
After a quick introduction with my instructor, we set out on the track. The first two sessions on Saturday were largely a wash, pun intended, because of the torrential rain. At a number of spots on the track, there was at least three inches of standing water. That made it almost impossible to drive the line of the track. It was more like drive to avoid the lakes. Our second session was black flagged due to the standing water. Keep in mind that when you are on the track, you have to run with your front windows down for hand signals and so you don't break the glass with your helmet. Even so, there really was not that much water that made it into the car. Most of it hit the back seats. A quick wipe

down took care of all that.

The next two sessions on Saturday were relatively dry. So finally we were able to properly start exploring the track at speed. Even after the first two sessions, I still wasn't completely sure what turn was coming next. NCM is a very long and technical track.

Finally, toward the end of the third session and into the fourth, I had memorized the track and was able to know what to expect around each turn. Once you know where you are and where you are going, you can really start to nail down the proper line.

That is where the fun starts. Once you understand the line of the track, you are constantly working on improving. How soon do I need to brake for this turn? How far to the edge should I be? What speed should I hit this corner at? When





should I start turning in for this corner? Where can I apply or let off the throttle to help the car rotate? These are the questions you have to ask and experiment with for every corner on the track. With so many corners each lap, you will have plenty on your plate.



You also have to adjust for other drivers. I was in the "C" class, which was the novice class. The "B" class was for intermediate drivers and "A" was for advanced. Each class had different rules on where and when you can pass another car. For our group, we could only pass on designated sections of the track. All classes have to give a "point-by" where the driver of the car in front of you actually points out the window that he sees you behind him and is prepared for you to pass.

Particularly in the C class, the track staff spaced each driver out as we entered the track from the pits so we had plenty of room to ourselves. Except for the last session on Saturday. The last session, we all started at the same time! That made it a bit more interesting. There were plenty of point-bys both given and received.

Wrapping up Saturday's sessions, I packed the car back up and headed back to the hotel. I headed out to get some

dinner with friends and then headed back earlier than I had the night before. There were no White Castles involved. Thankfully. I reviewed the track map to consider the corners that were the most difficult and watched a couple videos on instructors discussing how to negotiate them. I also watched a couple lap videos of NCM to see how other people pick a line and where and when they brake. That was very helpful.

The next day, we had another classroom session and hit the track. Sunday was a beautiful day, sunny and warm. A totally different situation from the rain on Saturday. Each session on Sunday I found myself gaining confidence and speed.

After the third session Sunday, my instructor and I went over the student review form. This is used to determine your classification for your next track event. For the final session of the weekend, I was signed off to go solo. That was probably my best session of the weekend simply

because I was able to use all the experience I had gained in the other sessions.

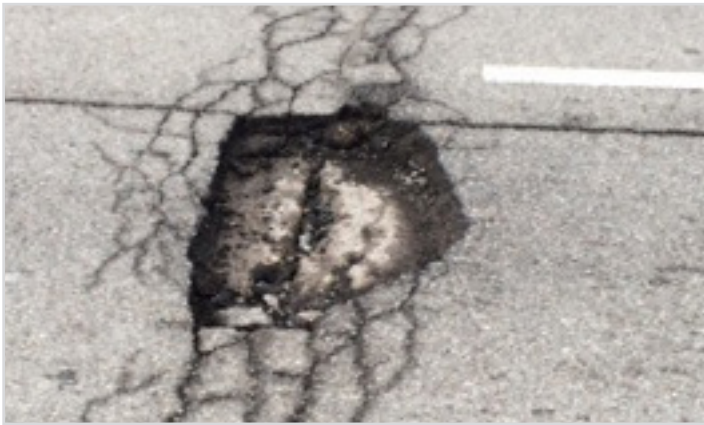
After the final session, I packed up and headed home. I can tell you that you really have to readjust a bit to driving on the expressway after spending a weekend on the track. If you have not made it to one of our HPDEs, I strongly recommend you look into the fall event at NCM. It is an incredible experience and I can't wait to get back.



Potholes: after the winter thaw.

We're well into spring and closely creeping into summer. But, once again in the Ohio Valley we have gone from a icy sub freezing winter to 2 days of spring and then into 89° with 95% relative humidity.

Ahh, SPRummer is here. And so are the potholes. After a looong snowy winter, the plows and salt trucks have again taken their toll on the roads. The road crews are trying to keep up but its a never ending battle. A football size pothole can quickly turn into a Dodge Neon size crater that will leave you wondering whether



its better to to drive into the median to avoid it (bad news on the expressway) or risk being engulfed by it and stranded along side of the road because you took the chance.

Now being the car lover that I am, I generally try to play auto-cross using the potholes as cones and honing my avoidance



skills (when I don't have cars along side of me of course) as I'm sure you all have. This is life after the snow stops.

Its late into May and most of the crater sized holes have been patched, waiting for next years snow to help them burst into their wheel swallowing glory. So your defenses are down and you're enjoying the drive, sunroof open, your favorite tunes

playing, engine sounds buzzing in your head, you're in the zone. You've gotten new tires a month earlier and they feel and grip great BLAM, BUMP BUMP sssssssssss, you roll over to the side of the road assuming the worst.

You've been down this stretch of road many times in the last month, where'd that come from? One of those football sized



potholes has turned into a wheel bending, tire popping crater. Small potholes quickly become huge potholes from cars and trucks constantly rolling over them--most cars and truck with their 60-70 aspect ratio sidewalls absorb the truma with barely a thump, but to those of us that have the 40 and 35 aspect ratio (most BMWs) this is like running over a running over a telephone pole at speed almost knocking the wind out of you.

You know whats happened, but have to get out to assess the damage. Flat Tire, check. Bent or Broken Wheel, check. Ok, what has it done to my suspension, what about the back wheel and tire? Now what? Get on the phone -- cancel the meeting you were on your way to and any meetings after that because you know this isn't a fast process. Newer BMWs mean no spare, and I hate runflats. Get back on the phone and call BMW roadside assistance, you explain where you are and what has occurred. they will call you back when they have a flatbed tow truck ETA. You sit in the shade as cars and trucks whip by. All you can do is wait.

You're going to hit potholes, I don't care who you are. Here are some contacts to call to get them filled, its the first step in getting the roads pothole free (right). Oh, and if you spy one, call, don't wait for someone else to, because more than likely that person is in a SUV with a 85 aspect ratio, and to them, well, it wasn't even there.

Call MetroCall at 311 or 502-574-5000 and report the problem to one of the operators. Make sure you give them an accurate location.

Confession

by: Bill Wade

I was with an old love last night. I'm embarrassed to say but I have to come clean. This relationship has cost me so much, so, so... so much money. Much stress and anxiety and pain but also has given me so much joy. I felt like a sailor coming into port and then finally, it was time. Much has changed since we were together last. Almost 18 months has passed since I was left heartbroken... again, and yet I came back.... again. Like a child at their first middle school dance, it was awkward at first touch but then felt so right so quick. Remembering all the little things that make me smile. The touch quickened my pulse. Just a little encouragement from me and the months just melted away. We were one mind again. Connected. I wanted to scream it felt so right. All the pain and hurt was gone.

I got my M3 track car back.

OK lets back up. October 2013 the HPDE at MidOhio with the Buckeye Chapter. I really wasn't planning on going but got talked into it by the Buckeye Chief Instructor because they really needed instructors. This is not my favorite track weekend... it can be cold and rainy, it gets dark

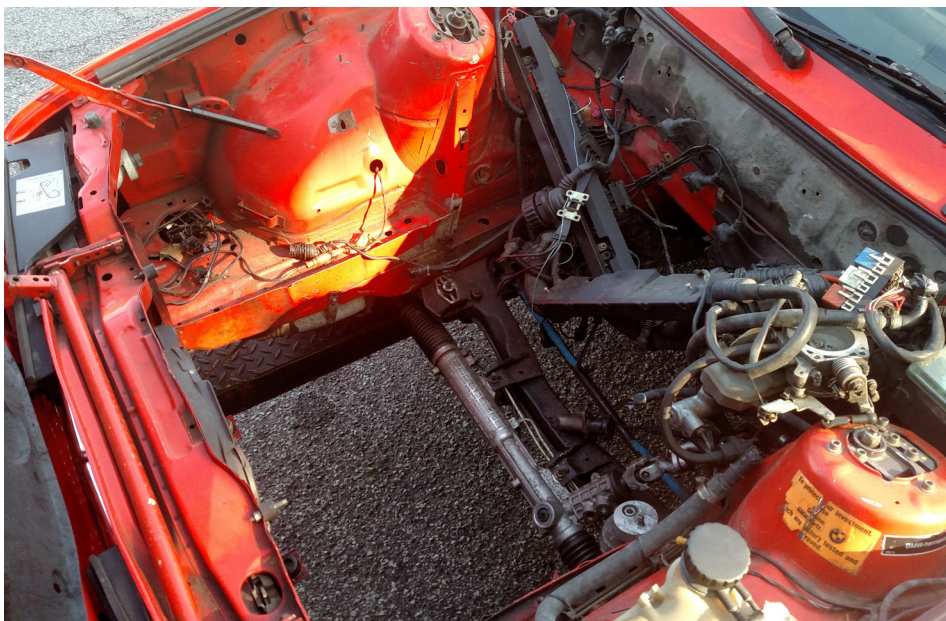


early... but this year it was actually a nice weather weekend. The school has a dark cloud over it for me. The year before my car rolled hard into the end of someone's trailer when I left the hood up and the wind caught it like a sail. The car was out of gear and the wind pushed it about 75 feet, damaged the front grill, right front, hard-to-find, fender.

It was the last instructor session of Sunday, the last drive of the year for me and I almost didn't go out because I was please with my track time for the weekend, but again I yielded to peer pressure and buckled up. About 3/4 of the way through the session, coming over the

'Madness' hill all hell broke loose in the car. It sounded like a metal garbage can half full of bricks and maybe a cat was rolling down a hill. I promptly shut it off trying to save something... anything at this point... and rolled to the side of the track out of the way. I sat until the session was over with people driving by going. "Oh look! there's Bill.... again". The truck comes and I get the tow strap treatment back to the paddock. My car rolls into my pit space and the crowd gathers. "What's wrong" "What happened" "What did you do?"... I started the car and the sound made everyone's man parts go back up between their shoulder blades. CRAP! (well I really said other things but I won't





repeat them here). Definitely something internal, valve dropped, rod/cam/something broke, something that is spelled with \$\$\$.

The car gets pushed on the trailer and we make the 4 hour drive home. Every time I look in the mirror the car stares back at me like a puppy sitting next the chewed up shoe, sorry but a little confused on why I'm mad.

With my son Max's streak of Dean's List performance's at WKU continuing I knew I was going to have to get creative financially on fixing this motor. I'd rather not document my history of motors in this

epic model of German engineering but let it suffice to say I've spent more than my share on keeping my passion for high performance driving in the money/per/miles category. The motor was pulled by Don Black, the Maestro at Performance Specialties and confirmed a dropped valve, showing me pieces that looked like small modern art jewelry. "What did I do?" I asked, "Probably nothing," he said. "It just happens sometimes"... somehow that didn't help. I said I can't rebuild this now so I'll come get the car. I took the car back and after having it sit through the winter of 2013, covered, at my Brother in Law's I took it to a nice dirt floored carriage house in Cincinnati that my Buckeye

friend Len Mueller owns. I procured a new to me S52 block and head from a great friend and started looking at a plan. I decided that this time everything that went back in was going to be new, basically tripling the cost of what I have done in the past on rebuilds like this.

That plan took 18 months to pay for, thanks to a very understanding wife and especially to Don Black who puts up with me. He built a very strong stock S52 motor. Nothing high tech, no trick parts. The plan was to get it back the week before and put 500 miles on it and get it back to Don for a oil change, valve adjustment and final check before putting it on the track. A few last minute problems and part acquisitions meant I didn't get it back till 4:00pm Wednesday the day before I needed to leave. With my trusty side kick Steve Cullen strapped in the right hand seat we head out to do a loop of Louisville-Lexington-Cincinnati-Louisville. clocking about 300 miles on it. I drove between 60 and 80 mph, varying the speed 5 mph every 15 minutes. I remind you that this is in a track car; with nothing in the interior but race seats, race harnesses and a roll cage. No radio, no A/C. Staring at the front bar on the roll cage knowing that you have to keep the harnesses tight or you'll get coloring books for Christmas for the rest of your life if you get in an accident. Also the added treat of no dash lights, a very loud exhaust, an expired license plate and old, hard R compound tires with zero tread on them. A tragic case of "Do as I say not as I do".



I dropped the car off in front of Performance Specialties at 12:45am Wednesday night/Thursday morning to return 12 hours later to strap it onto the trailer and head south. It didn't get washed, so with oily hand prints everywhere it had a Mad Max kind of gritty look. Not all the gauges were hooked back up but it ran like a scalded dog. New front brakes, new track tires it was awesome! Now I've got the learn how to drive it better again because I'm getting to places much faster than I was driving the various cars I was allowed to drive during my cars hiatus.

Like seeing an old love, the smells, the feelings, the little nuances that makes you smile, come back very quickly, like it was just yesterday....

Woo Hoo!! The "Beast of Bourbon" lives again!

Tales from a Shadetree by: David Bufford



Like many of you, I enjoy working on my own car. While I do not have any formal training as an auto mechanic, I have been wrenching on my cars for nearly twenty years since I was a teenager with a fresh-off-the-lot e36 328i. Admittedly, I probably broke more things than I fixed on that car. But sometimes you have to crack a few eggs if you want an omelet, right? Maybe not the best metaphor. Oh well.

I wanted to write a regular article where I can document what I do for my own car, and hopefully be an asset for my fellow shadetree mechanics. To start out, let's have a discussion of the essentials any shadetree mechanic (or aspiring shadetree) worth his busted knuckles should have at the ready.

To start with is something every experienced shadetree has woefully run short of too many times to mention; the forethought to recognize when a project is too big or too far out of your comfort zone to tackle on your own. Obviously major operations fall into this category- you won't find me starting to pull the head off my n54 on a Tuesday night. But this also includes things, even simple things, that you just haven't done before. I recall one sunny weekend morning when my nineteen year old self decided to try my hand at an oil change on a Honda Passport. I thought for sure the first ten quarts of motor oil would have been enough to fill up that old Honda. Luckily, before I started the eleventh quart, I remembered that you're not supposed to actually completely fill the engine with motor oil. But I can tell you that I learned everything I could on how to do a proper oil change after recognizing my mistake.

To help you avoid a situation like my Passport, always know exactly what you are going to do before you start. Follow a DIY, a Bentley manual, an experienced friend, a YouTube video, or whatever reliable source you have, just make sure you know what you are going to be doing before you do it. Plan out each step. Then you can decide if you are comfortable doing a particular project yourself, or if you should leave it to better experienced hands. There is no shame in recognizing a project is beyond your skill level.

Secondarily, if you do decide to work on your car, the next thing you will need is a safe place. A driveway or garage would be good. The parking lot at AutoZone is not as good. Working in the parking lot at your apartment complex will probably get you in trouble. Working on your car in the grass or in your street parking space is downright dangerous. Don't do that.

OK! Now on to the fun stuff: tools. I know if you are anything like me, you have a very low threshold for justifying a new tool purchase. But let's make sure to get the correct ones.

Starting out are what I call the supporting tools- jacks, jack stands, ramps, etc. I have two jacks, a low-profile "RACING" jack, and a regular steel jack. The steel one is not a "racing" jack, which I guess is reflected in the number of pumps it takes to lift the car up. A lot. It's slow. You can get by with one jack, in which case I would go with a low-profile model to make sure it fits under the car.

Next are jack stands. Don't cheap out on jack stands since they will be preventing your untimely death. You don't want a jack stand to fail, so make sure you purchase a stout unit. You should have four if you plan on lifting the entire car off the ground. While it may seem counterintui-

tive, I believe having all four corners level and secured on jack stands is safer than having the front or rear ends jacked up with the opposite end still on the ground. Then you are relying on wheel chocks and/or your parking break to keep the car from rolling off the jack stands. That is not a particularly stable arrangement.

I also use a set of rhino ramps when I need one axle off the ground, but I'm not taking the wheels off. If you use ramps, make sure the model you select will prevent you from driving too far and rolling off the front of the ramp. If your car is low to the ground, you will probably have problems clearing the front bumper cover over the ramp. What I use to solve this are a few pieces of 1x6 lumber that I stagger in front of the ramp so my bumper will clear the ramp. That just allows me to get the wheels up the ramp without the bumper pushing the ramps forward. Don't use wood to support your car, especially not with you under it.

Finally, you may want to use a jack pad adaptor. The e36 models had both underbody and rocker panel jack points. You need a special adaptor to use the rocker panel points. Similarly, later models have jack pad cups under the side rails with rectangular holes that I'm sure are good for something. I'm just not sure what it is. But if you use them as a jack



point without an adaptor, you will crush them. This is especially true on later generations that use plastic cups. I know my e46 used a rubbery material that would squish, but not break. The plastic ones just break.

Moving on to hand tools, you will need a complete metric socket set. Sockets come in six and twelve point versions. I almost always try to use a six point version. The six point socket gets a better purchase on a bolt and is less likely to strip off in high-torque applications. The twelve points tend to be a bit thinner, and that is useful sometimes too. For automotive applications, you can generally get by with a full set of 3/8 drive sockets. I would recommend a set of smaller sizes in 1/4 drive and some larger sizes in 1/2 drive to cover all your bases. I have broken multiple 3/8 drive tools on seized wheel bolts. For each size of driver, you will need ex-

tensions of various lengths and universal joints to work on peculiar angles.

In addition to your standard sockets, I prefer to have all my other fastener-types on a driver mount so that I can use a torque wrench when appropriate. For BMWs, this should include a full spectrum of Torx bits (regular and external "E-Torx") and hex head (commonly referred to as "Allen") bits in at least 5-14mm sizes for brakes, transmission, and differential services. You should also have a spark plug socket that fits (n54 and later turbo cars require a dedicated triple square thin wall socket) and a crows foot O2 sensor adaptor.

To use all these sockets, you will need ratchets in the correct drive sizes (1/4, 3/8, 1/2) and ideally a long breaker bar to use on stubborn bolts. Once you are

ready to reinstall a fastener, it is important to not over tighten the fastener. So you will need an appropriate torque wrench as well. I have two: one for lower torque applications and one for higher. But just having a torque wrench won't do you any good if you don't know the proper torque you should be using. Always refer to a manual for the proper torque setting.

Some applications require a torque plus an angle. This will be listed as something like "75 ft-lbs + 90°." If you are going to tackle something that is torque+angle, you can buy a torque angle gauge, or you can use a marker to mark starting and ending angles after you torque. Simply torque to specification, and then draw a straight line that starts on the fastener and ends on a fixed surface. Measure your angle and draw another line at that measurement. Then just turn the fastener until the line matches the line of the completed angle.

As a final note on torque wrenches, never confuse your torque wrench with a breaker bar. Torque wrenches are carefully calibrated tools designed exclusively for tightening applications. Using them to break bolts free will destroy the calibration.

After sockets, a set of wrenches should be in your tool box. I have a set of ratcheting combination wrenches that I use when a full socket and driver is not convenient. You might also want a flair-nut wrench for brake lines and brake bleeding. These are like closed box-end wrenches, but have one segment cut out to pass over a line. Basically, they grip five of the six sides of a fastener, rather than two sides like an open end wrench, to help prevent stripping damage.

After sockets and wrenches, you will need a selection of Philips and flat head screw drivers, a non-marring dead blow hammer, an oil filter wrench that fits your oil filter cap, and pliers/vice grips. Be careful with adjustable pliers, they have their place but also will readily strip bolts when they inevitably slip.

Moving on to fluid maintenance, you will need an oil catch basin. Please dispose of your oil responsibly, most auto shops will freely accept used oil for recycling. I usually wait until I fill up a number of five quart oil jugs with used oil and then take them in all at once. For brake fluid, you will need a catch can for flushing out old fluid. This is a container with a silicon





hose attached to the top that you connect to the brake bleeder nipple so you don't have brake fluid squirting everywhere. It helps to make sure you get one with a hose long enough so that you can set the can on the ground while you concentrate on bleeding the brakes. I also like to use a pressure bleeder when bleeding my brakes so it is a one-man job. Otherwise I have to get my wife out in the garage for half an hour pumping on the brake pedal. Unfortunately, that's not a euphemism.

Speaking of fluid, I like to have a supply of all fluids on hand. I have sealed brake fluid, coolant and distilled water, motor oil, transmission oil, and steering fluid on my shelf. Make sure you use the steering fluid required on the cap of the reserve. Some cars take ATF and some take a special hydraulic fluid. The two are not compatible.

For all your tools, you will want to have some sort of tool box. I have a tall Craftsman roller, and a separate tool chest. Or-

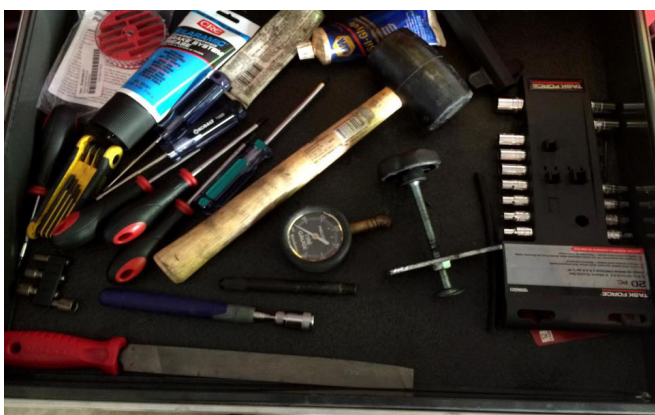
ganizing your tools will both help you find them when you need them, and hopefully help you from losing them.

Finally, you want to have plenty of cleaning supplies on hand. Keep a broom handy so that you can sweep up the floor before you lay down and get road grit all on your back and in your hair. That's never fun. I use nitrile gloves to try and keep my hands clean. I also have a sink and a gallon of Fast Orange hand cleaner in

the garage since I always end up getting my hands filthy regardless of the gloves. You'll want to keep some degreasers available to clean off engine parts. I use a squirt bottle filled with diluted Simple Green. Brake cleaner is also good for when you are working on your brakes, but try to keep it off the rubber piston seals.

With the supplies discussed above, you should be able to tackle at least 80% of the standard maintenance your car requires. There are certainly other tools you may find you need that are job or model specific, and sometimes you can find places to rent those tools you will only need once. If you need to know what you need to do and when to do it, I would recommend starting with Mike Miller's Old School BMW Maintenance Schedule. Mike will happily email you the latest copy if you email him.

Happy wrenching-
David



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"In memory of Dallas Tidwell"

Street Survival- The most important activity in which our club participates. by: John Wilson

The Bluegrass Bimmers holds numerous activities every year- Driving Tours, Social Events, High Performance Driving Schools and other events. But of all of the activities we have, the most important activity is our Tire Rack Street Survival Schools for Teen Drivers. We usually hold 2 Schools per year in Louisville and have members who instruct and assist in schools outside of Louisville.



Street Survival was founded in 2002 by the BMW CCA Foundation with Sponsorship from BMW of North America, Tire Rack, and Liberty Mutual Insurance. In 2003 few several schools were held. That number increased to over 101 schools in 65 locations nationwide in 2013 with sponsorships from Tire Rack.com, BMW, BMW CCA, Michelin, and Enterprise. The schools are facilitated by members of the BMW CCA, Porsche Club of America, Sports Car Club of America, Audi Club of North America, and the National Corvette Museum. This year the goal is 110 schools.

Our own Bill Wade is National Program Director for Street Survival in addition to being Chairman of the BMW CCA's National Driving Events Committee.

So why is Street Survival so Important? According to the National Safety Council:

- Motor vehicle accidents are the number 1 cause of deaths for teenagers.
- The chance of one crash in the first three years of driving is 89.2 percent
- The chance of two crashes in the first three years of driving is 52.5 percent
- 58% of teen drivers do crash within the first 12 months driving solo.
- A 16-year-old is 20 times more likely to be killed in a crash than an adult
- Teens are 400 percent more likely to die in a car crash than 25-34 year-old drivers
- 113 teenage drivers each week in the U.S. are involved in fatal crashes

- 62% of teenage passenger deaths occur in vehicles driven by another teenager.
- Nearly 1000 teens each day are treated in an emergency room for injuries suffered in a motor vehicle crash.
- In 2012 Kentucky and Indiana were 2 of 6 states whose 16-17 year old deaths increased by more than 5.

Driving Facts of Life:

- Seatbelts do save lives - About 2/3 of teens killed in auto accidents were not wearing seat belts
- Over 1/2 of all occupant deaths in accidents were not wearing seat belts.
- 62% of all accidents occur in urban areas.
- 60% of all FATAL accidents occur on rural roads.
- Many rural roads are based on old trails.
- Two lane roads offer limited run off area and little room for recovery if you drop a wheel off the road.
- 40% of all FATAL accidents on curves.

though a collection of exercises based on real world scenarios while driving their own car. They work on skid control on a wet skid pad, do lane change /accident avoidance maneuvers, perform threshold breaking / ABS exercises, and drive a slalom course to learn about weight transfer. Where possible we do two wheels off exercise and a tail gating exercise.

In the classroom they learn about proper seating position and hand positions, mirror placement, the concept of the contact patch of their tires, the theories of weight transfer, the use of long distance vision and situational awareness. We talk about the challenges of distractions to the driver, be it the radio / I-pods or cell phones for talking or texting or just the simple cause of too many teens in the car. Where possible we stage a semi-truck on site and park cars around it to simulate highway driving. We then have each student and all adults get into the cab and close the door to show how little the driver can see and how many of the cars are not visible to the driver. We also may explode an air bag to reinforce



What occurs at Street Survival Schools?

The Street Survival School is usually an 8 hour day.

The day is a mixture of classroom and in-car exercises with a coach in the car at all times with the student. They spend a total of about 2 hours in 3 different classroom sessions and the rest of the time they are in their car. When driving, the student is put

what they learn in class about hand placement on the steering wheel.

Who Instructs-

The coaches from various clubs have years of experience having participated and instructed at driver education schools ranging from car control, winter driving or high performance driving schools, many on race tracks and enjoyed various disciplines of auto racing, rallying or competitive auto-crossing. All are volunteers. Tire Rack Street Survival is not a speed event, but

these coaches have been exposed to all levels of car control and have the ability to communicate their experience in a manner that gets through to teens. In addition the coaches complete a certification course that focuses on communication and instruction for teenagers as well as specific course layout instruction and the goals of each driving exercise.

The role of parents and adults-

If you have a teenager at home you may at times feel that they don't pay much attention to you, but they do. What you know, communicate, and the example you set will have a huge influence on your children.

Knowledge and communication-

As a parent and adult you should be aware that driving is the most dangerous activity you do on a daily basis.

- Are you aware that more people were killed in traffic accidents between 1981 and 2012 than in all of the wars and incursions that the U.S. has been involved in since the revolutionary war? 1,335,380 people killed in vehicle accidents between 1981 and 2012. Deaths from wars and incursions from 1776 to date - 1,321,612.
- 10% of all drivers under the age of 20 involved in fatal crashes were reported as distracted at the time of the crash.
- Are aware that at a minimum you should have a 10" distance between the air bag cover and your chest when seat is in the proper position to ensure that you hit the airbag and the airbag does not hit you?
- Are your hands in the correct 9 and 3 position on the steering wheel?
- Are your mirrors set so you could see a car passing you or do you see the entire side of your car?
- Are you aware that in the 5 seconds it takes for a quick text message a car traveling 55 mph travels the distance of a football field?



- Remind teens that driving has risks and the more they retain from the training and class instruction, the less risk they will have of being in an accident.

Example adults set.

An interesting survey was recently completed with teenagers in which they disclosed the following about their parents-

- Nearly half of all teens had seen their parents driving while talking with cell phones in hand.
- 15% had seen a parent texting while driving.

When you jump in the car in the morning, do you check your tires, seat position and mirrors?



Do you buckle your seat belt low on your hips? Use your seat belt every time you drive the car? Use the correct hand positions? As a parent do you drive within the speed limits? Do you use turn signals every time they should be used? Do you tailgate? Are you a distracted driver? Do you show a little ROAD RAGE towards other drivers occasionally? Teens model what they see.

The personal benefit-

I personally fell more enjoyment from instructing at Street Survival than much else I do. I enjoy teens having coached them in baseball and softball when my children were in their teens.

For more Street Survival information contact Bill Wade:
bill.wade@streetsurvival.org or call him at 592.649.4871



Children all are unique and all have talents. It is fun to see what type of personality the students you instruct will have at each school. Teens are sometimes too aggressive; sometimes a little timid. Boys and girls will often be different in communication styles. But when you see their progress with driving skills and the knowledge they gain after a day spent with them, you know the instruction has improved their odds of survival on the road. At the end of the day you feel a real sense of accomplishment.

The only better feeling is the group of parents and teens giving instructors and helpers a standing ovation at the end of a school. This occurred last year at the first Street Survival School at the National Corvette Museum. This is not unique to only this event.

Instructors and those assisting in the school knew it had been a day very well spent.

Instruct if you have the experience.

Assist on the course if you can or volunteer to do registration.

Volunteer to help reduce the number of teen deaths and injuries.

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Welcome New Members

Every issue we add the new BluegrassBimmers club members. Don't forget to join the facebook page and to come to the social closest to your specific area, its a great way to meet and get to know other members. Welcome.

Stephen Wilkins

Floyd Knobs, IN

Tony Stark

Georgetown, IN

James P. Hardy

Louisville, KY

Michael Chrisman

New Albany, IN

Scott W. Fleming

Versailles, KY

Bradley Wilcox

Louisville, KY

Loren Miller

Louisville, KY

Matthew Condra

Louisville, KY

Brett Hale

Louisville, KY

Gary Vanegas

Louisville, KY

Zachary Hilton

Lexington, KY

Elijah Lane

Lancaster, KY

Mason Sullivan

Louisville, KY

Mary Cole

Lexington, KY

Pferdestärke is going pure digital!

That's right folks, we are moving away from the printed newsletter. Why? You ask. Well there are a couple reasons for this. Cost is one, it costs a lot of money to print and mail ~ 400 newsletters (and it isn't getting any cheaper). Time is the other, Facebook and E-mail allows us to organize events quicker and get feedback on proposed events, the printed newsletter was not able to evoke the real-time conversation that is needed this day in age.

What do I need to do? -- Make sure your e-mail address is correct at www.bmwcca.org

What if I don't do E-mail? -- Worry not, we will continue to mail you a printed newsletter. But, you will probably receive the newsletter 2-3 weeks later than if you signed up for e-mail delivery.

When will this start? -- September 1st. The Fall newsletter will be the first to be delivered primarily via e-mail.

What if I'd prefer a paper copy mailed to me?

Simple - either log in to www.bmwcca.org and set your newsletter delivery preference to US Mail, or call the National office at 864-250-0022 and ask to

Don't forget the Louisville /Lexington Socials*.

Louisville Area: 2nd Wednesday of each month

BoomBozz Taphouse
1315 Herr Lane
Louisville, KY 40222
Contact: Dan Miller

Lexington Area:
2nd Tuesday of each month
Clarion Hotel (old Holiday Inn at I-75)
1950 Newtown Pike
Lexington, KY 40511
Contact: Chad Sledd

**All membership socials are "DutchTreat".*

If your location is not close to Lexington or Louisville and would like to schedule a Social, contact our webmaster to set up a time and location in your area, that way we can get the word out on the website, facebook, email blast and in the newsletter.

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