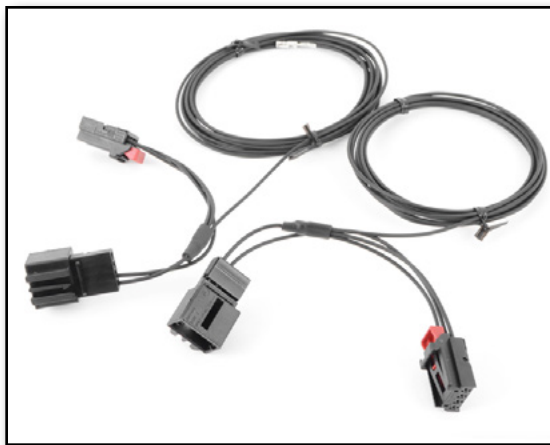




Volkswagen MK7 Golf European LED Tail Light Harness Kit Installation Instructions



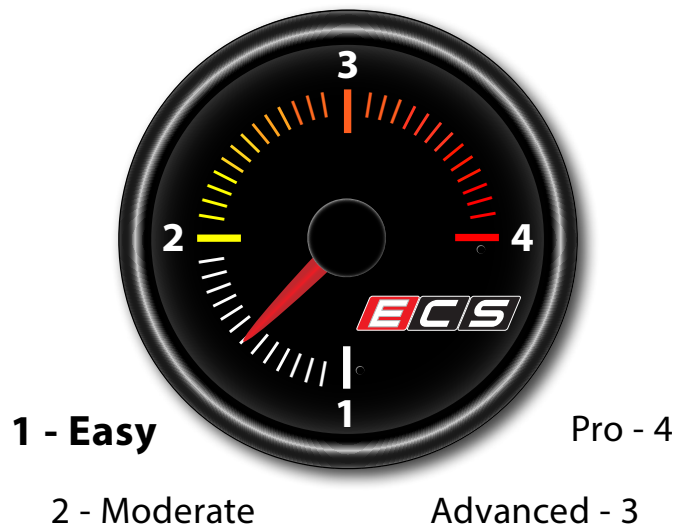
Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times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

INTRODUCTION

The Project:

Red Hot is how we describe the European LED Tail Light Sets for the Volkswagen MK7 Golf. These tail lights will give the car a whole new appearance both day and night, and they also have a built in rear fog light and amber colored turn signals, but you won't be able to take full advantage of these extra features without adding the ECS Tuning European LED Tail Light Harness Kit, and making a few coding changes. So today we're going to show you how to install our European LED Tail Light Harness Kit into a MK7 GTI, then we're going to show you how to make the necessary coding changes so that you can take full advantage of all the features these European LED Tail Light Sets have to offer.

ECS Difficulty Gauge



Our Tail Light Harness is easy to install and only requires a few basic tools, but remember you need to make coding changes so a VCDS scanner will be required later. If you don't have a lot of "wrench time" under your belt, rest assured because we are going to walk you through the installation step by step, and once you're done you'll be able to just sit back and admire your work.

Take your time and enjoy this install, these instructions may seem a little daunting, but you should be able to finish this install in a few hours or less. Read these instructions completely first, and with the project overview under your belt, you'll breeze right through it. Just to make sure you have everything you need, reference the required tool list on [Page 5](#) before you begin. Thank you for looking to ECS Tuning for all your performance and repair needs, we appreciate your business!

TABLE OF CONTENTS

Kit Contents.....	pg.4
Required Tools and Equipment.....	pg.5
Shop Supplies and Materials.....	pg.6
Installation and Safety Information	pg.7
Project Overview	pg.8
Installing the LED Tail Light Harness Kit.....	pg.9
VCDS Coding Changes	pg.32
Schwaben Tools	pg.38

KIT CONTENTS



Inner LED Tail Light Harness (QTY 2)



Outer LED Tail Light Harness (QTY 2)



Rear Fog Wire Trigger Harness (QTY 1)

REQUIRED TOOLS

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

Standard Automotive Tools

- Protecta-Sockets (for lug nuts)..... [ES#2221243](#)
- $\frac{3}{8}$ " Drive Ratchet [ES#2765902](#)
- $\frac{3}{8}$ " Drive Torque Wrench [ES#2221245](#)
- $\frac{3}{8}$ " Drive Deep and Shallow Sockets [ES#2763772](#)
- $\frac{3}{8}$ " Drive Extensions [ES#2804822](#)
- Hydraulic Floor Jack [ES#240941](#)
- **Torx Drivers and Sockets** [ES#11417/8](#)
- $\frac{1}{2}$ " Drive Deep and Shallow Sockets [ES#2839106](#)
- $\frac{1}{2}$ " Drive Ratchet
- $\frac{1}{2}$ " Drive Extensions
- $\frac{1}{2}$ " Drive Torque Wrench [ES#2221244](#)
- $\frac{1}{2}$ " Drive Breaker Bar [ES#2776653](#)
- Bench Mounted Vise
- **Trim Removal Tool Set**..... [ES#517779](#)
- **Hook and Pick Tool Set**..... [ES#2778980](#)

Required For This Install

Available On Our Website

- $\frac{1}{4}$ " Drive Ratchet..... [ES#2823235](#)
- $\frac{1}{4}$ " Drive Deep and Shallow Sockets [ES#2823235](#)
- $\frac{1}{4}$ " Drive Extensions..... [ES#2823235](#)
- Plier and Cutter Set..... [ES#2804496](#)
- **Flat and Phillips Screwdrivers** [ES#2225921](#)
- Jack Stands..... [ES#2763355](#)
- Ball Pein Hammers
- Pry Bar Set..... [ES#1899378](#)
- Electric/Cordless Drill
- Wire Strippers/Crimpers
- Drill Bits
- 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

- **VCDS Scan Tool** [ES#3143002](#)
- **Coat Hanger or ECS Dipstick**

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, and ALWAYS make sure that the vehicle is securely supported on jack stands.

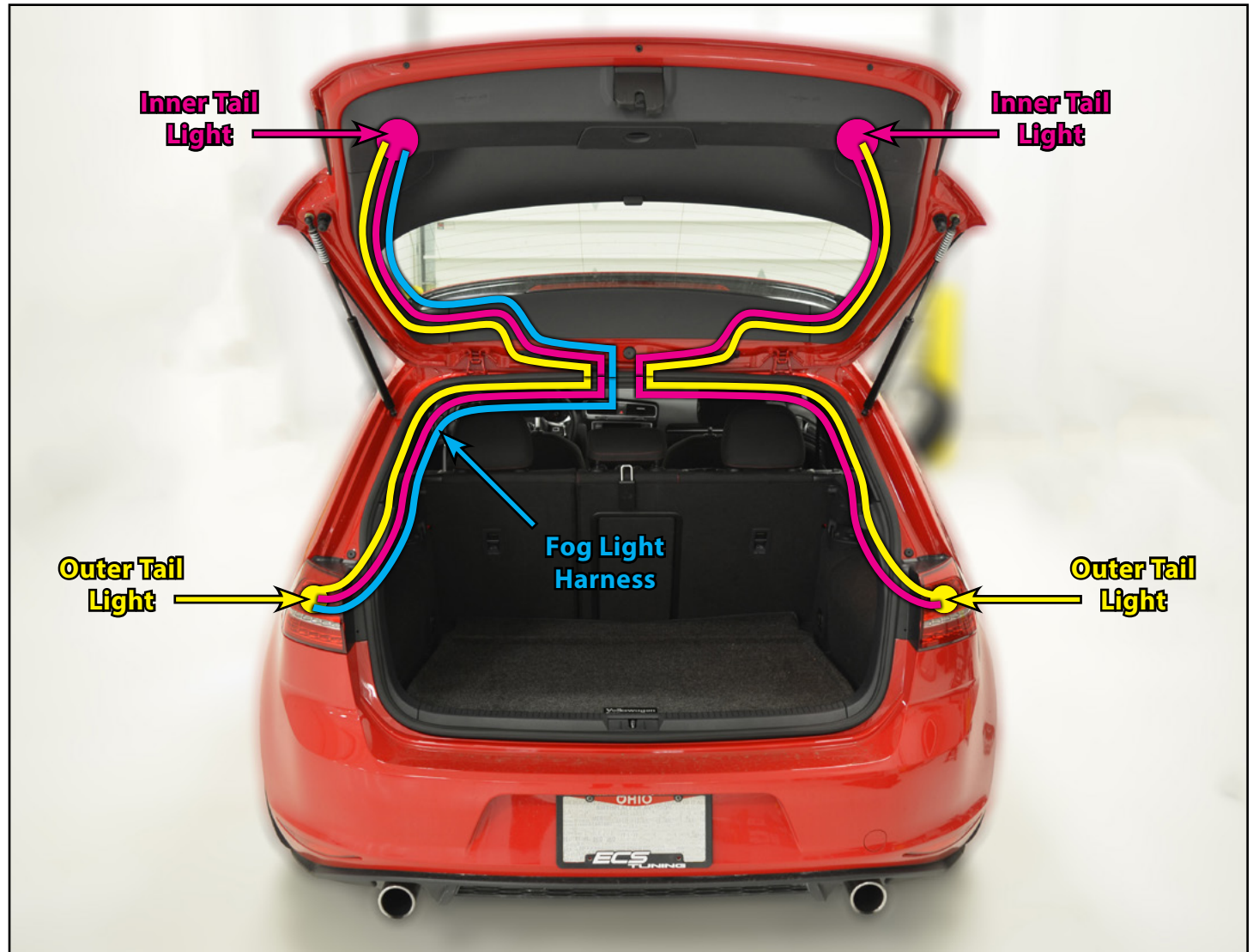
PROJECT OVERVIEW

Wire Harnesses:

Let's take a moment and look at the wires we will be running between the tail lights. Each of the tail light harnesses (inner and outer) have a single wire which is coiled up when you receive the kit. These single wires are used to connect the inner tail lights to the outer tail lights, and the majority of the time it takes to install this kit will be spent running these wires.

As you can see in the photo on the right, there is also a single wire (represented in **BLUE**) which is used to power the fog light. This fog light wire is only present on the LH (driver's) side of the vehicle.

So now that this project overview is fresh in our minds, let's get down to business!



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Hatch Trim Review:

The hatch trim pieces **MUST** be removed in the order shown in the photo. #1 is the upper trim, #2 includes both of the pillar trim panels, and #3 includes both of the tail light access covers, and #4 is the latch access cover. We will cover the steps involved in releasing these panels in the following pages.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 1:

Remove the upper trim panel from the hatch by simply pulling the panel away from the hatch, working from one side toward the other. You will hear the push clips release as you move along.



Step 2:

Remove the pillar trim panels by simply pulling the panel away from the hatch as shown in the photo, then pivoting the panel down and away.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 3:

Remove the two tail light access covers by simply pulling them down as shown in the photo.



Step 4:

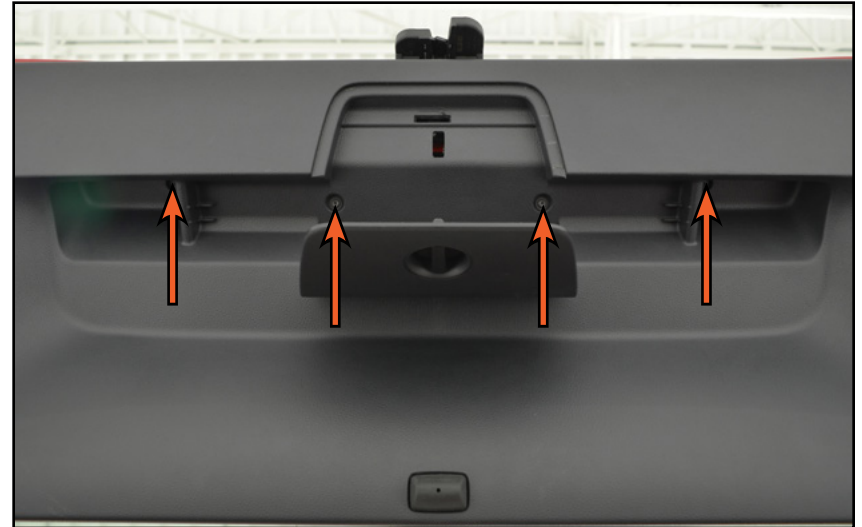
Rotate the knob inside the latch access cover and allow the cover to swing down.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 5: T25 Torx

Remove the four screws which secure the lower hatch trim panel in place.



Step 6:

The lower hatch trim panel is now only secured by the same style of push clips as the upper trim panel and the pillar trim panels. It's easiest to remove the lower panel by first grasping inside one of the tail light access hole and pulling downward. Then you can move your hand in between the panel and the hatch and continue pulling the panel downward, moving from one side to the other as you release the clips.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 7:

Once all of the clips have been released you can remove the panel from the hatch.

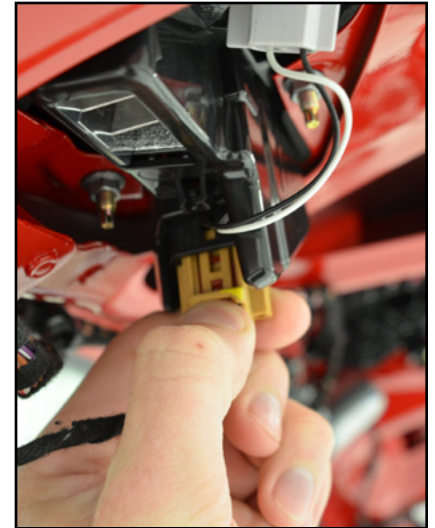


When you remove the panel from the vehicle, be sure to not pinch any of the wires which run down the two pillars.



Step 8:

Release the locking tab on the inner tail light connectors and disconnect them from the tail lights.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 9:

Now let's remove the upper trim panel which runs along the rear of the headliner inside the vehicle, this is done by simply pulling downward on the panel to release the clips. It is best to begin on one side and work your way across releasing clips as you go.



Step 10:

Once all of the clips have been released you can remove the panel from the vehicle and set it aside.



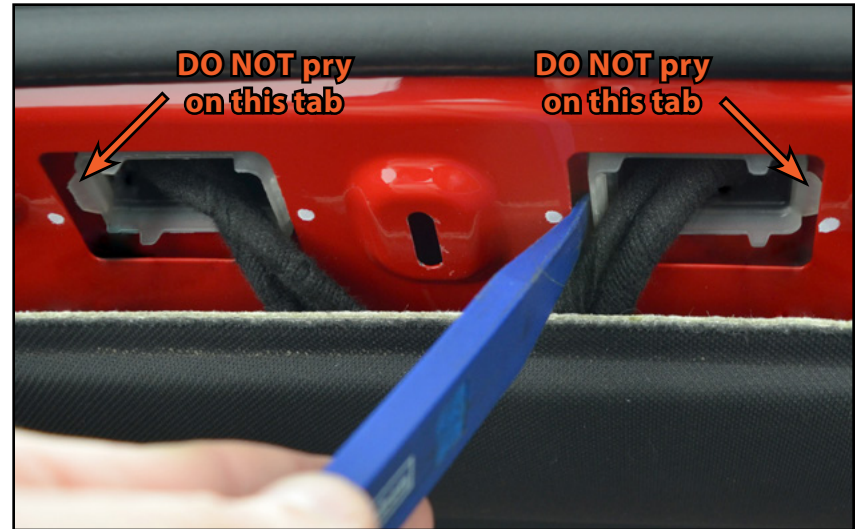
INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 11: Trim Removal Tool

With the upper trim panel out of the way, locate the bottom of the two hatch accordion boots shown in the photo. These accordion boots must be removed by **GENTLY** prying on the **INNER** tabs shown as shown in the photo.



Be **EXTREMELY** careful not to break these accordion boots. If these clips are broken, they can leak water into the vehicle, and they are **EXTREMELY** difficult to replace.



Step 12:

Once the tab has been released, gently lift the inside edge of the accordion approximately $\frac{1}{8}$ - $\frac{1}{4}$ ", then slide the accordion in the direction shown in the second photo to release it.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 13:

Release the top corners of both rear pillar trim panels as shown in the photo. We are **NOT** going to completely remove these pillar trim panels, we only need to release them enough to feed the tail light harnesses through the gap.



Step 14:

This photo shows the approximate route which we are going to feed the wires behind the interior panels. We want to feed the wires behind the rear pillar trim panels, down along the pillar and out through the tail light access flap. Proceed to the next page for some tips and tricks to make this process easier.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 15:

Feeding the wires can be achieved with a number of different guide tools, but for our install we chose to use one of our ECS Tuning Dipsticks. We did this because unlike a coat hanger, there is no sharp pointy end which could possibly damage paint finishes or interior panels. If you choose to use a coat hanger instead, be sure to completely fold down one side of it, the sharp end **WILL** puncture the rubber accordion boots which lead to the hatch, and replacing those boots is an extremely time consuming repair.

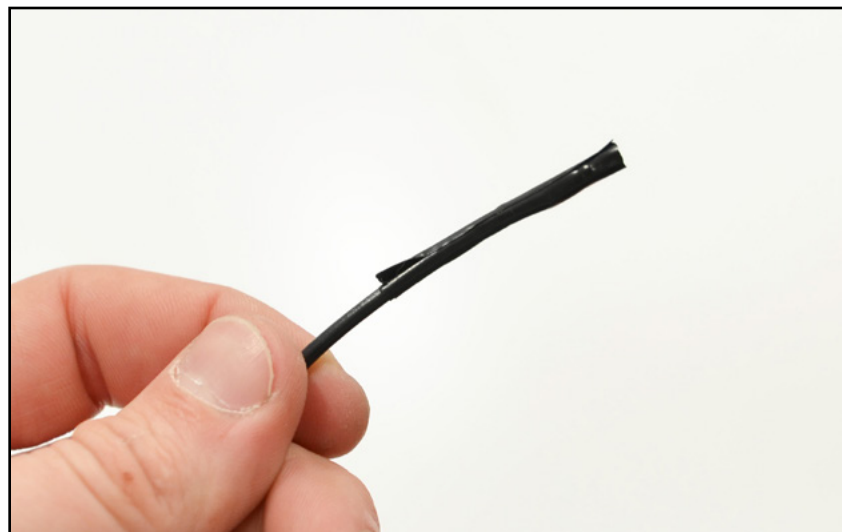


Step 16:

Now we're ready to route the wires. Begin by wrapping the pins from the outer tail light harnesses with electrical tape to protect them from damage.



Label the wires after you wrap them so you don't mix them up with other wires later on in the install.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

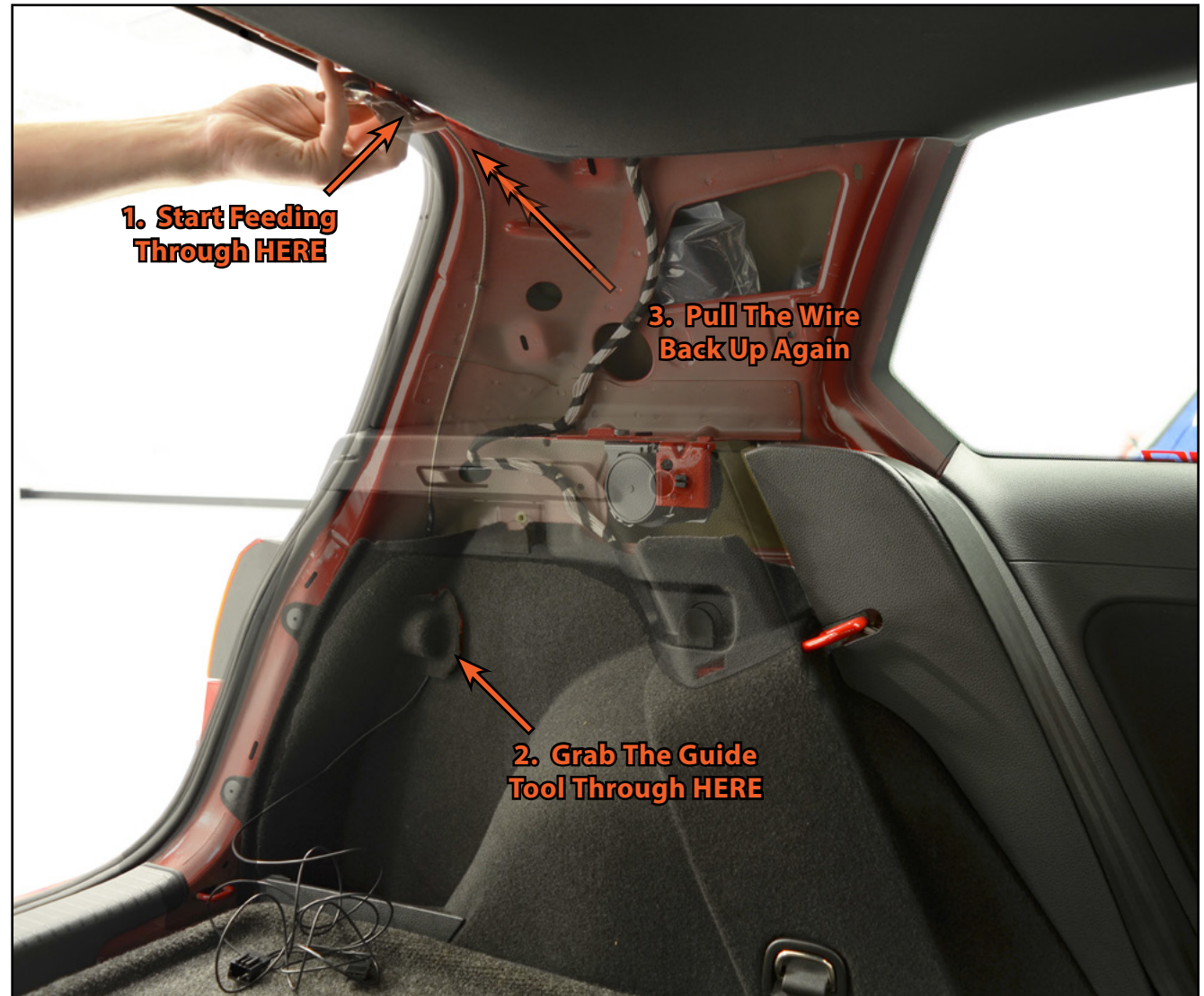
Step 17:

So now we're ready to pull the single wire attached to the outer tail light harness **UPWARD** behind the interior panels. This photo has been taken to better illustrate the exact path the wire will travel behind the panels. It will not be necessary for you to remove the panel in your vehicle, but feel free to use this photo as a reference.

We fed our guide tool in behind the panel from the **TOP** all the way down until we could reach it with our fingers and pull it through the tail light access hole.

Next we taped the single wire from the outer tail light harness directly to the guide tool. Then gently pulled back in the other direction, this pulled the wire along the inside of the interior panels and up to the headliner.

Repeat this process on the other side of the vehicle.



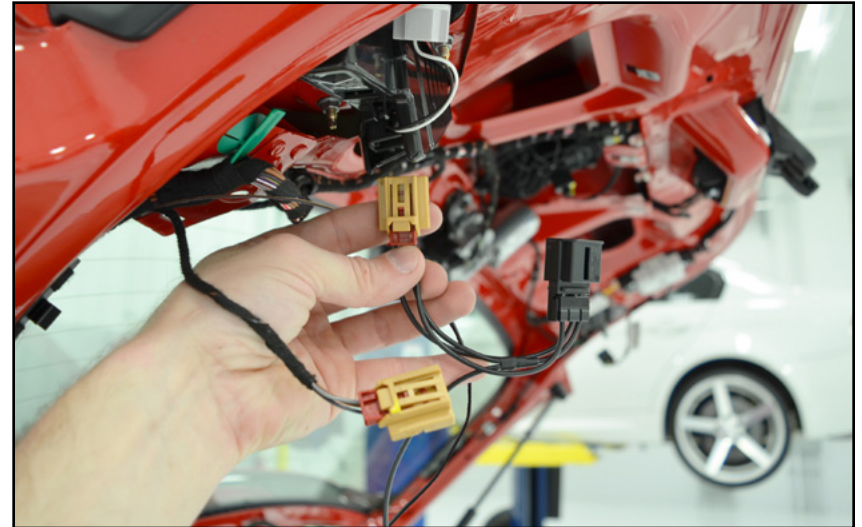
INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 18:

Moving up to the hatch, we need to run the wires from the inner tail lights out to the outer tail lights. First we need to ensure that the new harness is in position where it can be plugged in after the wires are routed.



For our install we plugged the harness into the inner tail light in order to ensure that it did not move during the following steps.

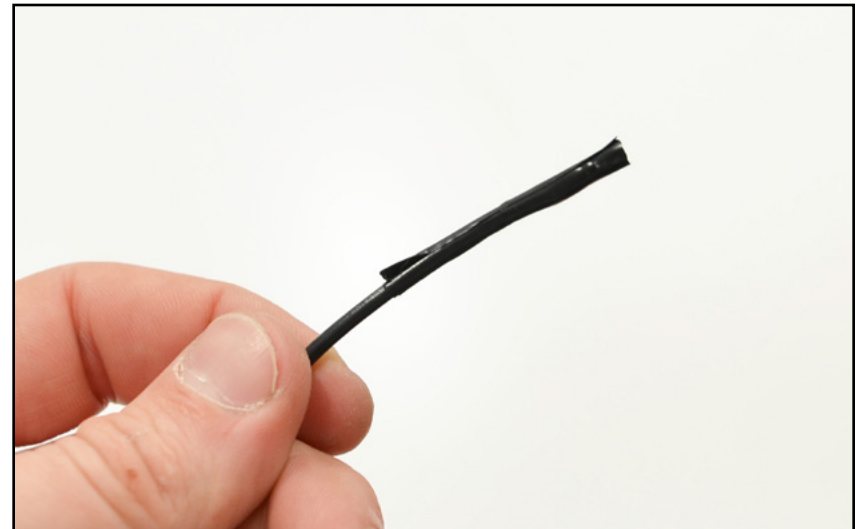


Step 19:

Wrap the pins from the inner tail light harnesses and the rear fog wire trigger harness with electrical tape to protect them from damage.



Label the wires after you wrap them so you don't mix them up with other wires later on in the install.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 20:

Route the wires down the hatch pillars around the wiring harnesses as shown in the photo, this will help to protect them from abrasion or being pinched by the pillar trim panels.



Step 21:

Gently insert your guide tool through the accordion and into the hatch.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 22:

On the LH side, tape the inner tail light harness and the **FEMALE** end of the fog light harness to your guide tool, then pull the tool and the harnesses through the accordion and into the vehicle. Next, repeat this process to feed the outer tail light harness from inside the vehicle up into the hatch.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

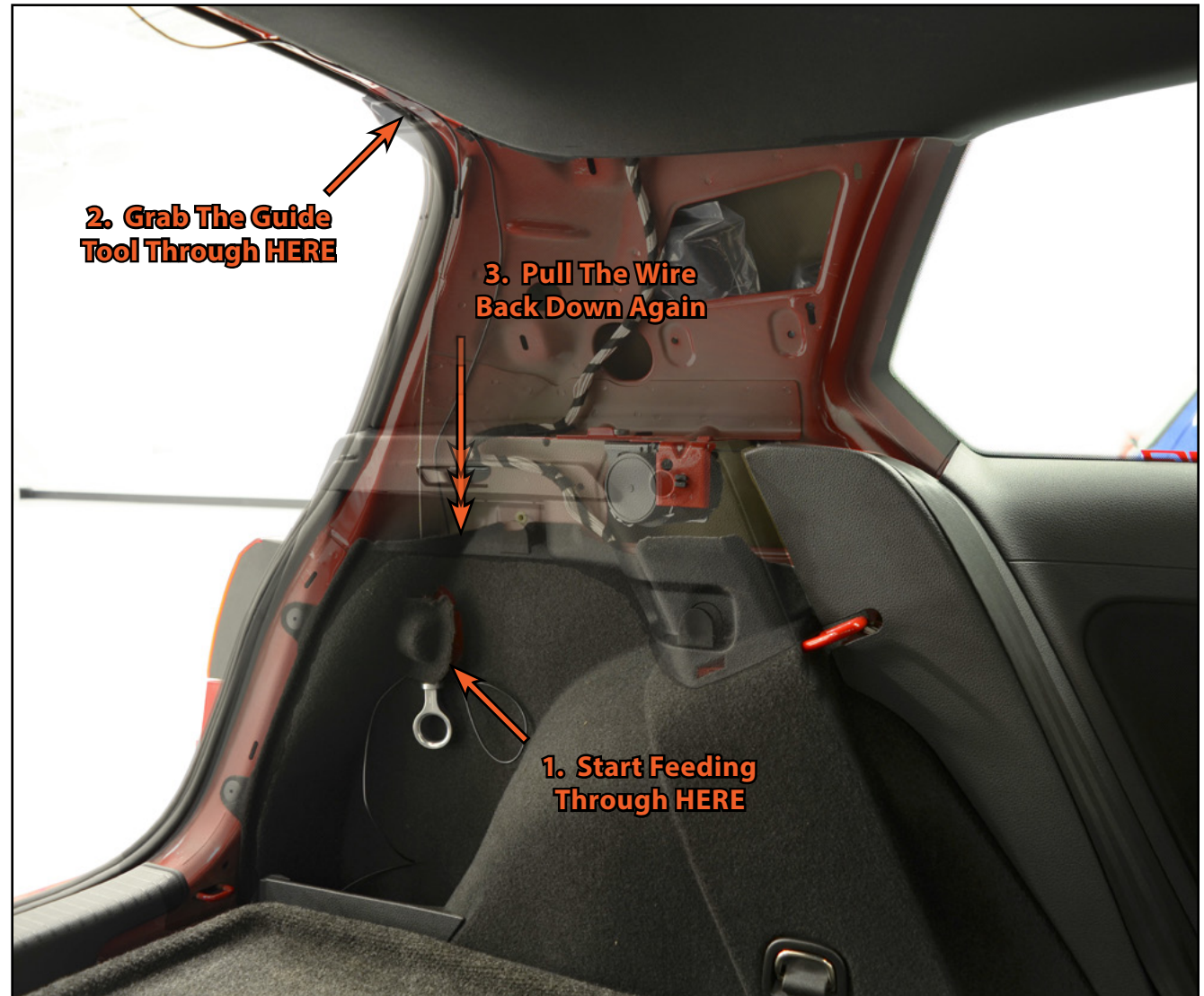
Step 23:

Now we're ready to pull the single wire attached to the inner tail light harness **DOWNWARD** behind the interior panels. This photo has been taken to better illustrate the exact path the wire will travel behind the panels.

We fed our guide tool in behind the panel from the **BOTTOM** all the way up until we could reach it with our fingers and pull it through out through the gap between the pillar trim and the headliner.

Next we taped both the single wire from the inner tail light harness, and the **FEMALE** end of the fog light harness, directly to the guide tool. Then we gently pulled the guide tool back in the other direction, this pulled the wire along the inside of the interior panels and out through the tail light access hole.

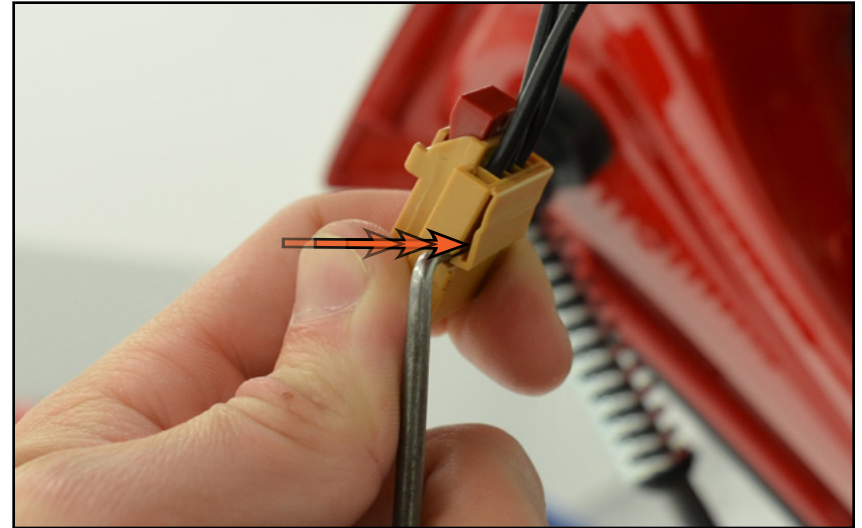
Repeat this process to guide the RH tail light harness into position.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

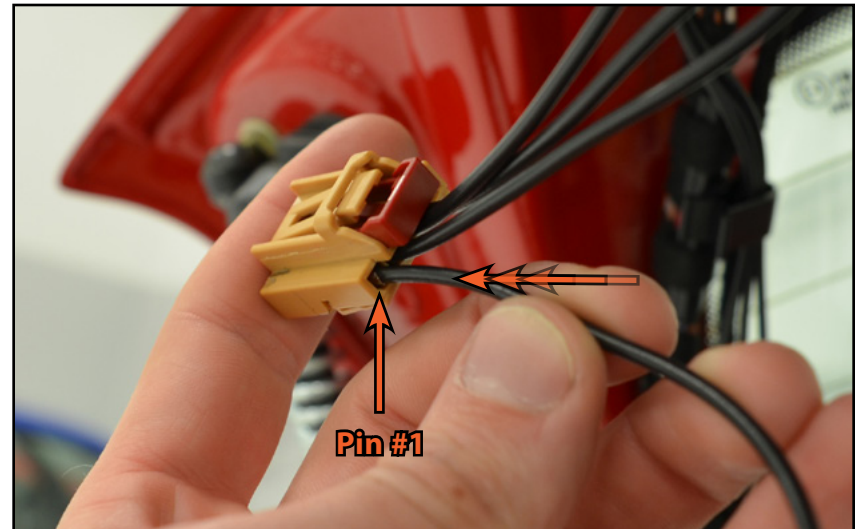
Step 24: Small Angled Pick

Now we need to connect the wiring leads to the appropriate connectors. Starting with the LH inner tail light, release the connector lock with a small pick or screwdriver as shown in the photo.



Step 25:

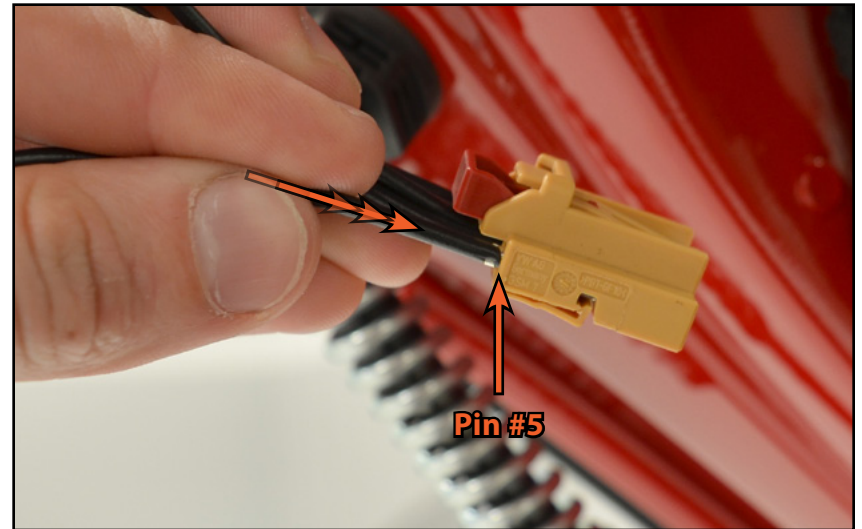
Insert the wire from the outer tail light harness into Pin #1 of the inner tail light connector.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

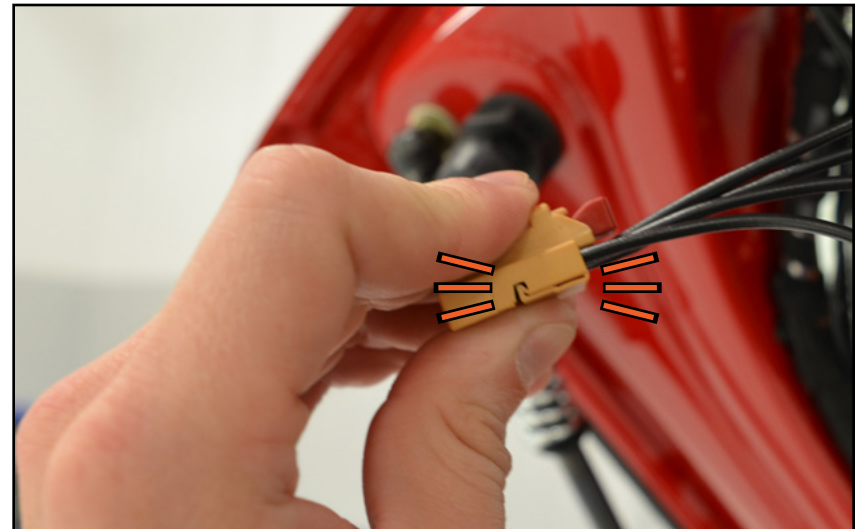
Step 26: Small Angled Pick

Next, we need to Insert the wire from the fog light harness into Pin #5 of the inner tail light connector (LH side only).



Step 27: Small Angled Pick

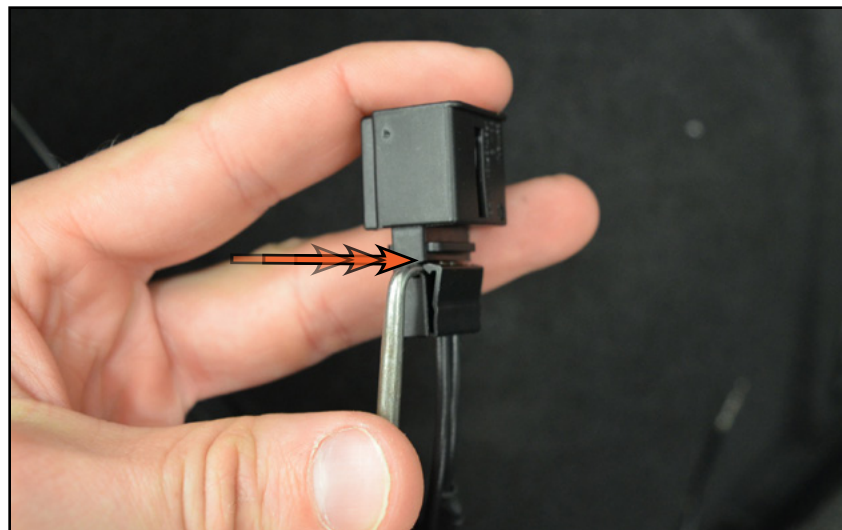
Repeat steps 24 & 25 on the RH side of the vehicle, then squeeze the connector locks until they click into place.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

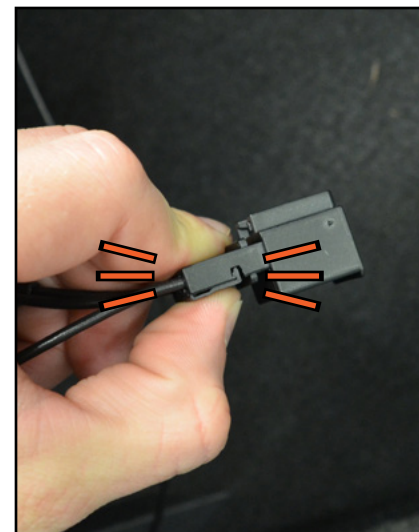
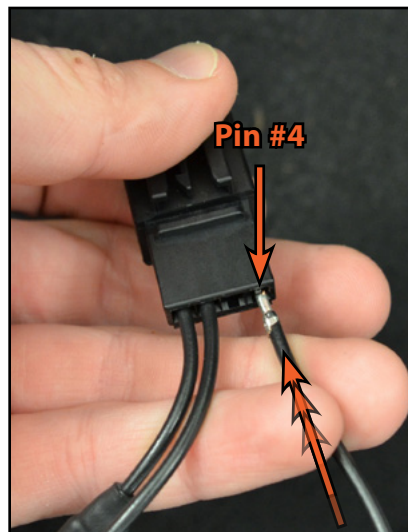
Step 26: Small Angled Pick

Moving to the outer tail light harnesses, release the lock on the **FEMALE** connector with a small pick or screwdriver as shown in the photo.



Step 27:

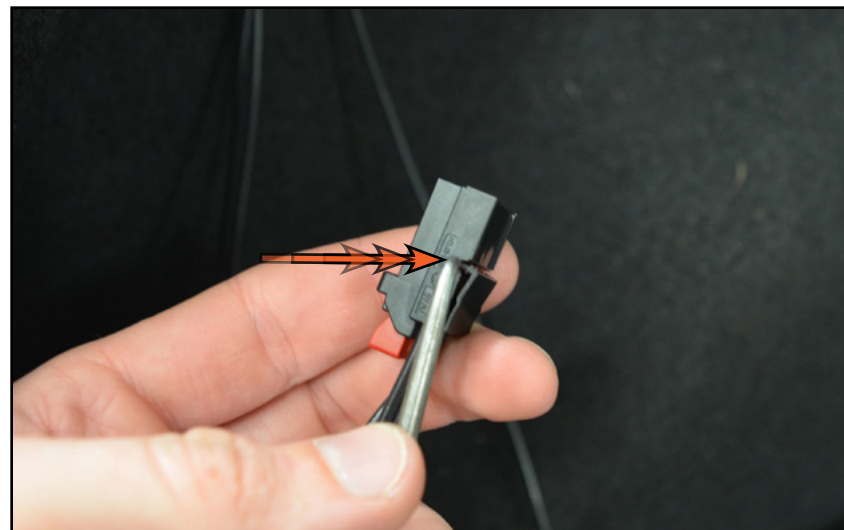
Insert the wire from the inner tail light harness into Pin #4 of the outer tail light female connector.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

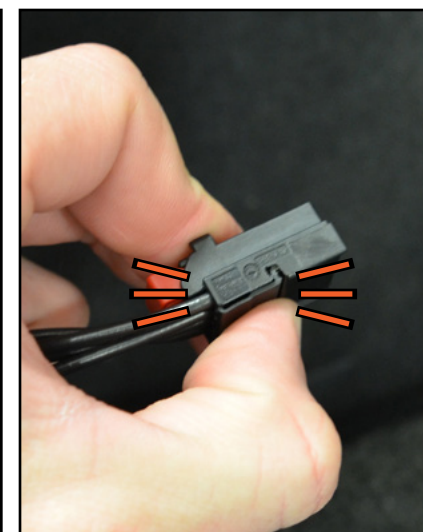
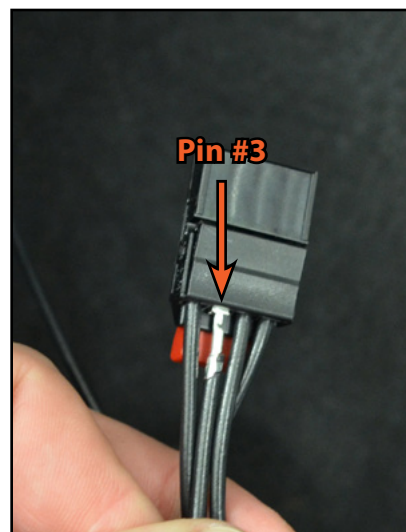
Step 28: Small Angled Pick

Finally, release the lock on the **MALE** connector with a small pick or screwdriver as shown in the photo.



Step 29:

Insert the wire from the fog light harness into Pin #3 of the outer tail light male connector.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 30:

Connect the jumper harness between the vehicle and the outer tail lights. Tuck the wires out of the way where they won't get pinched or damaged.



Step 31:

Connect the jumper harness between the vehicle and the inner tail lights. Tuck the wires out of the way where they won't get pinched or damaged.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 32:

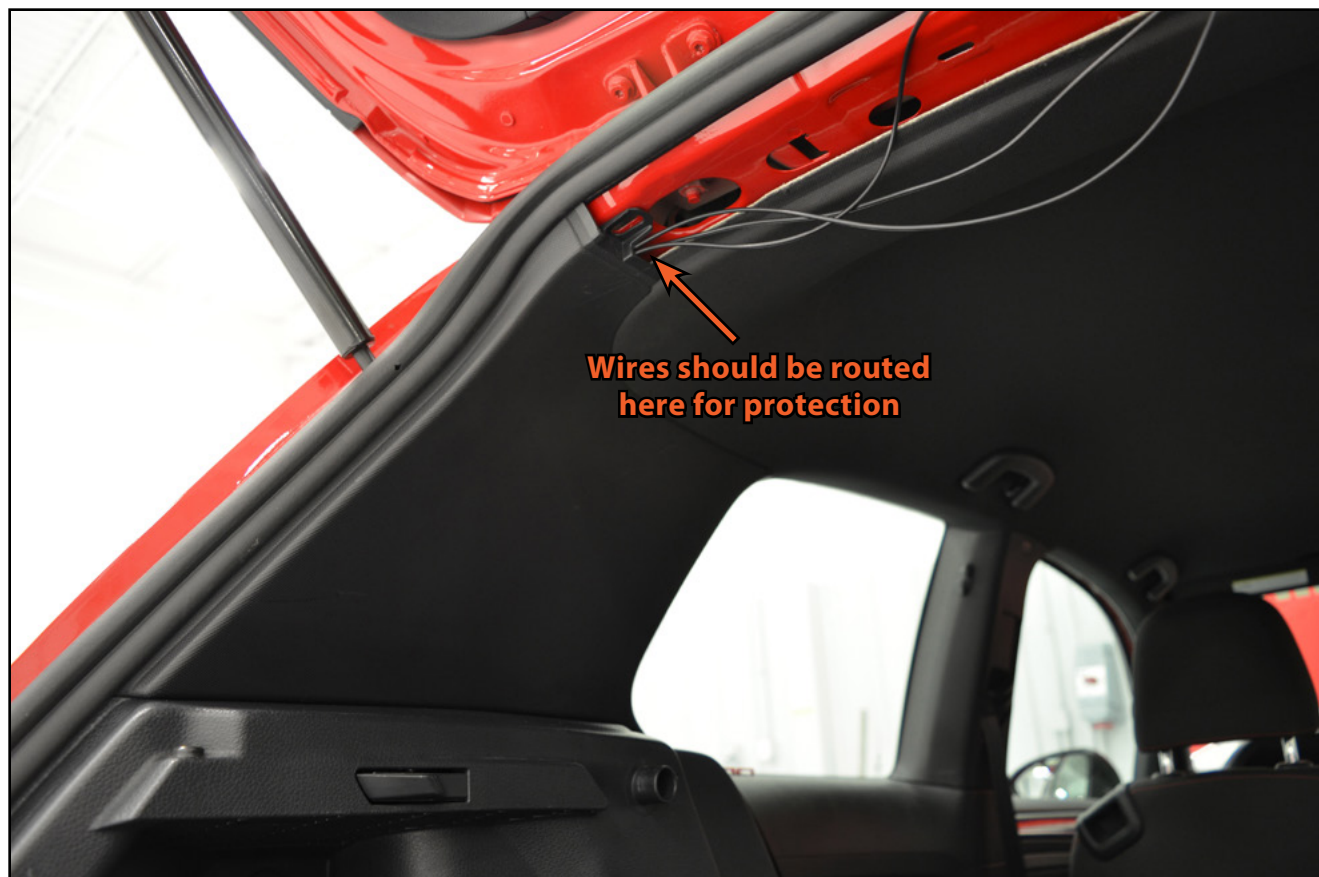
Reinstall all of the hatch trim pieces in the order shown in the photo (reverse order of removal). #1 is the lower hatch panel, #2 includes both of the pillar trim panels, #3 is the upper hatch panel, #4 includes both of the tail light access covers, and #5 is the latch access cover.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 33:

Reinstall the two rear pillar trim panels, but be careful to not pinch the wires while clipping the panel back into place.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 34:

Push the wires into the space above the headliner as shown in the photo, this will prevent them from being pinched by the upper trim panel clips.



INSTALLING THE LED TAIL LIGHT HARNESS KIT

Step 35:

Reinstall the upper trim panel by simply lining up and pushing the clips into place. It is best to begin on one side and work your way across snapping the clips in as you go along.



Step 36:

Make sure the seal is laying on top of the rear pillar trim panels and the upper trim panel.

Now, proceed to the next page for details on the required VCDS coding changes

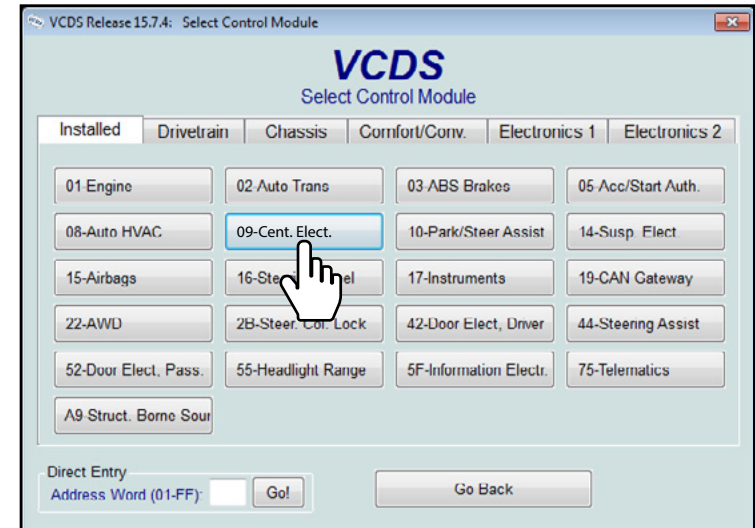


VCDS CODING CHANGES

Step 1:

Now we need to change the adaptations inside the BCM to activate all of the features in our tail lights. To do this, start by selecting:

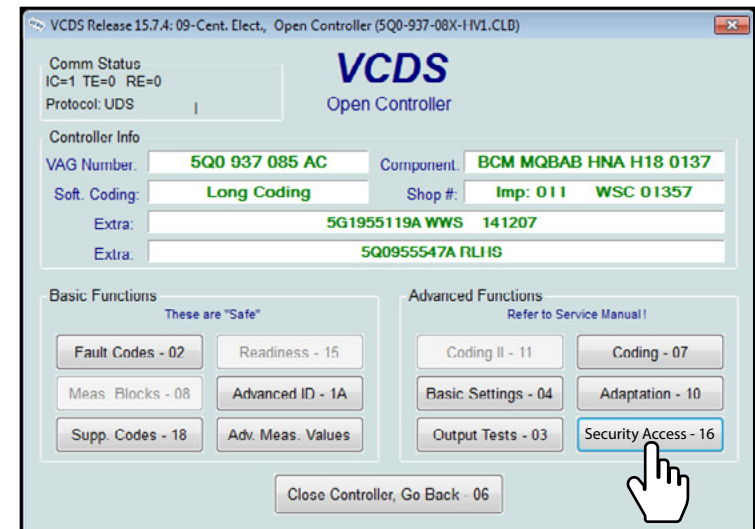
09-Cent. Elect.



Step 2:

Next, select:

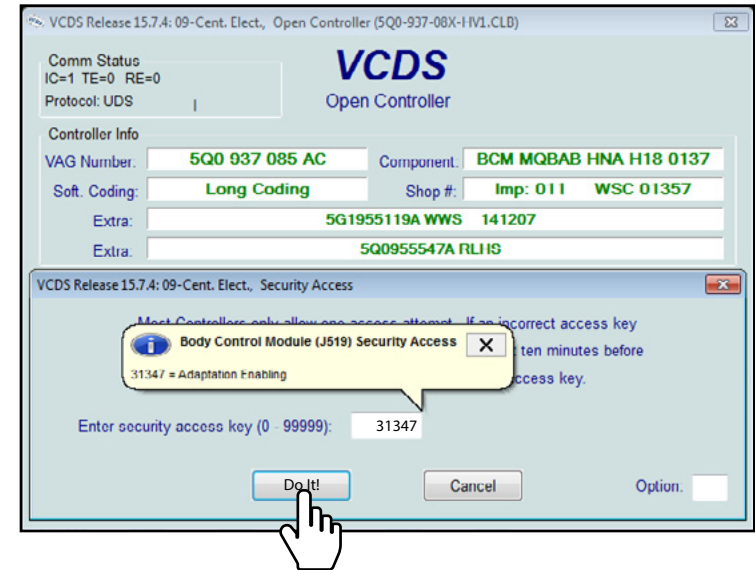
Security Access - 16



VCDS CODING CHANGES

Step 3:

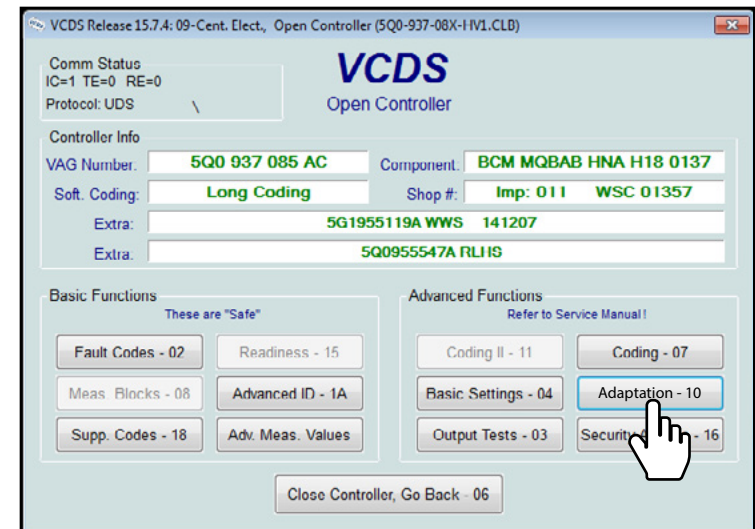
Enter **31347** into the security access key box, then click **Do It!**



Step 4:

Select:

Adaptation - 10



VCDS CODING CHANGES

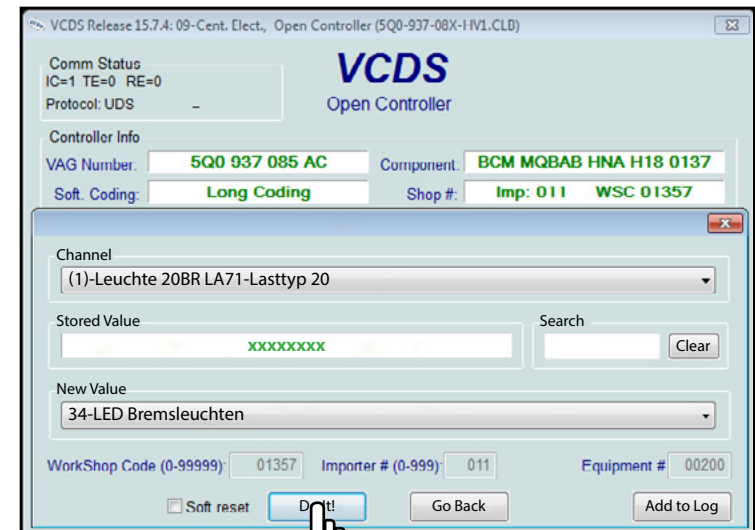
Step 5:

First, we need to click the drop down menu in order to access the channel list, then we need to scroll down the list to find the channels which we need to change. All of the required channels are listed in the tables on the next page, use these tables as a reference as you change all of the stored values to the specified new values.



Step 6:

After you change each **New Value** click **Do It!**



VCDS CODING CHANGES

Outer LH Brake Lamp	Adaptation:	Change to:
	(1)-Leuchte20BR LA71-Lasttyp 20	34-LED Bremsleuchten
	(5)-Leuchte20BR LA71-Lichtfunktion B 20	Not Active
	(6)-Leuchte20BR LA71-Dimmwert AB 20	100
	(8)-Leuchte20BR LA71-Lichtfunktion C 20	Not Active

Outer RH Brake Lamp	Adaptation:	Change to:
	(1)-Leuchte21BR RC8-Lasttyp 21	34-LED Bremsleuchten
	(5)-Leuchte21BR RC8-Lichtfunktion B 21	Not Active
	(6)-Leuchte21BR RC8-Dimmwert AB 21	100
	(8)-Leuchte21BR RC8-Lichtfunktion C 21	Not Active

Inner LH Parking Lamp	Adaptation:	Change to:
	(1)-Leuchte23SL HLC10-Lasttyp 23	33-led-Modul Blinkleuchten
	(4)-Leuchte23SL HLC10-Lichtfunktion A 23	Not Active
	(8)-Leuchte23SL HLC10-Lichtfunktion C 23	Blinken links Hellphase
	(10)-Leuchte23SL HLC10-Dimmwert CD 23	127

Inner RH Parking Lamp	Adaptation:	Change to:
	(1)-Leuchte24SL HRA65-Lasttyp 24	33-led-Modul Blinkleuchten
	(4)-Leuchte24SL HRA65-Lichtfunktion A 24	Not Active
	(8)-Leuchte24SL HRA65-Lichtfunktion C 24	Blinken links Hellphase
	(10)-Leuchte24SL HRA65-Dimmwert CD 24	127

LED Rear Fog Lights	Adaptation:	Change to:
	(1)-Leuchte26NSL LA72-Lasttyp 26	1-LED Tagfahrlichtmodul Versorgung (3-LED lighten module)
	(4)-Leuchte26NSL LA72-Lichtfunktion A 26	Standlicht allgemein (Schlusslicht; Positionslicht; Begrenzungslicht) (Nebelschlusslicht wenn kein Anhaeenger gesteckt)
	(6)-Leuchte26NSL LA72-Dimmwert AB 26	127



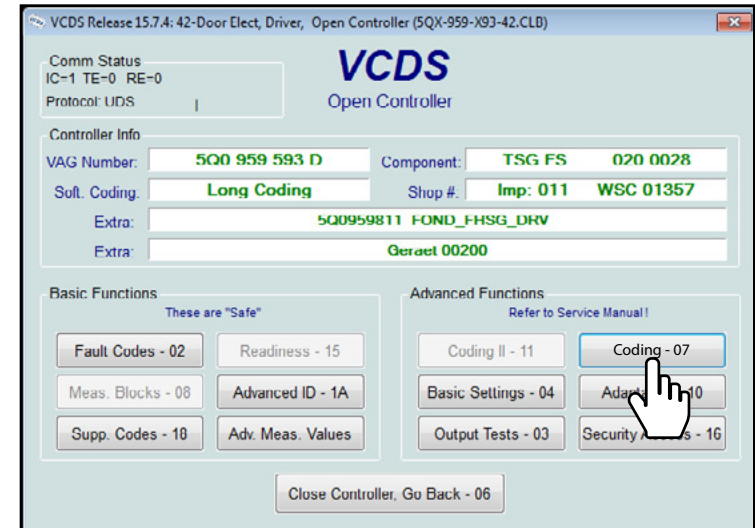
We're almost there, continue to the next page for the final coding changes!

VCDS CODING CHANGES

Step 7:

Close the Adaptation screen, then select:

Coding - 07



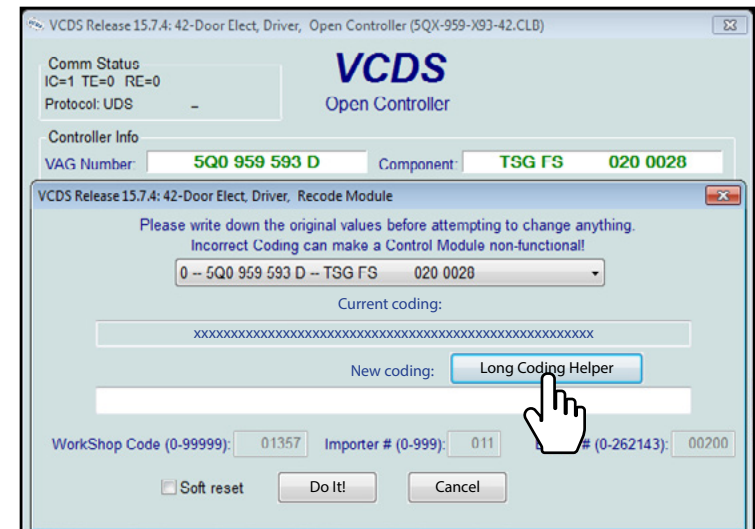
Step 8:

Write down or save your Current Coding for reference, then select:

Long Coding Helper



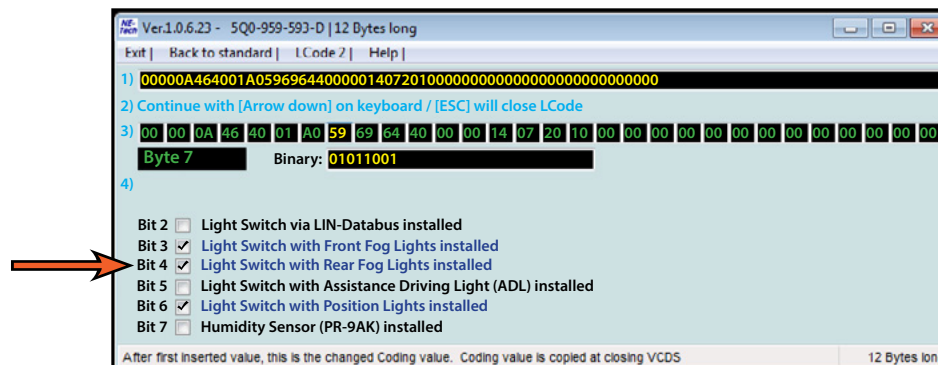
CAUTION: Store the Current Coding somewhere safe, without it you will not be able to easily revert to factory coding.



VCDS CODING

Step 9:

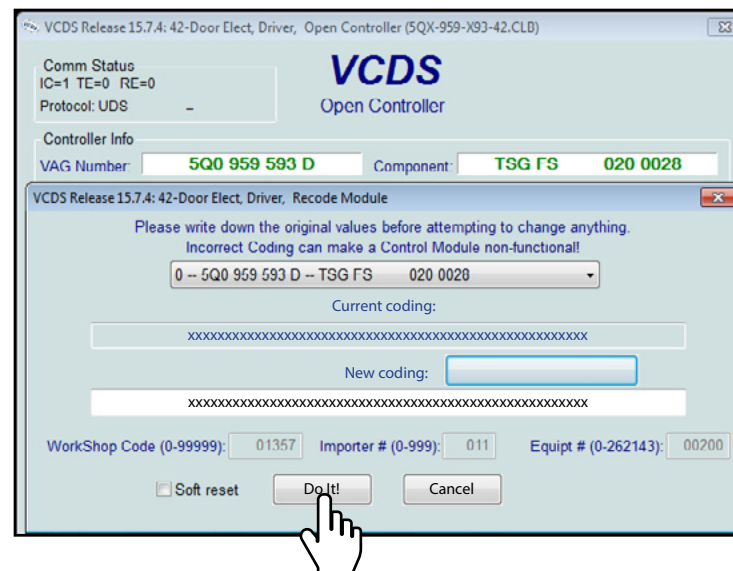
Select the eighth box in the #3 row to open **BYTE 7**, then check **Bit 4**.



Step 10:

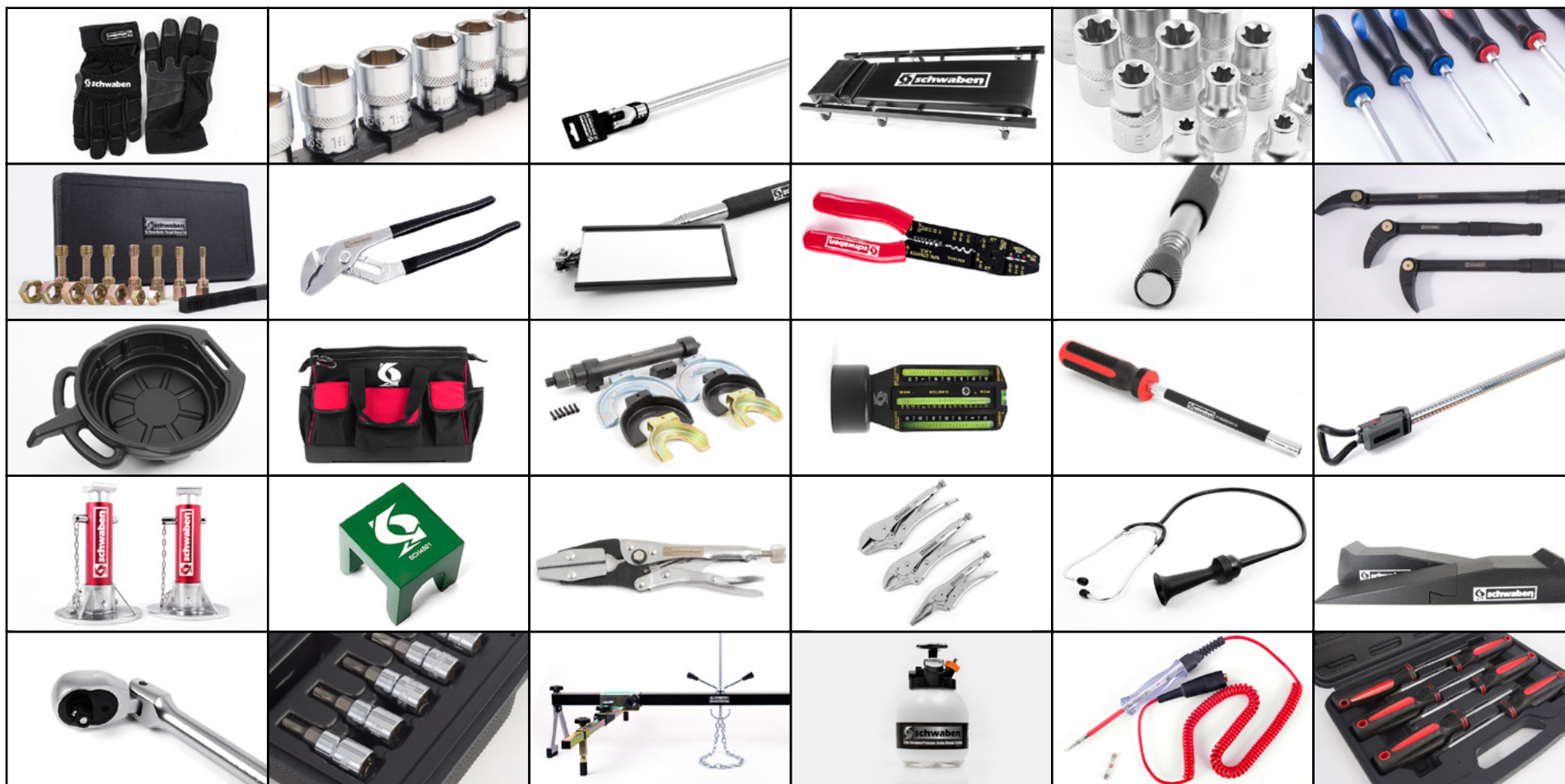
Close the Long Coding Helper and click **Do It!** Another screen should pop up saying the coding was accepted, click **OK** and close the controller.

Your installation is now complete!



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 MK7 European LED Tail Light Harness 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.