# WA Technology

# **Install C8 Edge Red Engine Cover**



The C8 is the first Corvette with a Mid Engine (ME.) Zora Duntov, (considered the father of the Corvette) wanted a ME from his early days with GM that started in 1953. His desire started in Europe when he worked with Dr. Porsche. From working with the successful German race cars in the 1930's Dr. Porsche knew the right place for the engine was in the middle.

In fact, he built his first prototype sports car, a Porsche 356, as a Mid Engine (pic below right.) But it was too expensive for 1948 Germany recovering from the war. So, the production Porsche 356 sports cars were made with "the people's car," a

rear engine VW! The transaxle and engine were just modified VW.

# "Let Me See The Engine"

Those are the first words folks ask who are admiring my C8! The car looks so good, hated to open the back hatch and show this rather



bland engine. Of interest, GM decided to paint the valve covers a bright red BUT left the engine cover plan black.

However, GM offers an optional engine cover in the same "Edge Red" color as the valve covers. It's an easy mod. There are some body color engine covers also available. BUT that leaves the Edge Red valve covers. Decided to get an Edge Red engine cover from ShopChevyParts.com for \$375 (MSRP \$495.)



Now proud to open the hatch and show off the ME!

Looks much better and matches the Edge Red valve covers. It's an easy mod compared to a lot of effort if you wanted to paint the valve covers a different color to match another color engine cover.

## Install:

Although an easy mode, as usual there are some tricks! The following is a pic/text overview of the install and shows some things to watch for.

# **Photo Sequence**

There are several How To Install Video's I watched. Two by Youtubers that at least aren't home movies. They show different ways to deal with one of the first tasks, removing a hose from a front clip. One shows a screwdriver being used to pry up the clip. That is the wrong way! Once the clip is open you can see the clip inserts into a section in the front. Don't pry with a screwdriver, press the tab to release it and pivot-up. That is the way it is designed to unclip!

Pull the hose out from the bottom grove as it's held tightly.



Place the hose in front of the engine cover out of the way. Best to keep the clip attached and remove it after. One of these "Professional Youtuber" videos showed removing it while the cover was attached. Bad idea! They took quite a while and needed several tools. In the end the hacked-up the plastic barbs that holds the clip in place and showed it was very loose when they reinstalled.

May be "Professional Youtubers" and make money and this "old gearhead" is no pro, cars are just my hobby, but could see they were not doing it properly.

There is a hose on the left engine side that can be easily removed from its clip.

Then loosen the four 10 mm bolts holding the engine cover in place. Note they are not very tight, relatively low torque required. That is what should be used when reinstalling!

Only use a wrench to loosen each bolt a few threads. Then use you hand to remove it completely and put it in a safe place. YOU DON'T WANT TO DROP A BOLT!"

I dropped a screwdriver and it did NOT fall on the ground! But was easy to retrieve. A bolt might not be so easy!

The cover simply lifts off.





Comparing the two covers, it's obvious the Edge Red cover with Black Corvette insets is better.

The OEM cover uses shinny metal insets, which is a bit of a puzzle as there is no other used elsewhere!

Funny, one of the "Professional Youtuber" videos installed a custom painted cover and he pointed out it didn't have the inside "cushioning" as he referred to the material. Said it wasn't needed!

Yep that sound deadening padding was installed by GM for a reason. No sense having valve sounds reflecting off of the hard engine valley and cover surfaces!





Now that you can see how the front clip is held in place it becomes easier to see how to remove. NOT like hacking away as the one "Youtuber" did with the cover on the car and NOT like the other "Youtuber" who said rock back and forth and pull it out!

I used one of my plastic trim tools. Placed the "claw" end carefully under the top round plastic disk. As noted in pic, a few barbs were bent BUT it was in fine shape to hold well when reinstalled.

The removed front clip can be installed in the new Edge Red Cover two ways. Only one is right! Once pressed in no room to turn in 180 degrees!

The open end must face forward. If installed the opposite way you will have to remove and 'beat-up" those bottom barbs again! Just be sure the open end is facing forward BEFORE inserting.





Install the left rear bolt first by hand and only about halfway. That is an easy one to access and positions the cover properly so the other 3 holes will be aligned.

Note the rear right bolt is similar and easily inserted.

The front left bolt has the hose support bracket that must go over the cover to hold both in place.

Again, insert that bolt by hand. On the right side install that easy access rear bolt first. Last, install the front bolt that also holds a hose support bracket that goes over the engine cover attachment ear.

I found that last bolt required pulling the cover slightly to align the holes. Easily done as the plastic engine cover can be spread of compressed with little force.

Once all bolts are in then tighten with about the low torque used to removed them No need to overtighten.





Time to install the front hose.

First press the hose into the open clip and into the bottom. It will snap in if you apply force.

Then close the clip and press hard from the top so the latch clicks into the front section that holds it shut.

Reinstall the hose on the left-hand side front clip on the metal bracket. It just slips in, no latch to deal with.

Had used Meguires Water Spot Remover on the engine plastic BUT it was not uniformly black. Decided to try the Meguires Ultimate Black. I had used it to make my 3 ½ year old GM splash guards I removed from my 2014 Z51 so I could make them look "new" on my 2017 Grand Sport. Took about 3 coats. That is also what the instructions recommend.

Used only one coat here but it looked great. With water coming in the top engine hatch vents, expect it would be needed almost every wash. Easy enough to use, just apply and remove excess.





This is a view from the left side. Combined with the Meguiar's Ultimate Black plastic surfaces- looks great!

# WA Technology

"50" C8, 2017 Grand Sport & 2014 Z51 Stingray Mods, Info Available As PDFs:



51 PDFs discuss improvements or info about a C8, 2017 Grand Sport, 2014 Z51 Stingray function and/or esthetics. Some are minor and others, like the installing "Low Dust Brake Pads" on C8 & C7s, have detailed information.

Below are the PDF's available. Click on picture or Blue PDF link or copy and paste the PDF link (Blue type) into your browser. Or email me at <a href="mailto:GUttrachi@aol.com">GUttrachi@aol.com</a> and state the title desired, shown in Yellow:

# **C8 Install High Wing**

How To Remove Rear Bumper- Install Wing http://netwelding.com/C8\_High\_Wing.pdf

# **C8 FWD Hybrid**

WFWD Hybrid Provides More Power & MPG http://netwelding.com/C8\_FWD\_Hybrid.pdf

### **Rusty GS/C7 Muffler**

Why the C7 muffler rusts way to turn matte black. http://netwelding.com/Muffler\_Rust.pdf

#### Change GS/C7 Oil

WHY change your own oil and C7 Lifting Methods http://netwelding.com/Changing\_Oil.pdf

#### C7 Carbon Fiber Side Skirts

How to install C7 side skirts with jacking info http://netwelding.com/Side\_Skirts.pdf

## C7 Carbon Fiber Splitter w/End Plates

How to install Splitter & Nylon bra fit <a href="http://netwelding.com/CF\_Splitter.pdf">http://netwelding.com/CF\_Splitter.pdf</a>

#### C7 Removing GM Plastic Film

How To Remove The Rocker Panel Film <a href="http://netwelding.com/Rocker\_Panel\_Film.pdf">http://netwelding.com/Rocker\_Panel\_Film.pdf</a>















#### **C8/GS/C7 Mirror Proximity Alarm**

Limit switch alarm warns when close to door frame http://netwelding.com/Mirror Proximity Alarm.pdf



#### Jacking Pads for C8/GS/C7

Manual says Jacking Pads 2 1/2 inch max OD... http://netwelding.com/Jacking\_pads.pdf



#### C8/GS/C7 Radar Power

For C7 tapped rear fuse panel. For GS tapped mirror http://netwelding.com/Radar\_Detector\_Power.pdf



## **GS/C7 Belt Rattle**

Passenger seat belt rattles against the seat back. http://netwelding.com/Eliminate Rattle.pdf



## **Aluminum C7 Chassis and Weld Repair**

The C7 aluminum chassis. Includes weld repair info. http://netwelding.com/Aluminum\_Chassis.pdf



#### C8 Z51, GS/C7 Z51Ceramic Brake Pads

Performance Vettes have dusty brakes. These US made pads help!

http://netwelding.com/Ceramic\_Pads.pdf



#### **C8/GS/C7 Z51 License Plate Frame;**

**Must Meet South Carolina Law** http://netwelding.com/License Plate Frame.pdf



# Manage GS/C7 Spilled Gas & Door Lock

Protect when filling gas. Preventing door lock failure. http://netwelding.com/Manage\_Spilled\_Gas.pdf



## **GS/C7 License Plate & Cargo Lights**

LED license plate light & cargo area bulbs http://netwelding.com/License\_Plate\_Light.pdf



## **GS/C7 Rear Cargo Area**

Rear cargo area storage device and rear protector http://netwelding.com/Rear\_Cargo\_Area.pdf



# **GS Rear Diffuser (Fits Any C7)**

Rear Carbon Flash Composite Diffuser http://netwelding.com/Rear\_Diffuser.pdf



#### **GS/C7 Door Panel Protector**

Black plastic protector prevents scuffing of door http://netwelding.com/Door\_Panel\_Protector.pdf



## **GS/C7 Improved Cup Holder**

A solution to the cup holder spilling http://netwelding.com/Improved\_cup\_Holder.pdf



#### **C8/GS/C7 Wheel Chatter/Hop**

Why sharp, low speed turns with cold tires causes the front tires to chatter/hop.

http://netwelding.com/Wheel Chatter.pdf



#### **C7 Carbon Fiber Grille Bar**

Install genuine carbon fiber grille bar overlay

http://netwelding.com/CF\_Grille\_Bar.pdf



#### Jacking a C8/GS/C7 Vette

Safely jacking either front only or back & front

http://netwelding.com/Jacking\_A\_C7.pdf



# Deer Whistle Installed on C8/GS/C7

Do they work? Plus Install Info http://netwelding.com/Deer\_Whistle.pdf



## **Replacing C7 Battery**

Tricks for installing battery!

http://netwelding.com/Battery\_Issues.pdf



## **GS/C7 Window Valet**

Lower Windows With FOB Helps Latch Hatch http://netwelding.com/Hatch\_Latch.pdf



#### C8/GS/C7 Splash Guards

GM splash guards. ACS Best Front Guards for GS. http://netwelding.com/Splash\_Guard.pdf



Smaller rear and side windows cause C7 blind spots.
Small "blind spot mirrors" help

http://netwelding.com/Blind\_Spot.pdf



#### **GS/C7 Skid Pad Protector**

After the air dam, the aluminum "skid pad" hits http://netwelding.com/Skid\_Pad\_Protector.pdf



#### C8/GS/C7 Wheel Locks

Wheel locks, help protect your expensive wheels. http://netwelding.com/Wheel\_Locks.pdf



### **GS/C7 OnStar Lights**

Rear view mirror OnStar LED's, at a quick glance, look like a police car flashing light! This is a fix.

http://netwelding.com/OnStar\_Lights.pdf



## **GS/C7 Skip Shift Eliminator**

Skip Shift Eliminator install with suggestions on jacking a C7.

http://netwelding.com/Skip\_shift\_Eliminator.pdf

# **GS/C7 Catch Can & Clean Oil Separator**

What is Coking and how to reduce the potential http://netwelding.com/Catch\_Can.pdf

#### **GS MGW Flat Stick Shifter**

The MGW shifter shortens throw and is more precise http://netwelding.com/MGW\_Shifter.pdf

#### **GS/C7 Round Shift Knob**

A round shift knob shortens throw on OEM shifter http://netwelding.com/Shift\_Knob.pdf

#### **GS/C7 Stingray Sill Plate**

Stingray sill plate replaces original. http://netwelding.com/Sill\_Plate.pdf

#### **GS/C7 Nylon Bra**

Nylon Bra Stops Bugs. Fits with Stage 3 Winglets http://netwelding.com/Nylon\_Bra.pdf

#### **GS/C7 Clutch Fluid Change**

Clutch fluid after 3000 miles gets dirty http://netwelding.com/Clutch\_Fluid.pdf

#### **C7 Carbon Fiber Hood Vent**

Replaces Plastic Hood Vent http://netwelding.com/Hood\_Vent.pdf

#### **GS/C7 Cold Air Intake**

Low Restriction Air Filter & Duct

http://netwelding.com/Cold\_Air\_Intake.pdf

#### **GS/C7 Soler Modified Throttle Body**

For Improved Throttle Response http://netwelding.com/Soler\_Mod\_TB.pdf

#### **Garmin GPS for GS Cubby**

Garmin Mounts in GS Cubby & Apple CARPLAY <a href="http://netwelding.com/GPS\_In\_Cubby.pdf">http://netwelding.com/GPS\_In\_Cubby.pdf</a>

## **GS Splitter Stage 3 Winglet**

Stage 3 Winglets Integrate with Spats http://netwelding.com/Stage\_3\_Winglets.pdf

#### GS 2LT to 2.5 LT

Red Upper Dash Pad Like 3LT

http://netwelding.com/Red\_Dash\_Pad.pdf



























#### **Jake Emblem/Decals for GS**

Jake Symbols Support GS Racing Image http://netwelding.com/Jake\_Emblems.pdf



# **C8/GS Splitter Protector**

Scrape Armor Protection for Splitter <a href="http://netwelding.com/Splitter\_Protectors.pdf">http://netwelding.com/Splitter\_Protectors.pdf</a>



## **GS Engine Compartment Mods**

Cosmetic Additions in Engine Compartment <a href="http://netwelding.com/Engine\_Compartment.pdf">http://netwelding.com/Engine\_Compartment.pdf</a>



#### **GS Vitesse Throttle Controller: Fits All C7s**

Adjustable Throttle-by-Wire Control

http://netwelding.com/Throttle\_Control.pdf



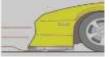
#### **Boomy Bass Solution**

Use Presets to Adjust Bass etc Tone/Balance http://netwelding.com/Boomy\_Bass



## **GS/C7 Air Dam, Functions**

Why Missing from Z51, Some GS & Z06 http://netwelding.com/Air\_Dam.pdf



## **C8 Edge Red Engine Cover**

Engine Cover Matches Valve Covers <a href="http://netwelding.com/Engine\_Cover.pdf">http://netwelding.com/Engine\_Cover.pdf</a>



# **Engineering a ProStreet Rod**

How Our '34 ProStreet Rod Was Designed and Built http://netwelding.com/Engineering%20Street%20R od%203-08.pdf



# **Motorsports Welding Article**

Wrote a 5 Page Article for AWS March 2018 Journal Covers NHRA and NASCAR Chassis Design http://netwelding.com/Motorsports\_Welding\_2018.pdf

