

LED Exterior Lighting

Another upgrade I wanted to make is to upgrade my exterior lighting to make it more visible. If you were to stand behind my car in the daylight and observe the tail lights you would notice that they looked fairly dim. There was nothing wrong with them. It's just that the lighting on newer cars is much brighter. That meant that people who were not used to the incandescent lights on my car may not notice them as quickly or easily in a panic stop situation. My front turn signal/marker lights weren't much brighter. I felt that upgraded lighting was something I wanted to do when the timing was right.

There is a gentleman named Gary on the Vintage Mustang Forums who goes by the handle gtonavy. He has developed LED lighting for the classic Mustangs and started a company known as Vintage LEDS. Many of the forum members use his lighting and give Gary and his products nothing but rave reviews. I have been watching the forum posts and Gary's Web site for some time now, but wasn't ready to pay the price for his products. When Gary offered a holiday sale I decided it was time and placed an order for his sequential LED tail lights, LED front turn signal/parking lights, and LED backup lights.

Gary had all the parts in stock and shipped them to me quickly. Once they arrived I tested each one out on my bench using a 12 volt power supply. Other than blinding myself (these lights are really bright) everything worked fine. I had some minor issues installing the lights in the car as some of my 50 year old sockets had some corrosion. The tail lights were adjustable so I made sure I had them set to my liking before I put everything back together. As an added touch, I replaced the hood mounted turn signal incandescent light bulbs with LED bulbs.

Now all of my exterior lighting except for the fog lights, headlights (which I converted to H4) and license plate lighting is LED. The lights are much more visible in the daytime and I'm satisfied with my purchase. However I do still need to align my headlights and fog lights to make sure they are working the best that they can. I plan to get that done once the weather starts to warm up in the Spring.

Fuel Pump Failure

It is the summer of 2017 already and I've only attended 3 or 4 shows due to weather or other commitments. I had the opportunity to attend the Mustang Mania show in Columbia MD and was excited to attend as a friend of mine usually attends that show as well. I got up early, packed up some drinks, loaded up the car and was all ready to go. Unfortunately the car had other plans. I was unable to get it to start. I thought that maybe the gas in the fuel bowls had dried up, so I squirted in some. The car started right up. ran for a few seconds, and then died. I repeated this process several few times with the same results. Thinking I might be out of gas (the gauge read pretty close to empty) I poured a couple of gallons into the tank. That didn't help. Since the fuel bowls on the carb were still empty I suspected either stuck floats or a bad fuel pump. Tapping on the floats didn't help. I removed the fuel line from the fuel pump inlet and there was plenty of gas there. A vacuum pump was easily able to draw fuel out of that line. Next I disconnected the fuel line from the carb and put the end in a small container. I cranked the engine but no fuel appeared. At this point I gave up on the show and went back inside to order a new fuel pump. I ordered a new Carter replacement pump through the Summit Racing web site. A few days later a new pump arrived, and several days after that I got it installed. The car started up right away and I let it run for several minutes. It appears I have corrected my "no start" issue and am ready to attend shows again.

I have also noticed some difficulty shifting the car into second gear. I have trimmed the carpet back some more around the shifter, but that didn't seem to help. My next step is to try adjusting the stop bolts. I'll try that next chance I get and report back if it resolves my issue.

Winter Projects 2017-2018

The weather is starting to get colder and the 2017 show season is almost over. The car performed fairly well this season, although I didn't get to drive it as much as I would have liked to. I did get to make a longer trip to Cruisin Ocean City, which was about 500 miles round trip. The car does have some remaining issues I need to deal with, as well as some upgrades I've been hoping to perform. With the driving season coming to a close I need to prioritize what I want to accomplish over the winter.

My highest priority is some rust repair on the front frame rails. I've already spent some time attempting to locate a shop willing to take on that type of repair. Most body shops aren't willing to even look at the car, much less repair it. I did manage to find one shop that was willing to take on the job. A second shop also looked at the car, but the owner has some health issues and they have been very slow in getting back to me with answers to my questions. At this point it appears that the 1st shop will most likely get the job. But I'm not 100% decided yet.

Here are some pictures of the rusted frame rails.





Other than the rust repair, my biggest issue is all of the squeaks and creaks coming from the front end of the car. The entire front end was rebuilt back in the mid 1990's, just before the project went dormant for about 15 years or so. Even though the car was just sitting, it appears that the bushings in the coil spring seats has deteriorated, causing metal on metal contact. This has been an issue in the past, and I have replaced the spring seats more than once. The fix this time is to install new parts that use roller bearings rather than rubber bushings. This will eliminate the bushing that wears out and also permit the suspension to articulate more easily due to the reduced friction. I purchased my lower coil spring seats from OpenTracker Racing. Dazecars has a good explanation of how to build your own on his web site.

Here is a picture of the roller spring seats from OpenTracker Racing.



While the spring seat is being replaced I plan to also lower the upper control arms by 1 inch. This modification is commonly known as the Arning drop or the Shelby drop. This was a modification developed by a Ford engineer, Klaus Arning, and incorporated by Carrol Shelby

into the early Shelby Mustangs. This modification raises the car's roll center, which causes the car to resist body roll in turns. There are no downsides to the modification other than the need to have the front end aligned after the modification has been completed. Since I will be removing everything needed to perform the drop anyway, the job is all labor with no new parts required, and I need to have an alignment done after replacing the spring seats, it makes sense to do the modification along with the spring seats.

Here is a more detailed write-up of the Arning drop modification.

While I have the parts removed, I will inspect the front shocks and the upper control arms. If needed, I can have the shocks rebuilt by Koni. If the control arms are bad, I can either get stock replacements, or go for a pair of roller bearing control arms. The roller bearing arms have the advantages of not requiring periodic lubrication and having less friction which will allow the front suspension to articulate more easily. The price difference is fairly significant, so if new arms are warranted I will need to give the choice some additional thought.

These are the roller upper control arms from OpenTracker Racing.



The last winter project I have planned is to complete my upgrade to LED lighting. Almost all of the exterior lighting is done except for the license plate light. None of the interior lighting has been addressed yet. I plan to replace the license plate bulb, the dome light bulb, and the three console light bulbs with equivalent LED bulbs. I also plan to install under dash lighting using LED bulbs and reproduction sockets similar to a factory option that was available in 1967. I already have the sockets and an assortment of LED bulbs to work with. I bought the bulbs based on a replacement chart on the manufacturer's web site. However I don't think I agree with some of the recommendations, so I may switch things up a bit. When I'm done, I will document my decisions in a future blog posting.

