

**ECS TUNING**

Volkswagen MK6  
Golf and Jetta Sportwagen  
Fog Light Conversion Kit Installation



Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

## INTRODUCTION

### The Project:

Today we're going to install a fog light conversion kit in a Volkswagen MK6 Golf. This is a fun project, because it'll really dress up the front of your car, and fog lights are great to have year around. What's even better is that it's a fairly simple project. You'll be able to perform the complete installation from the top side of the car, and it will only require a couple hours of your time. Follow along with these instructions and you'll be done in no time! Thank you for looking to ECS Tuning for all your performance and repair needs. We appreciate your business!

### ECS Difficulty Gauge



**1 - Easy**

Pro - 4

2 - Moderate

Advanced - 3

### The Kits:

Our ECS Tuning MK6 Golf/Jetta Sportwagen conversion kits come with everything you need for a smooth, trouble free installation. All kits come with genuine VW fog light grilles, then we provide several options so you can choose either genuine VW or aftermarket fog lamps, yellow or white bulbs, or with or without a European headlight switch. The European headlight switch is required to make these work, however we've left it as an option in case you already have the switch. The kits also come with the rear fog light trigger wire, which will enable the rear fog light option if you decide to add it down the road.

#### Kits with genuine VW fog lamps

White Bulbs w/headlight switch .....	<a href="#">ES#2838997</a>
White Bulbs w/o headlight switch .....	<a href="#">ES#2569860</a>

#### Kits with aftermarket fog lamps

White Bulbs w/headlight switch .....	<a href="#">ES#2838993</a>
White Bulbs w/o headlight switch .....	<a href="#">ES#1905668</a>
Yellow Bulbs w/headlight switch .....	<a href="#">ES#2992024</a>
Yellow Bulbs w/o headlight switch .....	<a href="#">ES#2952241</a>

## TABLE OF CONTENTS

Kit contents.....	<a href="#">pg.4</a>
Required tools and equipment .....	<a href="#">pg.5</a>
Shop supplies and materials .....	<a href="#">pg.6</a>
Installation and safety notes .....	<a href="#">pg.7</a>
Mounting the fog lamps.....	<a href="#">pg.8</a>
Wiring connections - under the hood .....	<a href="#">pg.17</a>
Wiring connections - inside the car .....	<a href="#">pg.26</a>
Schwaben tools.....	<a href="#">pg.37</a>

### Symbols:

The following symbols may be used throughout these instructions indicating special attention:



**FORK IN THE ROAD:** When there are different options within any given kit, we will direct you to the proper page and step to continue.



**YIELD:** Pause for a moment to double check component installation before you continue. Ignoring this can cost you time later during the installation.



**CAUTION:** Pay close attention to these warnings and instructions. Difficult installation, personal injury or component damage may occur if ignored.



**STOP:** The upcoming steps require specific preparation and/or assistance in the interest of safety. Please read ahead in the instructions and prepare before continuing.

## KIT CONTENTS



Genuine VW Fog Lamp Grilles



European Headlight Switch  
(Optional)



Left and Right Fog Lamps



Installation Hardware



Fog Light Wiring Harness



Wire Ties



Fog Light Bulbs (White or  
Yellow)



Rear Fog Light Trigger Wire

## REQUIRED TOOLS

Note: The tools required for each step will be listed by the step number throughout these instructions.

### Standard Automotive Tools

### Required For This Install

### Available On Our Website

- Protecta-Sockets (for lug nuts).....[ES#2221243](#)
- 3/8" Drive Ratchet.....[ES#2765902](#)
- 3/8" Drive Torque Wrench.....[ES#2221245](#)
- 3/8" Drive Deep and Shallow Sockets.....[ES#2763772](#)
- 3/8" Drive Extensions.....[ES#2804822](#)
- Hydraulic Floor Jack.....[ES#240941](#)
- **Torx Drivers**.....[ES#11417](#)
- 1/2" Drive Deep and Shallow Sockets.....[ES#2839106](#)
- 1/2" Drive Ratchet
- 1/2" Drive Extensions
- 1/2" Drive Torque Wrench.....[ES#2221244](#)
- 1/2" Drive Breaker Bar.....[ES#2776653](#)
- **Hook and Pick Tool Set**.....[ES#2778980](#)

- **1/4" Drive Ratchet**.....[ES#2823235](#)
- **1/4" Drive Deep and Shallow Sockets**.....[ES#2823235](#)
- **1/4" Drive Extensions**.....[ES#2823235](#)
- Plier and Cutter Set.....[ES#2804496](#)
- **Flat and Phillips Screwdriver Set**.....[ES#2225921](#)
- Ball Pein Hammers
- Pry Bar Set.....[ES#1899378](#)
- Punch and Chisel Set
- Hex Bit (Allen) Wrenches and Sockets.....[ES#11420](#)
- Thread Repair Tools.....[ES#1306824](#)
- **Open/Boxed End Wrench Set**.....[ES#2765907](#)

### Specialty Tools

**Specialty Tool Requirements:** The following specialty tools are not considered part of a standard tool set and are required specifically for the installation of the MK6 Fog Light Conversion Kit. Tools with a hyperlink are available on our website.

- **Non-Marring Trim Tools**.....[ES#517779](#)

## SHOP SUPPLIES AND MATERIALS

**Standard Shop Supply Recommendations:** We recommend that you have a standard inventory of automotive shop supplies before beginning this or any automotive repair procedure. The following list outlines the basic shop supplies that we like to keep on hand. Shop supplies with a hyperlink are available on our website.

- Hand Cleaner/Degreaser - [Click Here](#)
- Pig Mats - for protecting your garage floor and work area from spills and stains - [Click Here](#)
- Spray detailer - for rapid cleaning of anything that comes into contact with your paint such as brake fluid - [Click Here](#)
- Micro Fiber Towels - for cleaning the paint on your car - [Click Here](#)
- Latex Gloves - for the extra oily and dirty jobs - [Click Here](#)
- Medium and High Strength Loctite Thread lock compound - to prevent bolts from backing out - [Click Here](#)
- Anti-Seize Compound - to prevent seizing, galling, and corrosion of fasteners - [Click Here](#)
- Aerosol Brake/Parts Cleaner - for cleaning and degreasing parts
- Shop Rags - used for wiping hands, tools, and parts
- Penetrating oil - for helping to free rusted or stuck bolts and nuts
- Mechanics wire - for securing components out of the way
- Silicone spray lube - for rubber components such as exhaust hangers
- Paint Marker - for marking installation positions or bolts during a torquing sequence
- Plastic Wire Ties/Zip Ties - for routing and securing wiring harnesses or vacuum hoses
- Electrical tape - for wrapping wiring harnesses or temporary securing of small components



## INSTALLATION NOTES

- **RH** refers to the *passenger side* of the vehicle.
- **LH** refers to the *driver side* of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process **BEFORE** you begin.

## GENERAL PREPARATION AND SAFETY INFORMATION

ECS Tuning cares about your health and safety. Please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- **ALWAYS** wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- If using an automotive lift, be sure and utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- When lifting a vehicle using a jack, always utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear. **ALWAYS** support the vehicle with jack stands.
- **ALWAYS** read and follow all safety information and warnings for the equipment you are using.



**Never get underneath a vehicle that is supported only by a jack. Always make sure that the vehicle is securely supported on jack stands.**

## MOUNTING THE FOG LAMPS

### Step 1: Non-Marring Trim Tool

We're going to start by removing the original left and right side grilles. Slip a trim tool in between the side and center grilles and gently pry the upper part of the side grille outward until the clips release and it pulls away from the bumper cover.



### Step 2: Non-Marring Trim Tool

Slide the trim tool downward and release the clips on the front "nose" of the grille (arrow), then pivot the grille outward and pull it towards you to remove it.





## MOUNTING THE FOG LAMPS

### Step 3:

Starting on one side, gently pull out the top of the center grille until the upper clips release from the bumper cover.



### Step 4:

Continue to release the clips until the top of the center grille is pulled away from the bumper cover. Do not attempt to release the clips on the lower part of the center grille. These are too difficult to release without removing the bumper cover and they may break if you try to pull them out.

#### NOTE

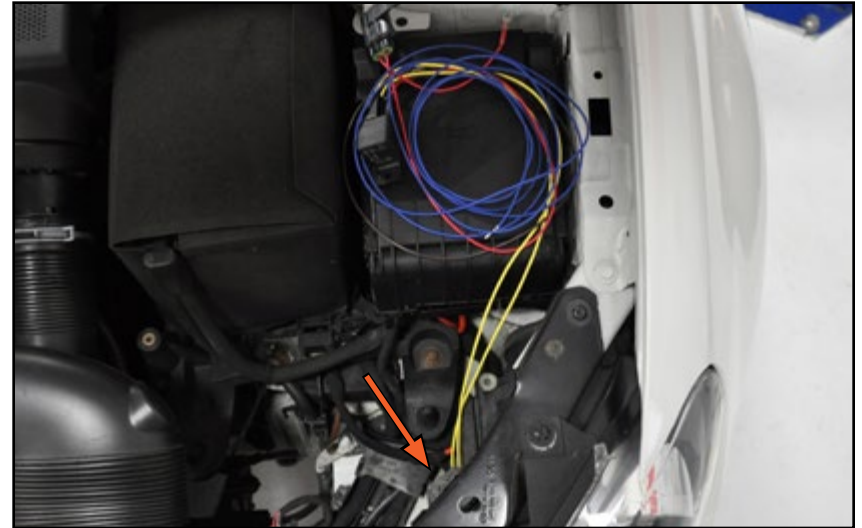
It is not necessary to completely remove the grille. With the top pulled out we will have just enough room to gain access to run the fog light wires.



## MOUNTING THE FOG LAMPS

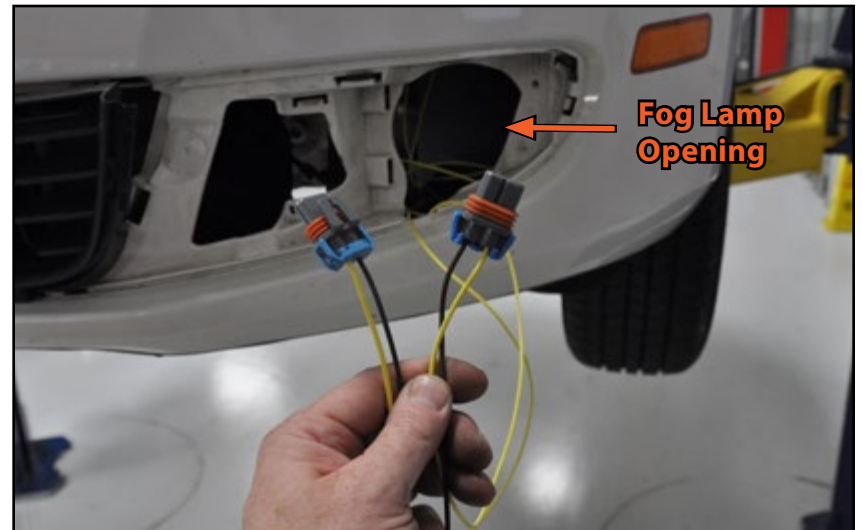
### Step 5:

Unpack the wiring harness and place it on top of the underhood fuse panel on the LH side of the engine compartment. Separate the two fog light connectors and wires (yellow and brown) from the harness. Route the wires down through the large opening just below the LH headlamp.



### Step 6:

You will now be able to access the wires through the fog lamp opening in the bumper cover on the LH side. As shown in the picture, you will have two connectors with identical colored wires. The yellow wires are the power to each fog lamp and are different lengths, the longer one is for the RH side. The brown wires are the ground for each fog lamp and are both short wires with an eyelet on the end.



## MOUNTING THE FOG LAMPS

### Step 7:

Run the long yellow wire through to the RH side, following along the lower edge of the radiator core support, between the bumper cover and the radiator. Pull the connector and the wire out through the fog lamp opening in the bumper cover on the RH side.



### Step 8:

On the RH side, just next to the fog lamp opening, look behind the bumper cover and you will see the horn bracket. There is a hole on one side of this bracket. Clean away any dirt from around the hole, then sand the bracket to expose clean metal.



## MOUNTING THE FOG LAMPS

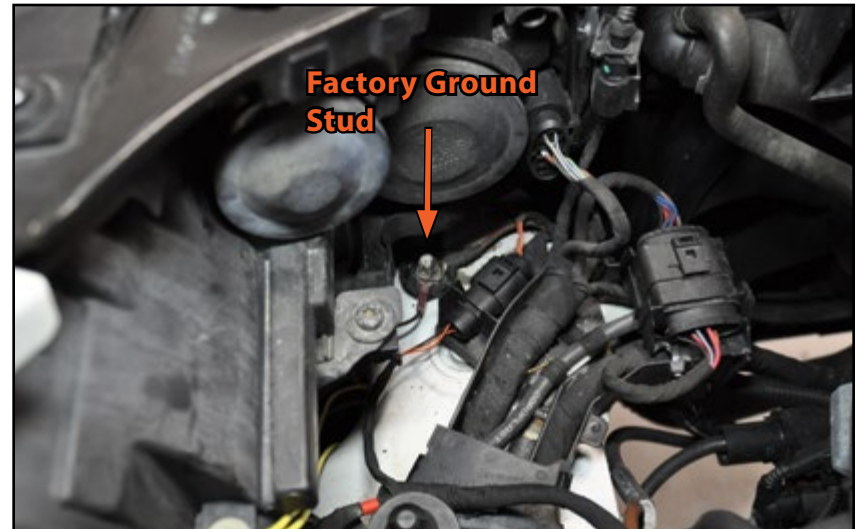
### Step 9: 10mm Socket, Ratchet, 10mm Wrench

Using the bolt, washer, and nut included with the kit, attach the eyelet of the brown ground wire on the RH side to the hole in the horn bracket. The washer should be located against the head of the bolt, the eyelet between the washer and bracket, and the nut on the bottom. Tighten the bolt securely.



### Step 10: 10mm Socket, Ratchet

On the LH side, look directly behind the headlight and you will see a factory located ground stud, with wires already connected to it, held on by a cap nut. Route the brown ground wire for the LH side back up through the hole, remove the cap nut, place the ground wire eyelet on the ground stud, then reinstall and securely tighten the cap nut.





## MOUNTING THE FOG LAMPS

### Step 11:

Unpack the new fog lamps and place them lens down on a soft towel. There are two features to notice here:

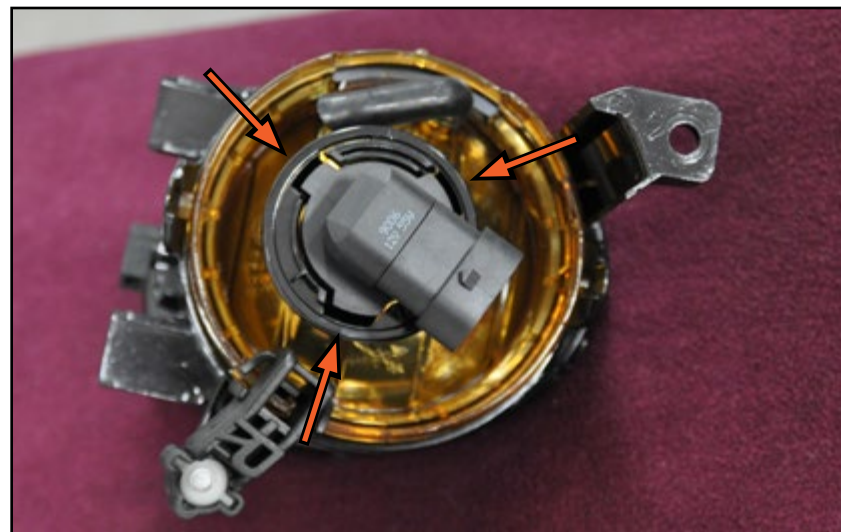
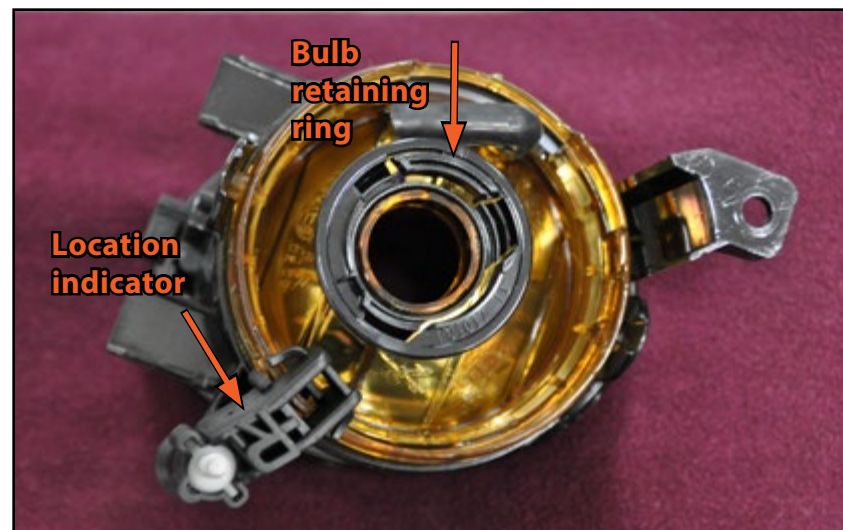
1. The cut-outs in the bulb retaining ring that match the tangs on the bulbs.
2. Each lamp housing has an "R" or an "L" on it to indicate its installed location (these will only fit on their respective sides anyhow, but this way you can grab the correct one the first time).

### Step 12:

Place a bulb into the back of each fog lamp so all three tangs are lined up with the cut-outs in the bulb retaining ring.

#### CAUTION

Be careful not to touch the surface of the bulb. Oils from your skin will be deposited on the bulb surface and shorten its lifespan.



## MOUNTING THE FOG LAMPS

### Step 13:

Push in slightly on the bulb, then rotate it clockwise until it stops. Make sure all three tangs on the bulb are properly engaged underneath the bulb retaining ring.



### Step 14:

Plug the connector into the back of the fog lamp bulb.





## MOUNTING THE FOG LAMPS

### Step 15:

Slide the two fog lamp “fingers” into the corresponding slots in the bumper cover.



### Step 16: T25 Torx

Install a self tapping screw (included with the kit) through the ear of the fog lamp and into the bumper cover.

Take a few minutes here to inspect your work. Make sure that none of the wires are pinched. Secure all excess wire out of the way with the cable ties included with the kit. Once the wiring is secured, snap the center grille back into place.



## MOUNTING THE FOG LAMPS

### Step 17:

Hook the end of the new fog light grilles into the bumper cover, then push them in place until all of the clips are engaged.



### Step 18:

Your new fog lights are in place! Now we'll move on to the electrical connections.

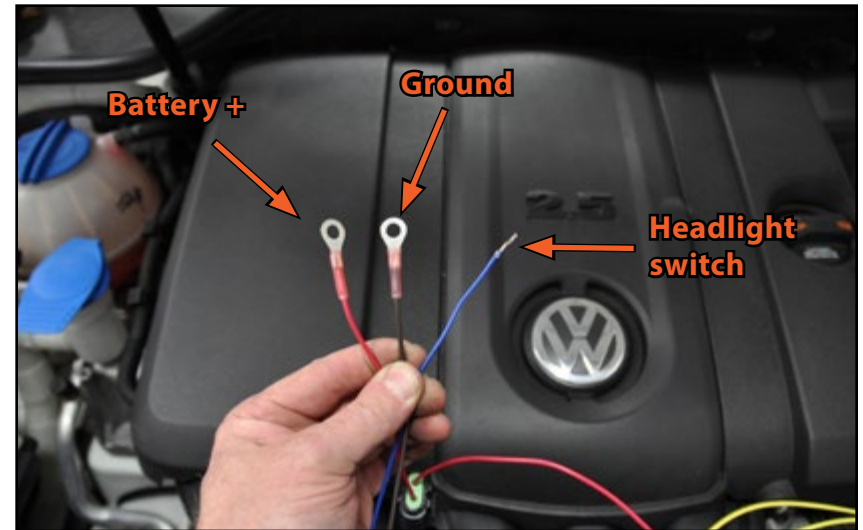


## WIRING CONNECTIONS - UNDER THE HOOD

### Step 1:

Now let's look at the connections on the harness. There will be three wires to connect:

1. Red wire with eyelet .....Battery 12V+ connection
2. Brown wire with eyelet.....Ground connection
3. Blue wire with female terminal .....Headlight switch connection



### Step 2:

We'll have to remove a couple things to make these connections, starting with the fuse panel cover.

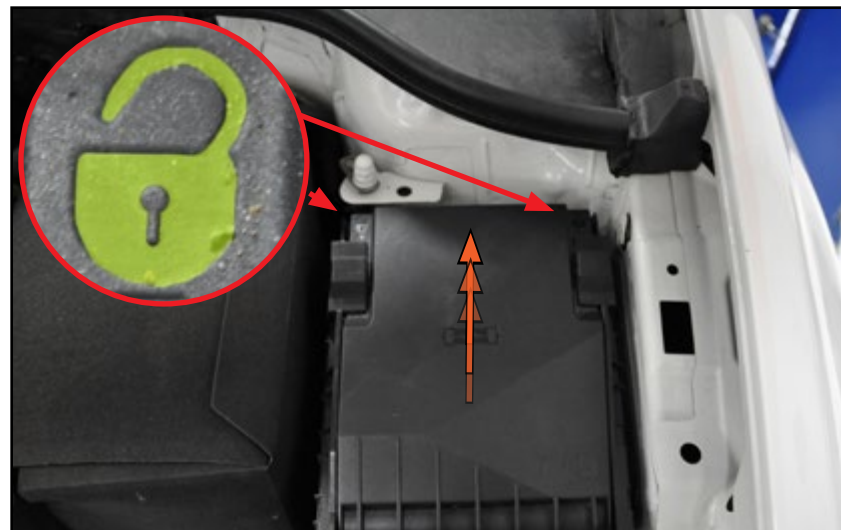
The cover will normally be in the "locked" position, indicated by the padlock symbols molded into the cover. Also note the arrow just above the padlock.



## WIRING CONNECTIONS - UNDER THE HOOD

### Step 3:

Slide the whole fuse panel cover in the direction of the arrow until it is completely “unlocked”, indicated by the padlocks molded into the cover. Now, simply lift the cover off.



### Step 4:

10mm Socket, Ratchet

Fold open the top of the battery insulator, and disconnect both battery terminals. Be sure and disconnect the negative terminal first.

### CAUTION

To reduce the risk of fire, explosion, or personal injury, **ALWAYS** disconnect the battery by removing the negative battery terminal first.



## WIRING CONNECTIONS - UNDER THE HOOD

### Step 5:

Lift off the battery insulator.



### Step 6: 13mm Socket, Ratchet

Remove the battery hold down, then remove the battery.

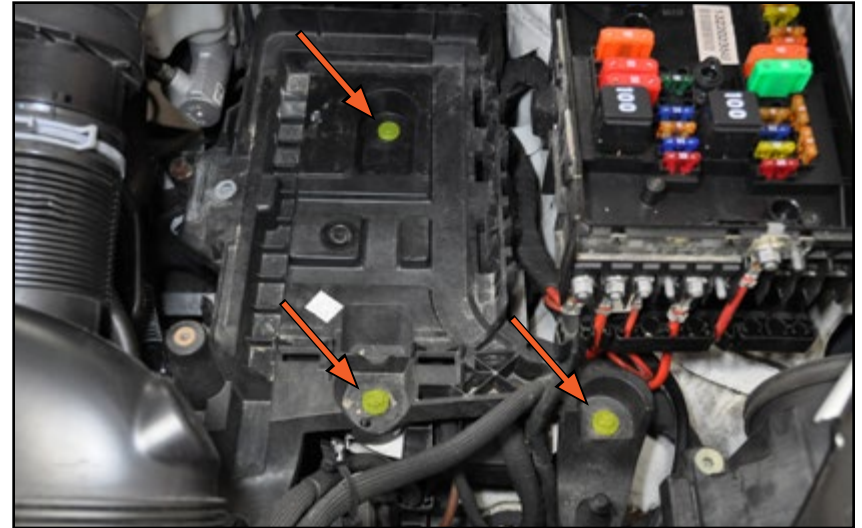




## WIRING CONNECTIONS - UNDER THE HOOD

### Step 7: 10mm Socket, Ratchet

Remove the three bolts and remove the battery tray, rotating it to guide it underneath the cables at the corner of the fuse panel.



### Step 8:

Now, with the battery tray removed, follow the main wiring harness and locate where it passes through the firewall. You will be able to feel a flexible rubber boot that seals the harness to the firewall. We will be routing the blue wire through this boot.

#### TECH TIP

We strongly recommend reading steps 9 through 18 before you continue. This will familiarize you with the harness routing and prevent mistakes. Pay particular attention to the final mounting locations of the relay and wiring so you do not finish your connections and discover a wire that is misrouted around other components.

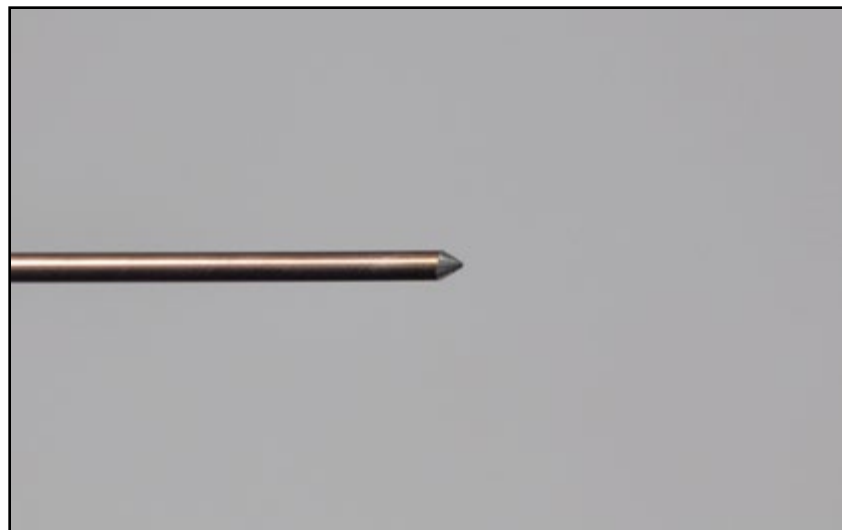




## WIRING CONNECTIONS - UNDER THE HOOD

### Step 9:

Sharpen the end of a coat hanger or welding rod to a point, this will be used to pierce the rubber boot and pull the wire through.



### Step 10:

Tape the end of the blue wire to your piercing tool.



## WIRING CONNECTIONS - UNDER THE HOOD

### Step 11:

Pierce the rubber boot at the firewall and push the tool through until the wire is pushed into the car.

#### CAUTION

The rubber boot will pierce very easily and the wire will push through with very little effort. If you encounter resistance, you may be piercing through the harness on the inside of the vehicle. If necessary, work back and forth between the inside and outside of the vehicle to make sure that you do not damage any other harnesses while routing this wire.

### Step 12:

From the inside, pull the wire through to remove most of the slack from under the hood. Leave the wire taped onto the piercing tool, we will be using it again to pull the wire up through the dash.



## WIRING CONNECTIONS - UNDER THE HOOD

### Step 13: Flat Blade Screwdriver

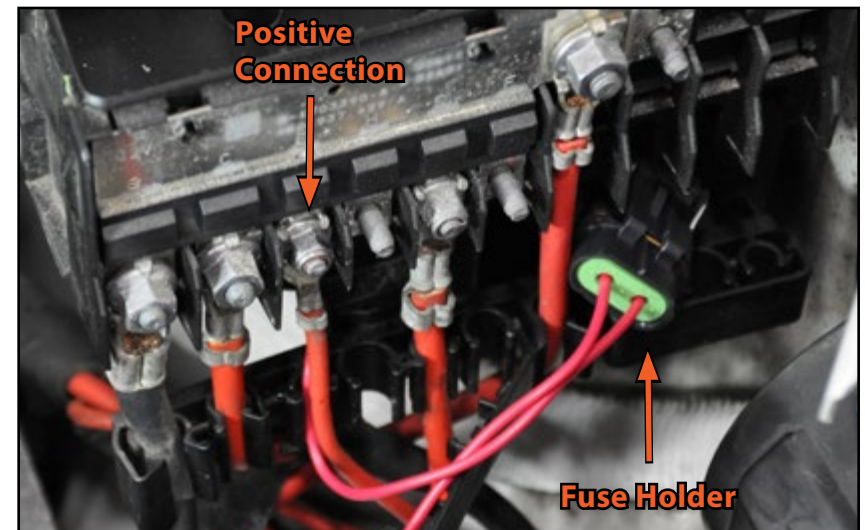
Using a screwdriver, gently pry open the wire retainer on the side of the fuse panel.



### Step 14: 8mm Socket, Ratchet

Remove the nut and the positive wire connection on the side of the fuse panel (arrow), slide the eyelet of the red wire over the stud, and reinstall the positive wire connection and nut.

You will be able to tuck the fuse holder off to the side, then you can snap the wire retainer closed with the positive wires held underneath.



## WIRING CONNECTIONS - UNDER THE HOOD

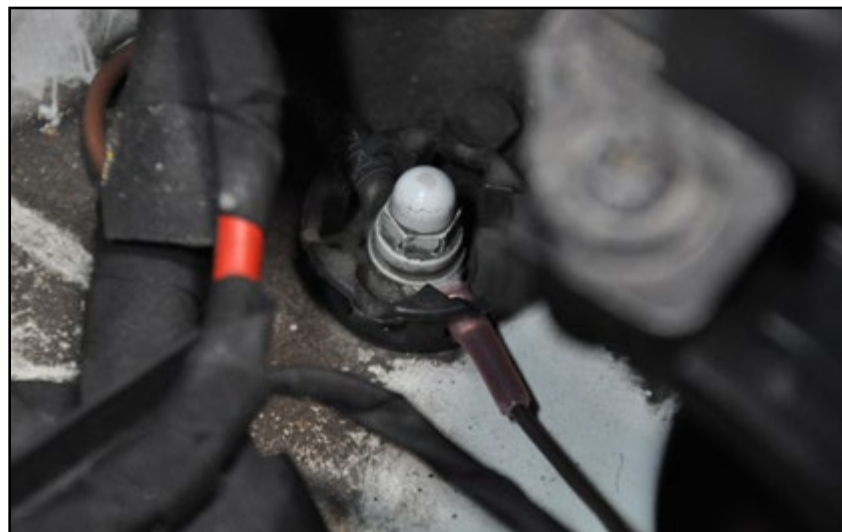
### Step 15:

Locate the factory ground stud, just forward and below the fuse panel (arrow).



### Step 16:

Remove the nut, slip the eyelet of the brown ground wire over it, then reinstall the nut.





## WIRING CONNECTIONS - UNDER THE HOOD

### Step 17:

Locate the relay in a safe, dry location, then secure it and all excess wire out of the way using the wire ties included with the kit. As you can see here, we have located the relay under the front corner of the fuse panel, and all wiring is neatly secured and routed away from any other components.



### Step 18:

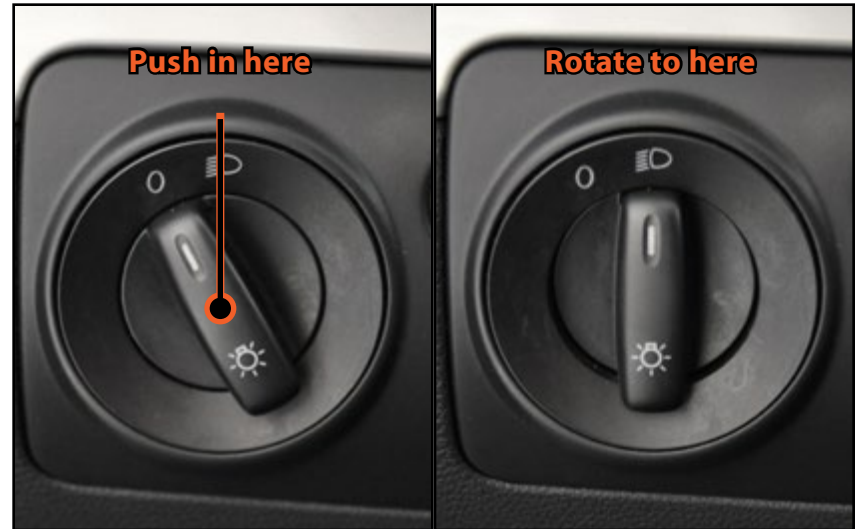
Reinstall the battery tray, battery, insulator, and fuse panel cover. Connect the positive battery terminal but leave the negative terminal disconnected for now.



## WIRING CONNECTIONS - INSIDE THE CAR

### Step 1:

Push in firmly on the center of the headlight knob until it depresses, then rotate the knob to the "headlight on" position. Release pressure on the knob and it should remain in the depressed position. This releases the switch retaining tabs. If it does not stay depressed, then it was not pushed in far enough before rotating it. Turn it back to "off" and do it again.



### Step 2:

Pull the headlight switch straight out of the dash.

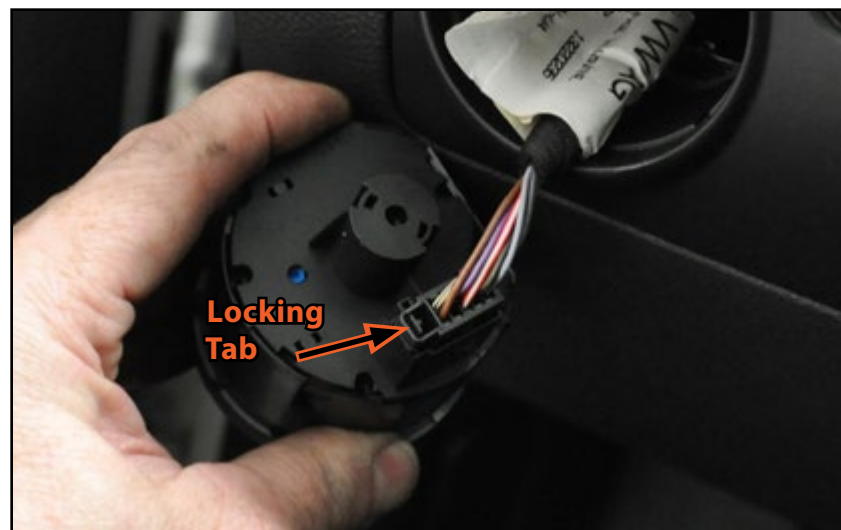




## WIRING CONNECTIONS - INSIDE THE CAR

### Step 3:

Disconnect the headlight switch by depressing the locking tab on the connector and unplugging it.



### Step 4:

Carefully guide the piercing tool up through the hole for the headlight switch.

#### TECH TIP

Removing the end cover on the dash may help you guide the coat hanger through.



## WIRING CONNECTIONS - INSIDE THE CAR

### Step 5:

Continue to guide the piercing tool through until you have pulled the blue wire out the opening for the headlight switch. You can now untape the wire and discard the piercing tool.



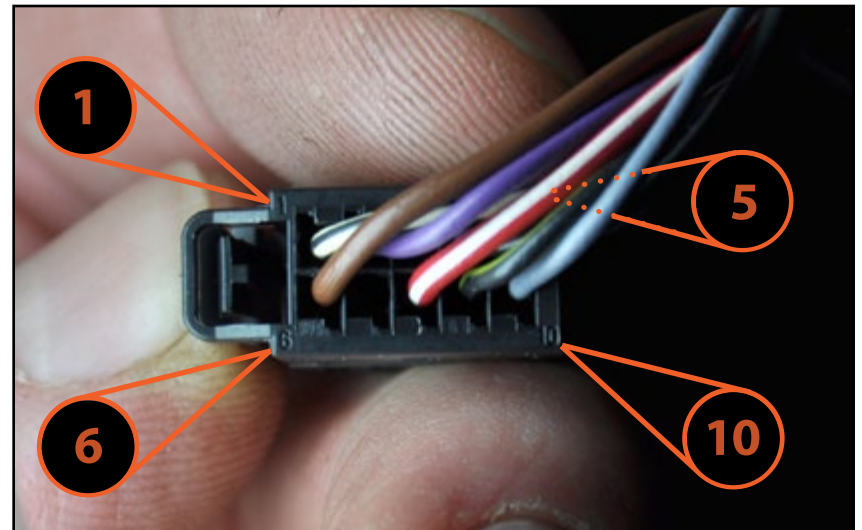
### Step 6:

Closely inspect the back of the headlight switch connector. It is a ten wire connector with each terminal/wire assigned a number one through ten. You will see that each of the four corners are marked with the corner wire numbers, which will allow you to identify the wire locations in between.

The in between locations are numbered in order, so, for example the wire locations in this connector as viewed in this picture are:

Top row: 1,2,3,4,5

Bottom Row: 6,7,8,9,10



## WIRING CONNECTIONS - INSIDE THE CAR

### Step 7:

We are going to install two wires into the headlight switch connector. The blue wire, of course, which will signal the fog light relay, and also the yellow rear fog light trigger wire, so if in the future you decide to install rear lamps with a rear fog light, the function will already be there.

The blue wire will be installed in location 5 and the yellow wire in location 7, as shown in the diagram on the right.

#### NOTE

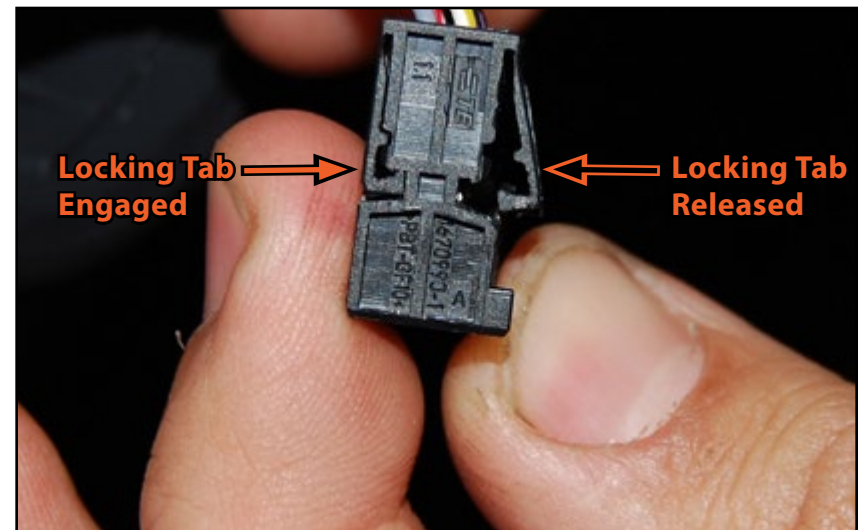
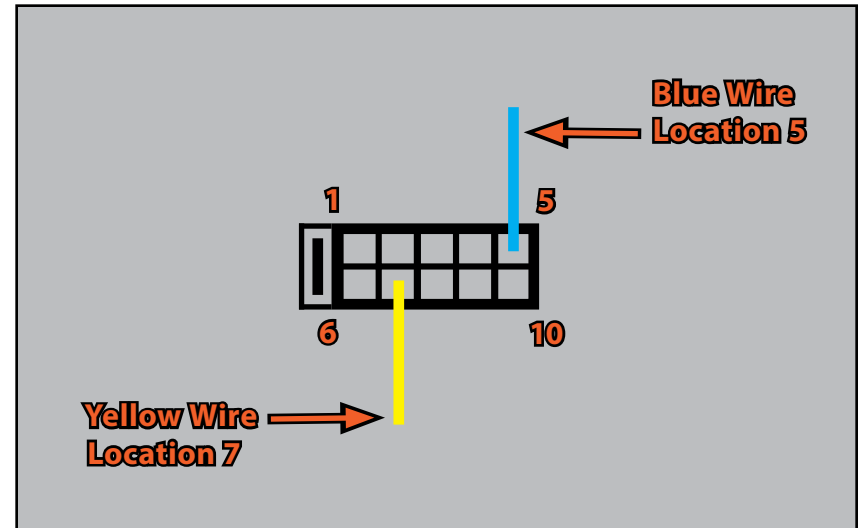
Installing the yellow wire is not necessary for the front fog lights to work. Continue to follow these steps in order and if you choose not to install the yellow wire, we will direct you to "skip" these steps.

### Step 8: Small Pick Tool

Turn the headlight connector sideways and release the terminal locking tabs by prying them out with a small pick. Here we are showing one engaged and one released for descriptive purposes, but you will need to release them both because you will be installing a wire on each side.



If you are only installing the blue wire for the front fog lamp relay, only release the terminal locking tab on the side of the connector that contains wire location 5.



## WIRING CONNECTIONS - INSIDE THE CAR

### Step 9:

Install the wires into the headlight switch connector by first lining them up and making sure the flat side of the terminals are facing towards the inside of the connector.

#### *Remember:*

The blue wire is installed in location number 5.

The yellow wire is installed in location number 7.

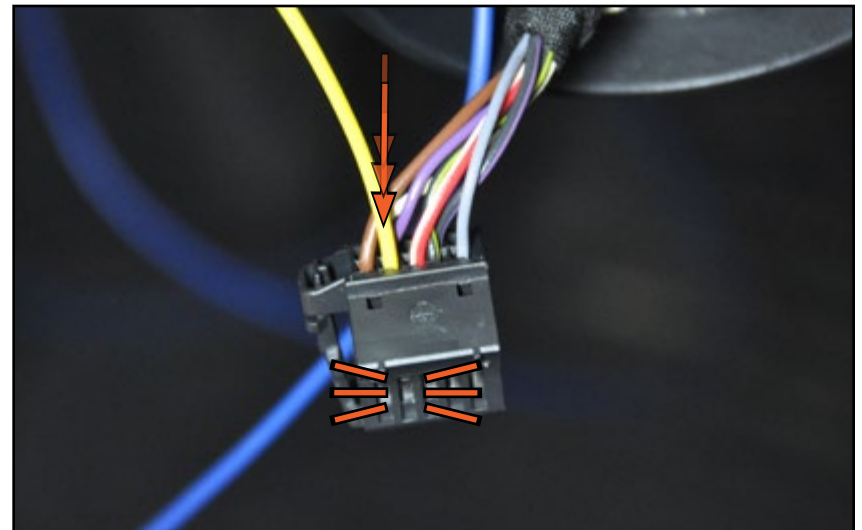
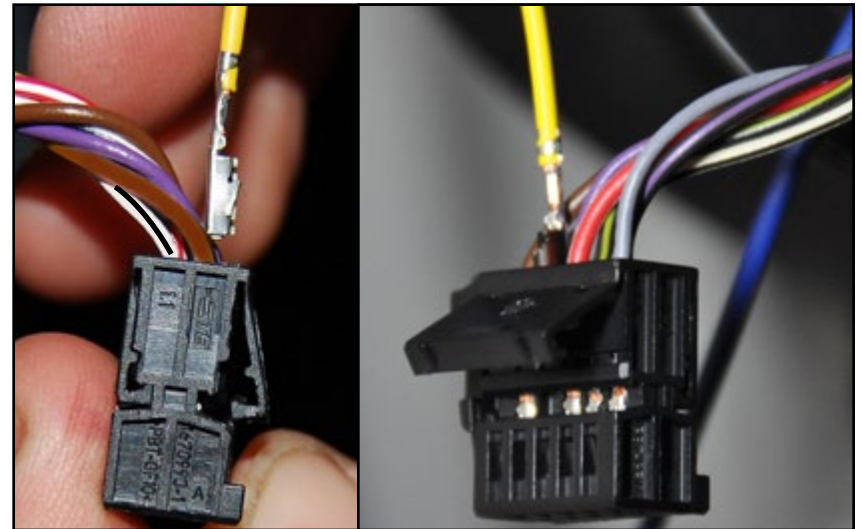


The yellow wire is shown here, but if you are installing only the blue wire, install it in location 5.

### Step 10:

Listen carefully, and slide each wire in until you hear a faint “click” that indicates the wire is fully seated.

To double check the wire installation, pull back **gently** on the wire. If it is not fully seated, it will slide right back out.





## WIRING CONNECTIONS - INSIDE THE CAR

### Step 11:

Squeeze the terminal locking tabs back into the connector.

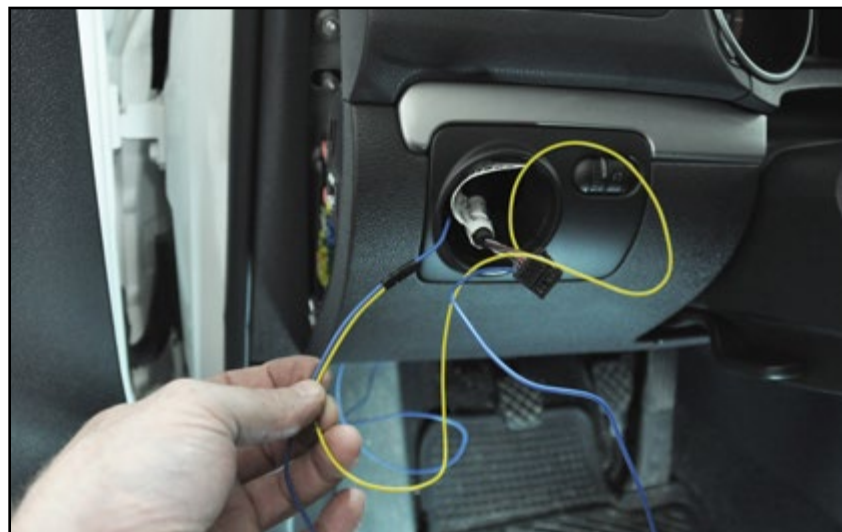
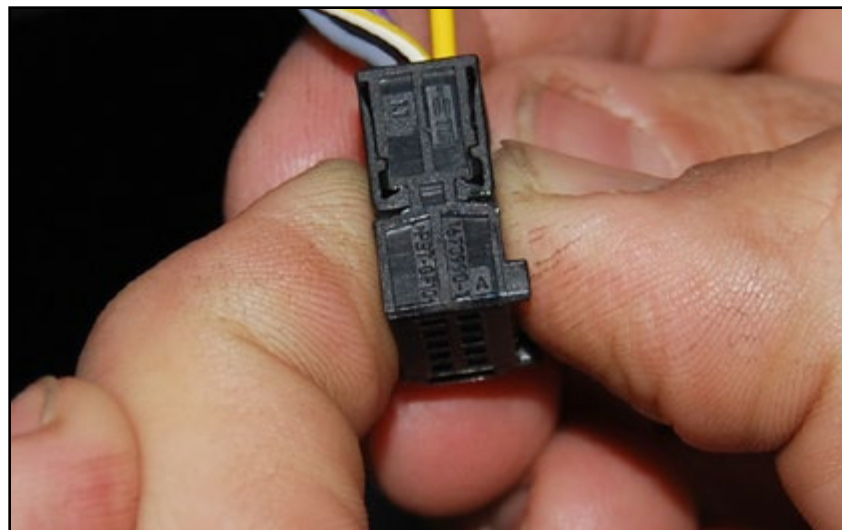


If you are installing only the blue wire for the front for lights, skip to [step 20](#) on Page 35.

If you are installing the yellow wire, continue with the next step.

### Step 12:

Gently pull the excess blue wire up through the opening for the headlight switch, then tape the end of the yellow wire to it near the opening in the dash. Now, gently pull the blue wire back through the dash to the footwell, and you've pulled the yellow wire down where you need it.

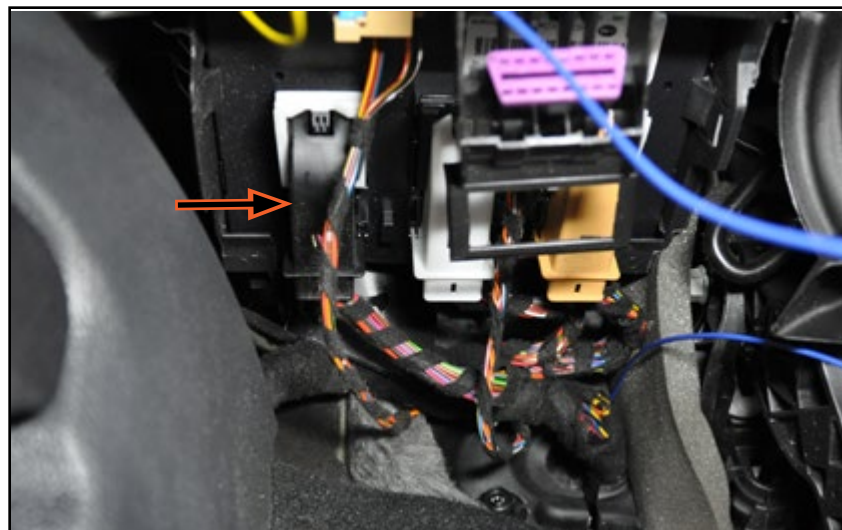




## WIRING CONNECTIONS - INSIDE THE CAR

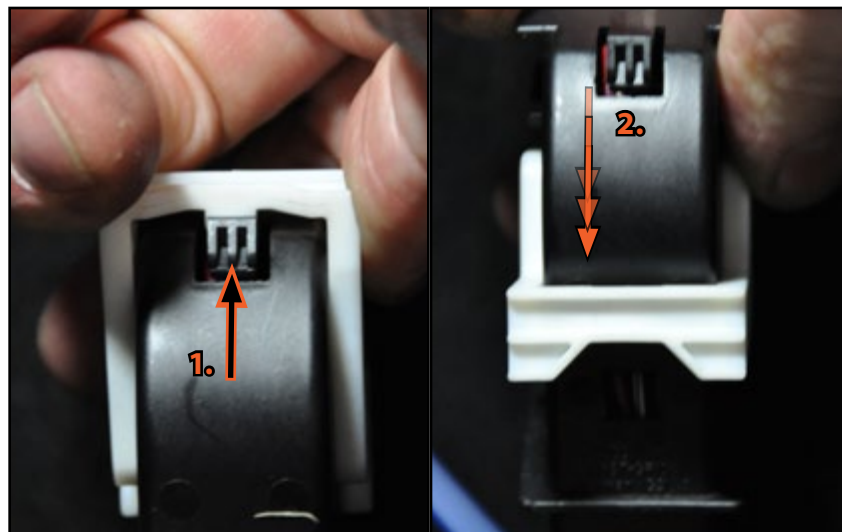
### Step 13:

Looking underneath the dash into the driver's footwell, locate the black connector housing (arrow). There are two separate connectors inside this housing, and you will need to access one of them.



### Step 14:

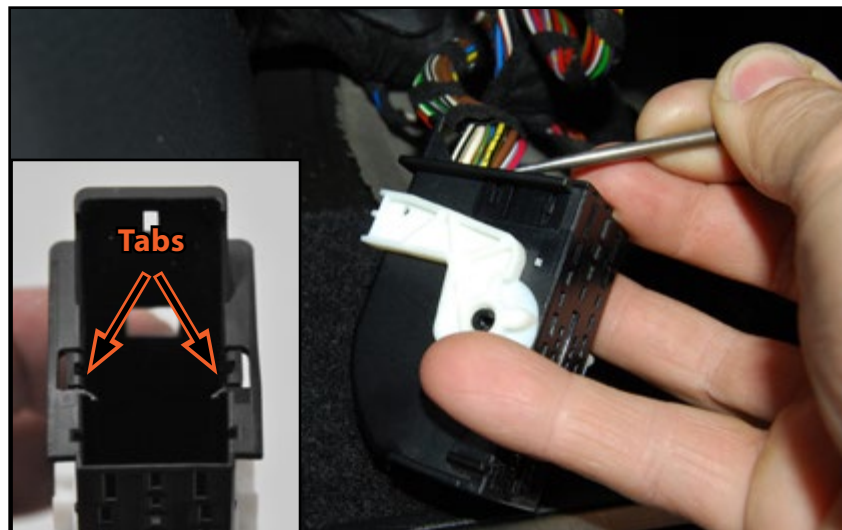
Depress the center tab (you should be able to do this with your finger), then pull the white connector ramp downward. As you pull the connector ramp downward, it will push the connector housing out.



## WIRING CONNECTIONS - INSIDE THE CAR

### Step 15:

Release the two tabs holding the connector housing to the connectors. The inset photo shows a view of the connector housing removed, to give you an idea of tab location.



### Step 16:

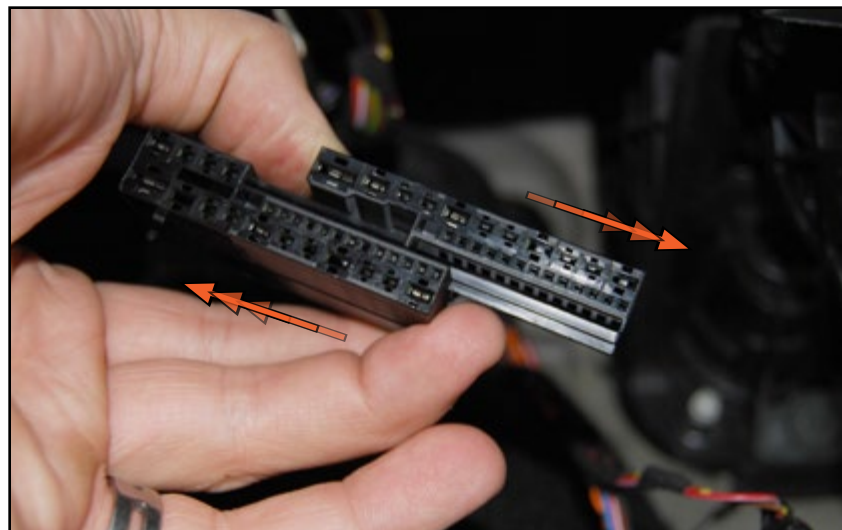
Slide the connector housing off of the connectors.



## WIRING CONNECTIONS - INSIDE THE CAR

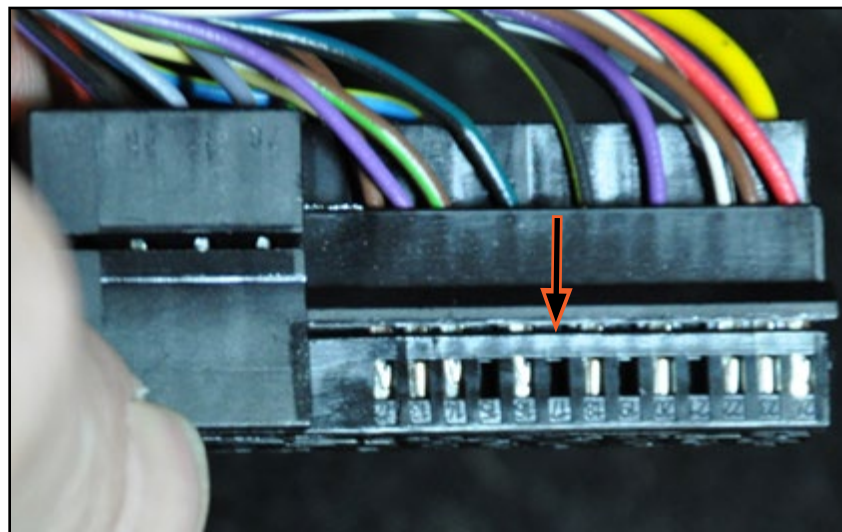
### Step 17:

Now slide the two connectors apart.



### Step 18:

Locate the empty wire location number 17 (only one of the connectors will have number 17) and it will be numbered on the terminal end of the connector.

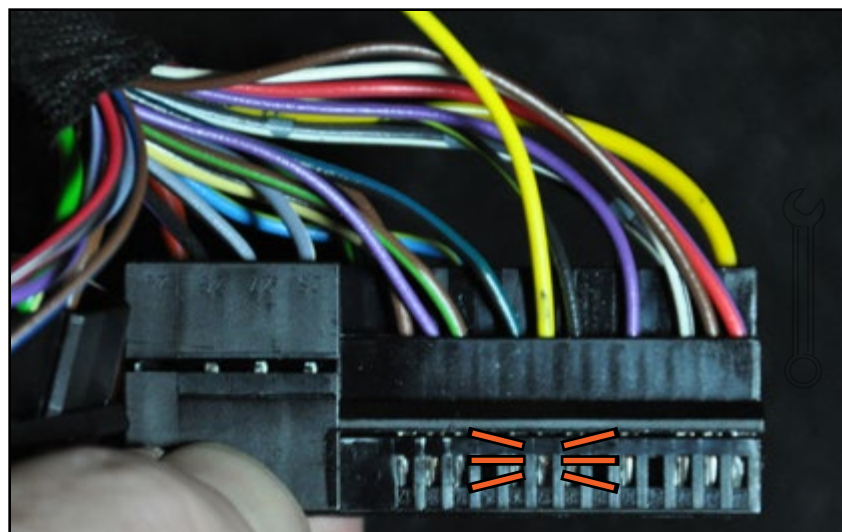


## WIRING CONNECTIONS - INSIDE THE CAR

### Step 19:

Listen carefully and slide the yellow wire into location 17 until you hear a faint “click” indicating that it is fully seated.

Slide the connectors back together, slide the housing over top, and reinstall the housing, making sure it is fully seated and the connector ramp is held in place by the center tab.



### Step 20:

Connect the new headlight switch and make sure all excess wire is pulled through and located in the footwell.





## WIRING CONNECTIONS - INSIDE THE CAR

### Step 21:

Push the new headlight switch into the dash until you hear it “click” in place.

Reinstall the dash side cover if you removed it.

Secure all excess wire using wire ties.

Connect the negative battery terminal.

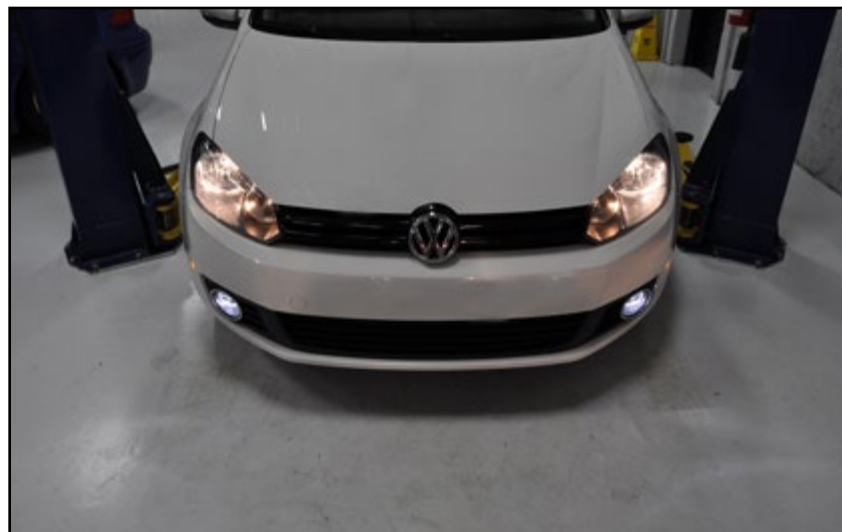


### Step 22:

Your fog light conversion is complete!

#### NOTE

The traction control, steering, and TPMS lights may stay on when you start the engine (this is normal when the battery is disconnected) but they will go out as soon as you begin to drive.





## SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION

At ECS Tuning, we carry a line of high quality Schwaben Tools and Equipment to help you build your ultimate tool collection. Never before has affordability and quality been so closely related. Our entire Schwaben line is subjected to strict in house testing for strength and durability. See what we have to offer and equip your garage without breaking the bank.



Your Fog Light Conversion Kit Installation is complete!



These instructions are provided as a courtesy by ECS Tuning

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

Although this material has been prepared with the intent to provide reliable information, no warranty (express or implied) is made as to its accuracy or completeness. Neither is any liability assumed for loss or damage resulting from reliance on this material. SPECIFICALLY, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS MADE OR TO BE IMPLIED WITH RESPECT TO THIS MATERIAL. In no event will ECS Tuning, Incorporated or its affiliates be liable for any damages, direct or indirect, consequential or compensatory, arising out of the use of this material.