

DISCLAIMER: I'm human and make mistakes. If you spot one in this how to, tell me and I'll fix it 😊 This was done on my 99.5 Jetta. Your car may be, and probably is different. If you do the mod and have any insights, tell me and I'll add them.

SO WHY DO THIS? I'm a big believer in the See and Be Seen principle. What this mod does is use the rear fog portion of both tail lights as a brake light, and let you turn on the rear fog light on the driver's side by itself. This is useful in inclement weather (like fog for example...) because the rear fog light is much brighter than the parking lights, and can be seen from a greater distance. Go Safety!

WHAT DO I NEED?

- A euroswitch to trigger the rear fog, (Or some other switch you rig up your self...) (I got my switch from www.vweuroswitch.com)
- Wire. About 16 feet.



- 5 “Female side terminals” :
- Crimper to crimp the terminals
- 2 Diodes. I got mine from Radio Shack. Get the 3 amp ones to be safe. They come in a package of 3. RS PN: 276-1144, 3 amps 400PIV
- VW repair wire. Part# 000-979-133 (if you have an old A4 like me, get some wire taps instead, as there is already a wire in the switch plug.)
- Solder and a soldering iron
- Heat shrink. Right by the diodes at Radio Shack...
- 2 Tail light bulbs. P21W Comes in a pack of 2



(image credit: DieselDorf)

- A 15A fuse (if one isn't already installed in slot 36)
- A coat hanger or fish tape
- Flat screw driver
- T20 Torque driver
- Tape (like regular office tape)

BUT I DON'T HAVE A EUROSWITCH, OR JUST WANT THE FOG LIGHTS TO COME ON WITH THE BRAKE LIGHTS.

That's fine. There are other excellent How-Tos on this topic:

Just the 5 brake light mod, no fog lights

<http://georgejacob.50megs.com/fab.htm>

5 Light mod on the Jetta Waggon (By EECSentric)

http://www-personal.engin.umich.edu/~jglettle/section/vwtdi/ext_light.html

I DON'T HAVE AN EARLY CAR, AND WANT SOME KIND OF INDICATOR FOR WHEN THE REAR FOG IS ON.

See here: <http://junglist.org/fogmod/> I've done this on my car too, works great!

OK, SO HOW DO I DO IT?

What we are going to do is connect the fog lights to the brake lights so that the fogs come on at the same time as the brakes. We are also going to connect the driver's fog so it can be switched on all by itself (as the fog should only be on one side). To do this, we need to filter the current going to the driver's fog so that current from one system doesn't go to another system. This is done with diodes. Current can only pass in one direction through a diode:



As you can see, current flows from the non stripe side to the stripe side.

Knowing this, we can make a jumper that will only let power go from the brake light to the fog light, but not the other way around.

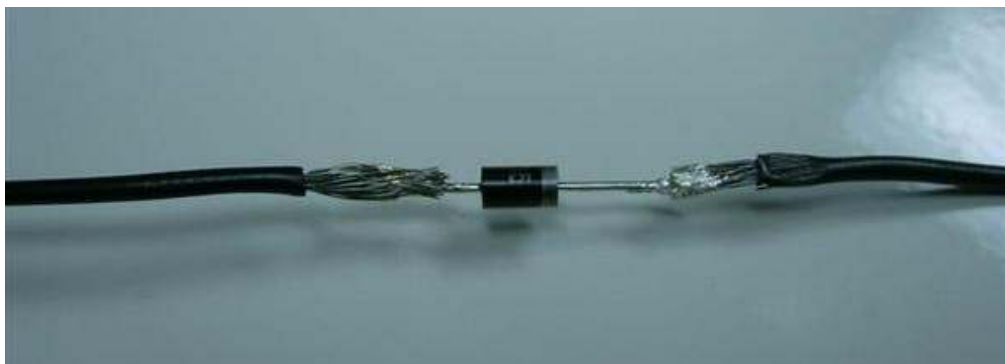
Start by cutting 2 pieces of wire, each about 9 inches long. On one, strip the ends and crimp on the female connectors. This will be the jumper on the passenger side.



Cut the other piece of wire about 3/4 to one end. This is so that we can tell which way to plug it in when we get to the car 🚗 Strip the ends in the middle, and melt some solder into them.



I found that made it easier to solder the diode on, because the solder was already on the wires.



Now, remember which way the diode is facing. Current will flow from the non stripe end to the stripe end.

Now cover the diode with heat shrink:



And strip and crimp the female connectors onto the ends of the wire.

Now we'll make the wire that will run from the light switch to the fog light. Cut a piece of wire about 15 feet in length. It has to run from the light switch, down the dash, along the floor, and up into the trunk, to the tail light. Double check my measurement here.

Go to one end of the length you just cut and cut off about 5 inches. We're going to solder another diode here. Solder it with the stripe side connected to the short piece of wire: the short end will be in the trunk, and we want current to go from the switch to the fog light. Put heat shrink around it when you're done soldering. Strip and crimp a female connector to the short end. Strip and solder the repair wire to the other end. I would double check that this wire works now, before we run it in the car. Using a meter on the ohm setting, put the + lead on the long end and the - lead on the short end. You should have current flowing through.

Great! Now for the fun part... running the wire. 🤖

First open the fuse door. It just pops open.



Then remove the side panel. It just pulls off:



Here is what the panel looks like on the back. Note the position of the tabs. That will make getting it on and off easier.



Now remove the plastic kick panel. It is held in place by 2 T20 torque screws:



This also lets the plastic piece above the pedals loose. If you pull it straight forward, it comes off. Note the tabs on the front, and the white catches attached to the front of the car.

Now remove the dead pedal. It is held in place by one T20 screw and a bunch of tabs:



It was a real pain to get that thing off. With the screw out, it slides up and the 3 tabs on the 'face' disengage, but there are also 2 tabs that hold the pedal to the trim along the side of the car. You can see them in that pic. Just go slow, and don't try this when the plastic is cold and brittle I guess. For reference, here is what's under the dead pedal:



Now remove the light switch. Push in on the dial, and turn it clockwise. It should stop right before the first normal position. Then it just slides out.



There is a tab on each side of the connector. Push them in and it comes right off.

Now we'll start running the wire.

Start feeding the diode-end of the wire down the dash, and grab it at the bottom.



A word of caution here. The wire is going past the power center of the car. I would put a piece of tape over the female connector: don't want it to short anything out 🤖

Pull the wire through so that just a little is left at the switch opening. But be careful not to pull it all the way through 🤖

Now start tucking the wire underneath the trim that runs along the side of the car. I found that if I lifted up slightly on the edge, the wire would slip right in 😊



I just ran mine under the seatbelt anchor.

Keep going along till you get to the back seat. Fold the seat bottom forward. You'll see this plastic screw. Mine came off very easily with no tools, it just unscrews.



And then the trim pulls up:



That piece is held in place by spring clamps that grip a metal strip. But at the top, it is held in place by something that doesn't just pull off 😬 So I just flexed the trim piece. Take care not to bend it though...

Now attach the end of the wire to the coat hanger or fish tape. You're going to want to pull this off the end of the hanger when you get it into the trunk, so don't use too much.



Take the hanger and push the wire all the way to the back of the car. Open the CD changer door, and the lamp access door. It will be above the tail light. It was kinda a pain to grab the wire, but I was able to. A helper might be good here to operate the hanger while you try to grab the wire. 😊 I suppose you could just try to push the wire back without using the hanger or fish tape... but I think it made life easier.

Now that you've got a wire run from the switch to the tail light, we'll install the bulb 😊

Open the CD changer door, and then the tail light access door. This is what you'll see (except there won't be a jumper... yet)

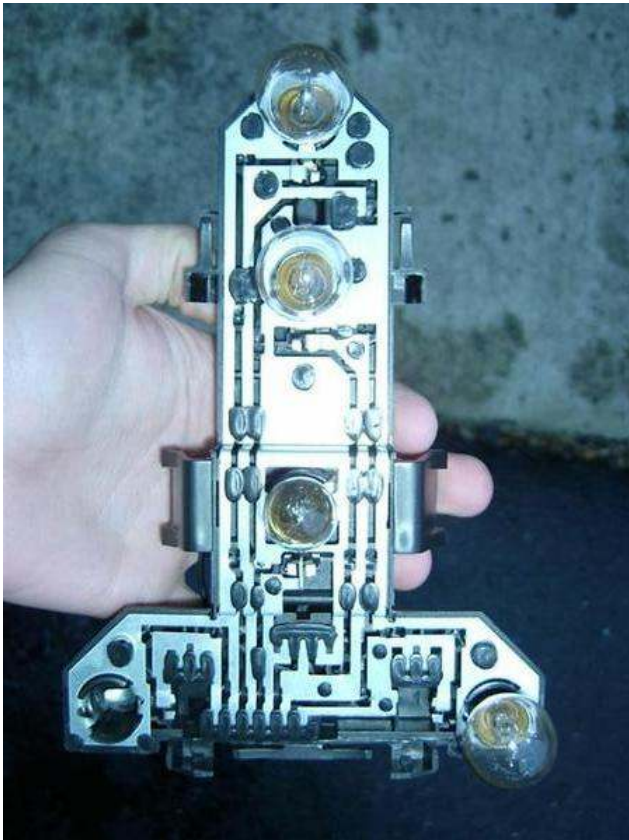


Disconnect the harness from the bottom of the socket assembly, as shown in the picture. It just pulls off.

Do you see the red pieces of plastic? They hold the black tabs that hold the socket assembly in place. Squeeze the tabs in, and it will come loose. Now for the hard part: getting the sockets out of the car.

I found it's easiest to get the top of the sockets out first, then the bottom. Push up on the trunk liner, and slip the top of the sockets past. Then wiggle the whole thing out. This is not a very well designed area... far too difficult to work on.

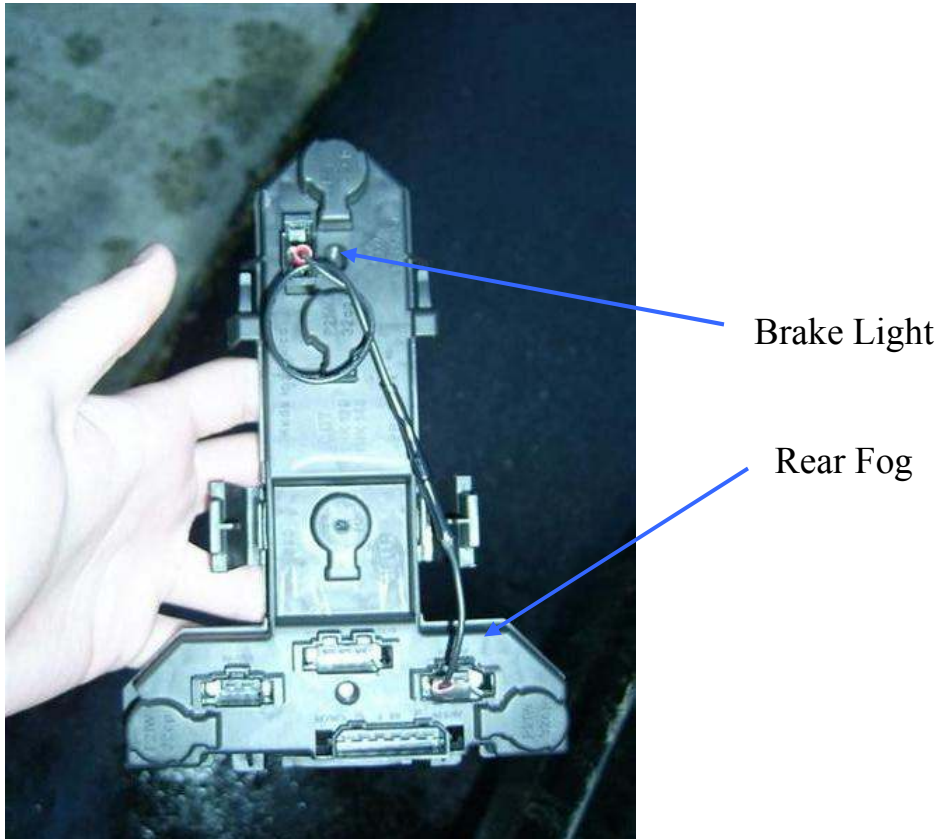
You should now have this:



The top bulb is the normal brake light. Next is the turn signal, then the marker light. The one on the right is the reverse light. The empty socket is for the rear fog. Install a bulb there. This is mirrored on the passenger side of the car.

Now, Newer cars have a tab over where the bulb goes into the rear fog reflector. You can just stress it off with a pair of pliers. It will leave a little nub on each side, just bend those off with the pliers too. Take care not to loose any of the pieces down into the hole! 😊

We'll go ahead and install the jumper while the sockets are out of the car... more room to work. What we are doing is connecting the pin for the brake light to the pin for the rear fog. Now, remember which way you soldered the diode. You want the side with the stripe connected to the fog terminal.



Now put the sockets back in the car. Reverse of before...

VW was really nice when they designed the socket holder: the rear fog connector has 2 pins. Makes our lives easier... plug the wire from the cabin into the other pin. Reconnect the harness to.



Woot! Driver's side is done! The passenger side is easier. Open the access door on the passenger side. Squeeze the clips again. The sockets are easier to get out on this side. Install a bulb in the empty socket. Run the jumper (the one without a diode.. the only one left hopefully) from the brake light pin to the rear fog pin. NOTE, this will be opposite of the way it was on the drivers side.



Now test the brake lights. You should see this:



If not, make sure that you have the jumper on the driver's side the right way around...

If you don't have a fuse in position 36 (fog lights) install the 15A fuse there now.

Now let's wire the switch. The pin on the bottom, closest to the door, is what is activated when you pull the switch out 2 clicks. It is labeled NSL. (FYI, the pin next to it, NL is what the first click is connected to) Install the repair wire here. I have an early car, so I just spliced into the wire that was already there.



Now, with the ignition on, and the switch out 2 clicks, you should get these:



And if you have an early car, you also get one of these 😊



I guess it makes up for not having an Immobilizer 🤔

Now that everything is working, put all the panels back in place. You're done! 😊

-Jason