



0**3/14/2023** 

**ACM Technik LLC** 

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# Parts/tools required

X1 LED Light bar grille

X1 LED Light bar grille harness

**Zipties** 

Flush cutters

T25 Torx

10mm Socket

13mm Socket

Some gloves are helpful

That's really all that's included/needed for parts and tools.

## **Battery Removal**

To begin installation, start by opening the hood.

Remove the intake box or aftermarket intake from the vehicle. (Plenty of videos online on how to do this.)

Next take off the negative battery terminal then positive battery terminal then unplug the plug connected to the negative terminal and disconnect the ring terminal from the positive.

After, there is a single 10mm nut that is holding down the arm going across the battery. Remove this and remove the arm.

Next there is a 13mm bolt holding down a metal plate holding the battery down. Remove this and remove the metal plate.

The battery can now slide out.

Next remove the series of 10mm bolts and nuts holding the hold down tray down and remove from the vehicle. There are 3 bolts and 1 nut on the backside.

ShopDAP has a very good video on YouTube showing this whole process on an MK7 GTI (it's the same). Humble Mechanic also has a very good video showing how to remove and install a new battery. Follow those videos if you get stuck.

#### **Grille Removal**

On to the hardest part of this whole install.

(You will most likely break something like the little GTI logo on the grille or the whole grille itself. However, you are upgrading to the better grille so it doesn't matter.)

Start by unscrewing the 4 screws holding down the grille and the intake funnel.



Next, remove the intake funnel, it literally just unclips and you can pull it out without much hassle. Should look like this when removed. The clips are here: (Also, pop the coolant hose off of the funnel too.)



Once that is done.....the fun begins......

The only good way I found to remove the grille is literally just grab it and pull it out. There is no good way of removing it. If you would like to go clip by clip but you may be there a couple of hours.

Be careful not to rip out the wires to the one sensor behind it.

Oh yeah! Unplug the sensor for the ACC once you get the grille off.

To remove the badge there are 4 clips on the back side of the grille push them while pushing the badge out. Same with the GTI logo it just unclips.

To remove the ACC Radar it is 2 clips. One on each side of the box. Just pop it out after and install it in the same orientation on the new grille.

## Installation

Installation of the new grille and wiring is fairly simple.

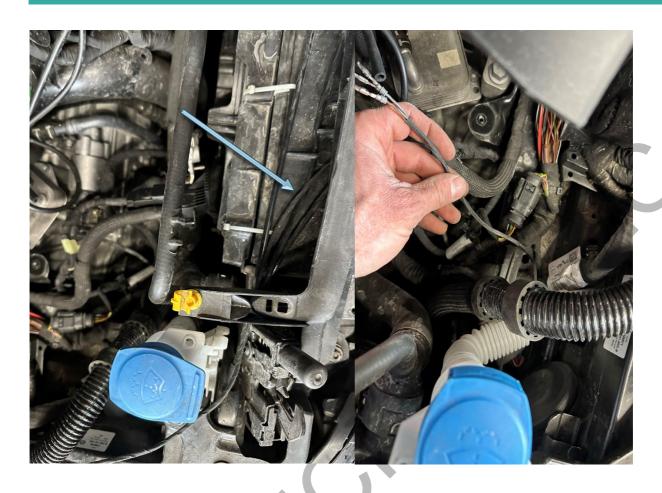
Install the ACC Radar box into the new grille.

Install the badges on the new grille.

Plug in the 2 connectors on the new harness to the 2 boxes on the new grille. Route the wiring like so.....or whatever way you feel best.

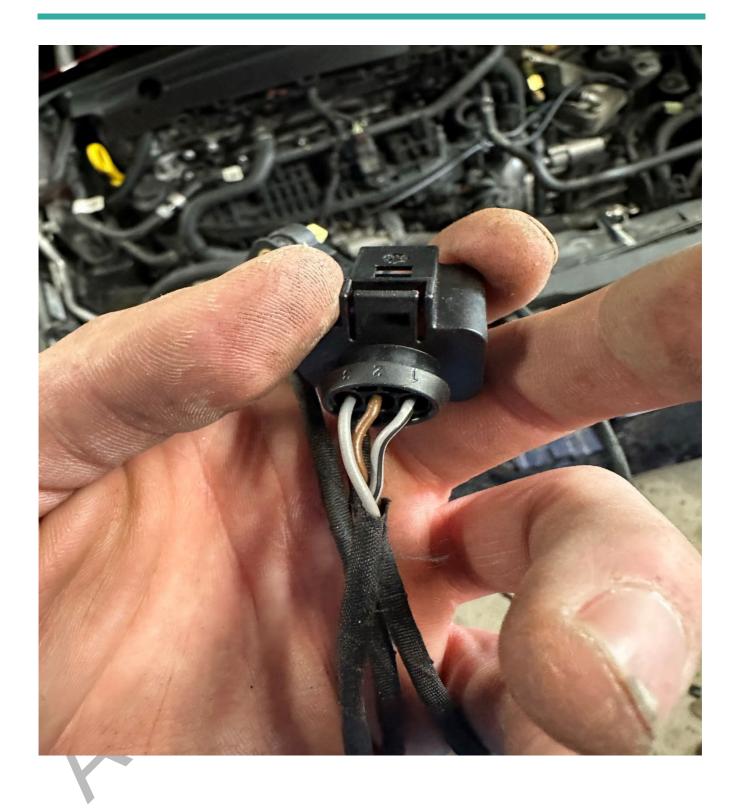






Once the wires are routed through into the engine bay....you can now put the new grille into its spot on the bumper and just pop it in. Push it in...however you can get it in without causing too much damage is good.

Next, it will be required to insert the terminals into the included plug. The wires go as follows: Brown pin 2. Grey black stripe pin 1. Grey pin 3.



Once repined... slide the pink terminal hold down back into the connector to lock the pins in.

Next, plug the second part of the harness into the plug you just repined.

Once that is done....route the wires through this plastic harness box.



Once routed through there, pop a hole into the factory grommet with all of the other wires.....or if you are too lazy and have a DSG...you are in luck...there is an unused grommet where a clutch should be. It is perfectly fine to poke a hole and use this. Just be sure to add some form of sealant around the hole later such as 3M window weld or silicone.

Now that the wires are in the interior, like so....



A couple of panels need removal, the driver side kick panel, the side of the dash panel, the fuse compartment cover, and the driver side door sill needs to be popped up.... Like so....



The side dash panel will pop off with an interior pry tool.



Also remove the little plastic piece to the left of it.... It just pulls out.

To remove the kick panel...you must remove the hood latch...to do this slide out this little clip with a screw driver or pick....then the whole latch handle pops off....



Once that is done... remove this little cover over this plastic screw.... Then remove the screw with a flathead.

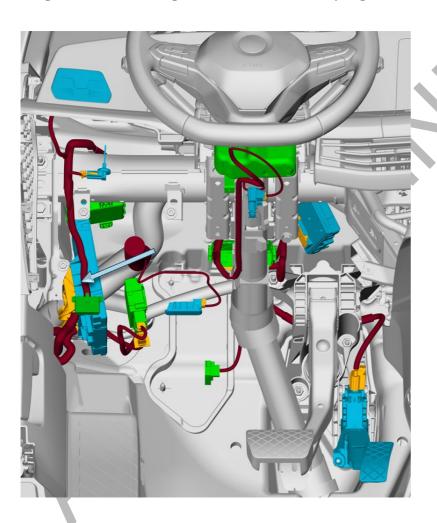


Once this has been removed.... The whole kick panel just pops off.

Now you can access the BCM.

It is hiding in the back driver side slightly behind the dash....

You will be working with the very first plug you see.... T73B. I couldn't get a very good photo of the BCM and plug but you'll know which one it is...here is the photo with the diagram. On the diagram of the BCM it is plug C.





Push the clip down...Swing the arm all the way down and the plug will release and pull out.

Once ample access to the plug has been obtained... the plug will need to be disassembled.

Cut the ziptie holding the wiring to the plug.

Release the 2 clips....one on each side of the plug....while doing this start to slide the housing off of the plug.



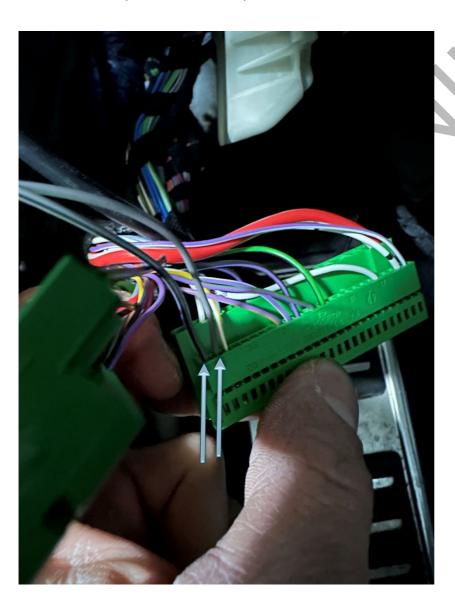


Once the plug has been removed from the housing.... Look on the plug... the pin numbers will be labeled...

The pins you will be looking for are 36 and 37.

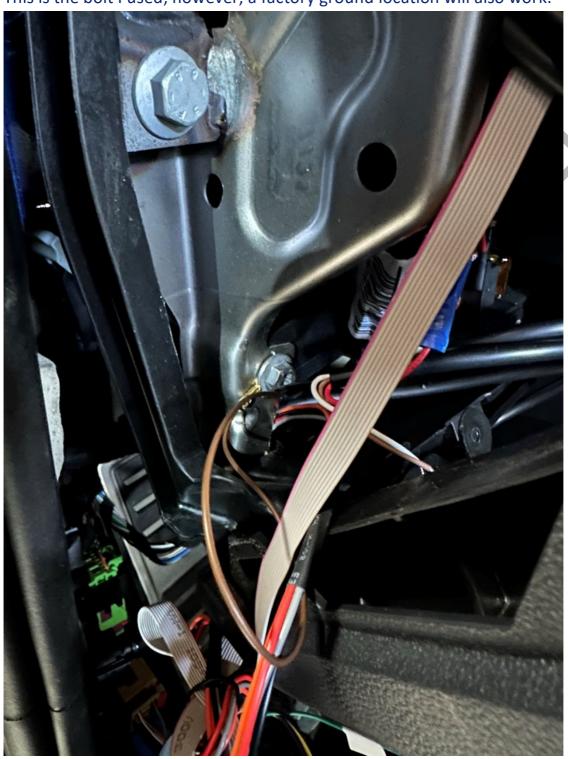
(Yes, I know the factory wiring diagram for the SE and up show Plug B pin 20 and plug b pin 32 for pre updated models and Plug C pin 61 and Plug C 35 for post updated models. All of those pins are already populated on the US model S trim vehicles. The pins chosen are not populate and still part of the ambient lighting.)

Insert the Grey with black stripe wire into Pin 37. Insert the solid grey wire into pin 36.



Next find yourself a nice place to ground the brown wire.

This is the bolt I used; however, a factory ground location will also work.



Guess what? It is time to put everything back together.

Everything is all reverse of removal.

Slide the BCM plug back together and plug it back into the BCM.

Tidy up the wires to your liking.

Put all the interior panels back together reverse of removal.

Put the Battery tray and battery back together and plug it back in.

Put the intake funnel back in.

Put the intake back on.

Keep the hood open for coding.

# **Programming**

Before the programming can begin.....start the vehicle. Notice that every light is on the dash like a Christmas tree.

You may have to hold the start button to start the vehicle.

Once started, turn the steering wheel full lock to the right, full lock to the left, then back to center.

All of the errors will disappear.

Shut the car off.

Plug in OBDEleven or programmer of choice.

Turn the ignition to ON but engine OFF.

Connect to the programmer.....

Once connected get to the list of control units.

Look for the (09) Central Electrics module and select it.

Once loaded.... An SFD Unlock will need to be performed. OBDEleven makes this easy by selecting SFD Protection then pressing Unlock SFD.

Once unlocked, go into the Adaptations section.

Search for Leuchte 33 AMBL 3 C36.

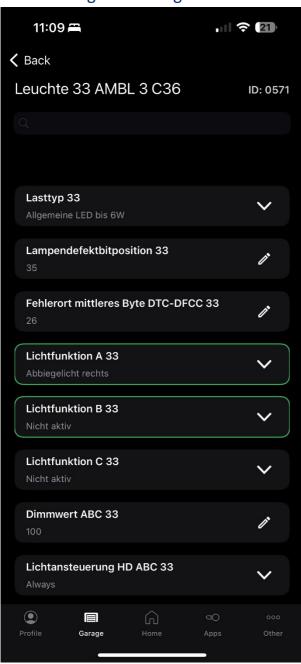
Select this.

Once inside you will see a couple of things....A bunch of lichtfunktions and other things.

To make it easier just change the all of settings (not just highlighted green) to match this:

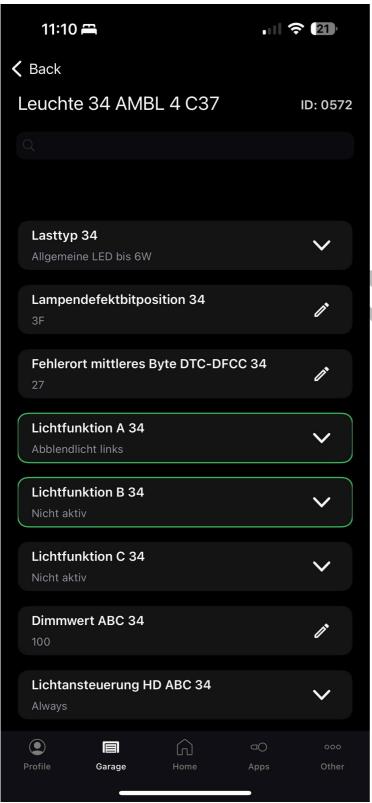
Any settings that you do not see in this screenshot...just don't touch them. This will code them to work like factory SE or Autobahn/R.

Once settings are changed.... Write the changes by sliding or tapping the button.



Once the changes are written go back to the adaptations section and search for Leuchte 34 AMBL 4 C37.

Repeat the process and change the settings and write them



These changes are setting the light bars to work like factory and turn on when the low beams turn on.

Once all the changes have been made you can now disconnect from everything.... Shut the hood.... Shut the car..... lock it.... Unlock it.... Turn on the low beams.....

Aaaaannnnnnnd realize that they still don't work....

WHAT?!

WHY?!

I AM GOING TO CONTACT THE PERSON THAT SOLD ME THIS AND MADE ME GO THROUGH THIS WHOLE THING AND WASTE MY MONEY AND GET A REFUND!!!

.....Imao....



Do not worry....

This is because the vehicle needs to go through a sleep or reset cycle before the changes take effect.

This can be done by getting out of the car, shutting all of the doors, locking the doors, walking away for anywhere from 15 minutes to 4 hours. It honestly all depends on vehicle and changes made. Some happen right away.... Some happen in 15 min... some in 4 hours.

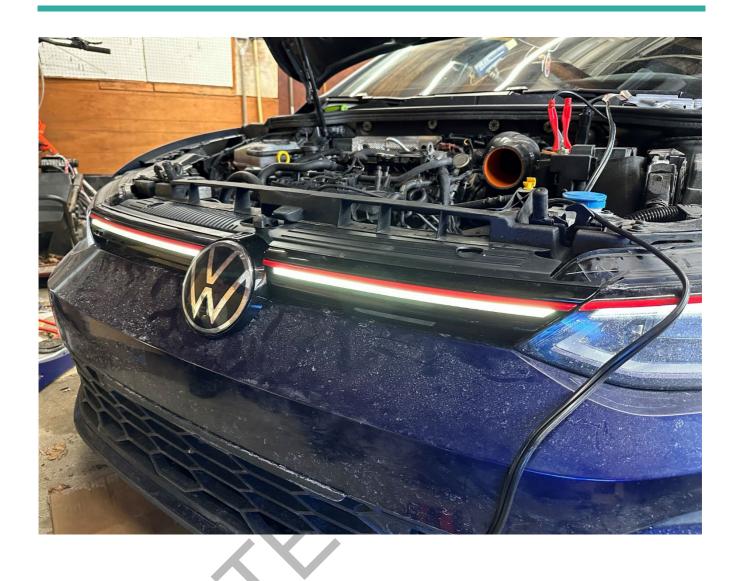
This vehicle reset can be forced by unplugging the negative battery terminal for 10 seconds and plugging it back in. Then going through the process to remove all the errors like before....

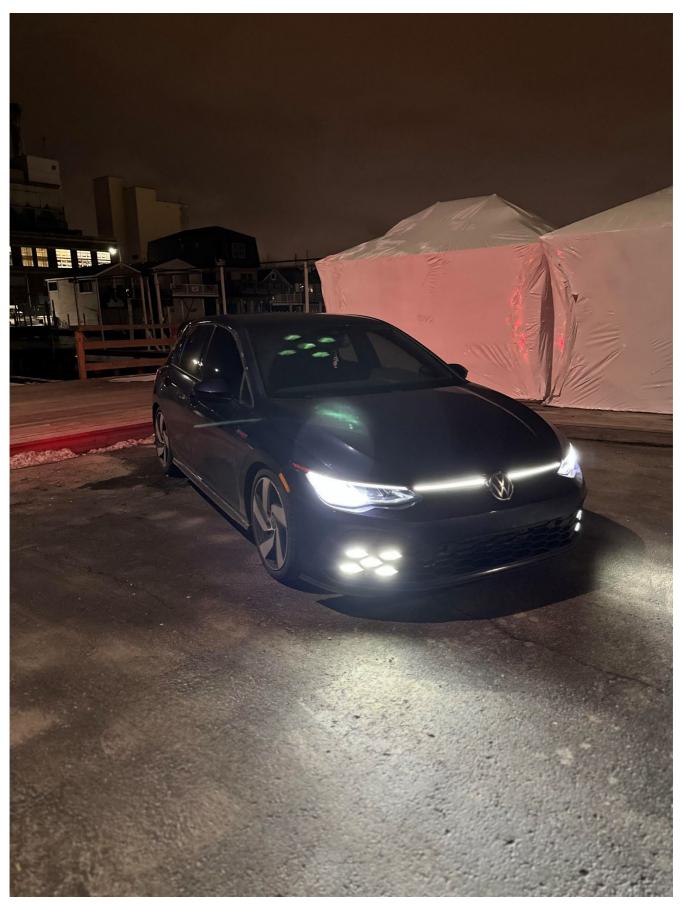
I do recommend using obdeleven to do a full code scan and full code clear before actually driving the vehicle......

YAY!!!

This install has been finished!

It should look like this!





.....If you would like to know how to have the light bar on all the time, with day time running lights, etc.....contact me! I will code the way!