Carbon Fiber Side Skirts Reduce Rocker Panel Rash

Even after installing GM Splash Guards, we still noticed "road rash" occurring on the rocker panels. The GM plastic covering was also scratched. With the coke bottle rocker area shape and sticky tires, especially with a Z51, there are going to be pebbles, sand and dirt thrown at the rockers. Also I don't particularly care for the clear plastic that GM put on the panels to help reduce the problem. The addition of Side Skirts should allow it to be removed.

What To Do:

Some GM cars have employed Side Skirts for performance and appearance. They also will protect the rocker panels from road rash causing debris. The C6 ZR1 (right) employed Side Skirts that went straight across from the rear of the front wheel to the rear tire well.

A model of the 2015 Z06 employs Side Skirts with a dip in the rear, apparently to assist with exiting the car (pic below left.) With its 335 section width rear tires and wider fender, that may be needed.

However that won't be as good at eliminating road rash toward the rear where we have found it on our C7. The C7's narrower, 285 section tires and fenders still allow easy, although watchful, entry and exit with full width Side Skirts.

Matching the Carbon Fiber Roof

Decided real carbon fiber Side Skirts would make a good match for our carbon fiber roof. The ones sold by LG Motorsports, which won a SEMA award, are properly contoured and well made. We purchased our LG carbon fiber Side Skirts from Southern Car Parts and they shipped in about a week. The following shows the install details including how the car was jacked-up, possibly useful for some DIY folks who don't have access to a lift.

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Photo Sequence (Install Followed By Jacking-If Needed)

The Side Skirts Arrived

The LG carbon fiber Side Shirts arrived in a well-built wooden box. I was concerned about how they would withstand the transport and was pleasantly surprised by the quality of the packaging.

The wood top was secured with a number of screws that were easily removed with a battery powered screw driver. There was sufficient bubble wrap and sheet foam to prevent the two Side Skirts from rubbing against each other. The packaging provided excellent protection of the very high quality, glossy finish on the Carbon Fiber Side Skirts.

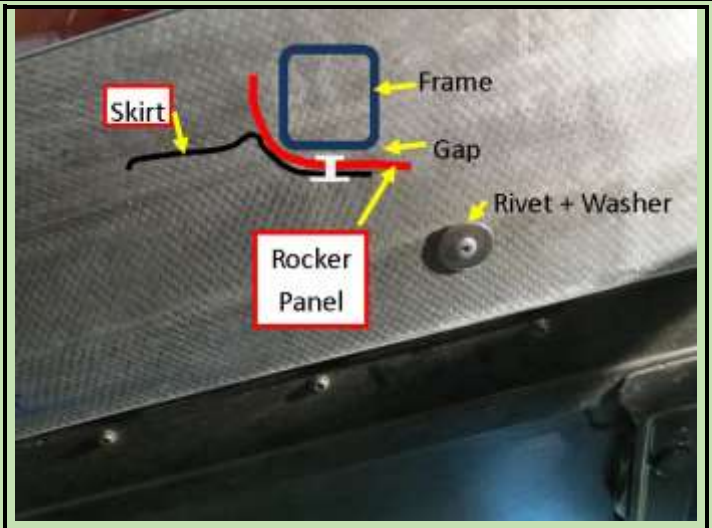
In this view the car is raised about 6 inches front and rear and ready for the side skirt installation. The first step is to thoroughly clean the rocker panels both on the face and underneath. I use a 3M product that is a General Purpose, Adhesive Cleaner typically used prior to painting.

The carbon fiber Side Skirts are installed using the 2 predrilled holes in the front and 2 in the rear using the factory 7mm screws. Install with the screws initially just hand tight. Masking tape is placed across the rocker panel so marks can be made where the center support rivet and other rivets will be located.

Installed the skirt as suggested using the 2 bolts front and rear and keeping them loose until the rivets were in place. We used 1¼ inch diameter stainless fender washers under the factory screws to distribute the load on the carbon fiber skirt.

The 3/16 inch Aluminum Pop Rivets used are for joining 1/8 to 1/4 inch thick pieces. This was perfect for the job at hand. A 1 inch diameter stainless fender washer is placed under the rivet head to spread loads over a larger area.

Thought I might use self-taping screws to secure the Side Skirts directly into the aluminum frame, instead of securing with rivets. But that was not practical since there is a gap between the frame and the rocker panel, see next picture.



This is a picture of the first rivet installed. Superimposed is a rough sketch showing what is being riveted to what! Note, there is a gap between the rocker panel (to which the skirt is being attached) and the frame. In fact we inserted an 1/8 inch thick piece of aluminum in the gap when drilling to assure the bit didn't contact the frame. It was moved as we drilled each 3/16 inch rivet hole. We used an 1/8 inch starter drill followed by a 3/16 inch bit. Note, as suggested, the rivet was placed just before the raised area at the outer edge of the rocker panel to assure a light fit.

We used 5 rivets per side, one in the center between the inner factory install bolts and two each on either side of the center rivet; approximately equally spaced.

As suggested for installation, we used an air hose to blow away all drill chips before installing each rivet. Once all 5 rivets were installed the front and rear bolts were tightened. Don't over torque.

This is finished skirt installed; the carbon fiber has an excellent finish and overall appearance and complements the carbon fiber roof.

This is a close-up view of the front of the Side Skirt. Note it fits below the GM Splash Guard we had previously installed. The screw that must be removed to install the front Splash Guards is also the one that holds the Side Skirt. Even if the Side Skirt was in place, if the front screw was removed and the other in the front loosened, the GM Splash Guard could still be installed. The skirt would bend down sufficiently to allow the Splash Guard tab to be inserted.

This picture shows the Side Skirt and the carbon fiber roof. They are a great complement to each other. The main reason for installing the skirts was to reduce road rash on the rocker panels. However the excellent finish and the great fitting LG Side Skirts look great as well!

This is a view from a low front angle.

Placing the 5 rivets per side close to where the raised portion of the skirt starts made them fit very tight. There are no gaps nor can you create any by pressing down on the skirt.

The one concern is when getting out of the car to be sure you or your passenger does not step on the skirt! It will only happen once, they won't support the force!

This is a low view from the rear of the car. Fit is perfect. It was mentioned you could adjust the fit after the front and back screws were installed hand tight and before placing the first rivet. The predrilled holes were just large enough to have the factory screws inserted, so no adjustment was possible. Thought perhaps I would make them slightly larger to allow adjustment but the fit was so good on both sides, there was no need.

Close-up view of contoured rear of the side skirts. Fit is perfect.

The Following Pages Relate to Jacking-Up the Vette

The total car needs to be raised to have access to the bottom for drilling the rocker panels, but the tires do not have to be removed. I don't like to use 4 jack stands (in fact, one set of my jack stands warnings states "Not to use 4 to raise the whole car!" Decided to make stanchions to place under the back tires of the car and use jack stands in the front. They would also be useful for oil changes etc.

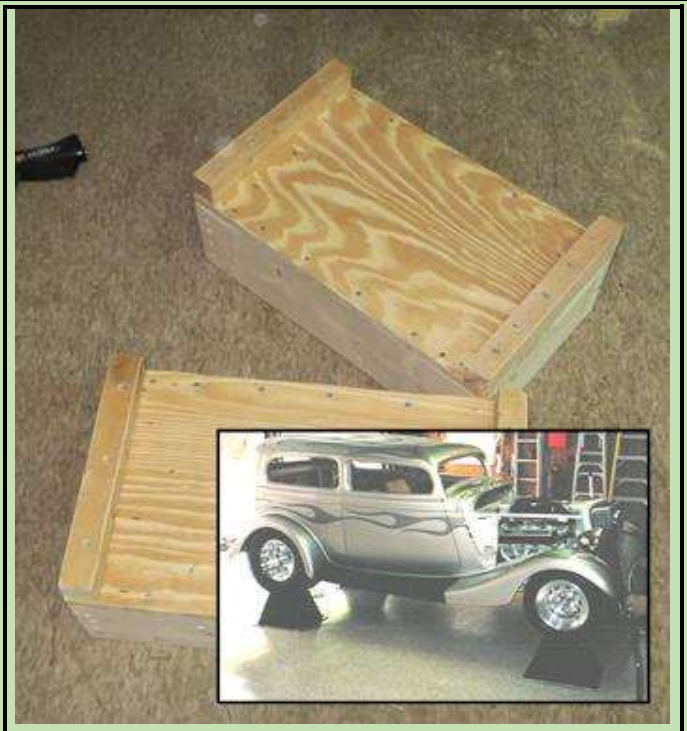
Purchased a 2X6 twelve feet long for under $8. Lowes cut them in half so the two pieces would fit in our SUV. Look for a straight, low knot board!

Cut four pieces each, 21 inches and 9 ½ inches long and assembled the bases shown using 3 inch long wood screws. Used 3 screws to fasten the 5 ½ inch sides. Cut pieces of some scrap ¾ inch thick plywood I had in my "might use someday pile" and screwed it into the base. This made the total height 6.25 inches for the tire stanchions.

Added some scrap 2 inch square wood sections at two edges. These were not really needed to secure the car since I always use wheel chocks on the wheels opposite the end being jacked but just in case they provide a tire stop.

These are the finished tire stanchions that can be used for many projects. They can also be used for our street rod when front or rear tires can remain installed and when working under the car.

The 12 inch high tire stanchions I also have (inset picture) were used when building the street rod, but are too high for this project. To use them requires a several step jacking process to get the car high enough to insert them. That was fine for the street rod where there was significant work needed under the car to install the exhaust, transmission oil cooler, route the gas line etc.



With the addition of Side Skirts, higher jack pads than the 1 inch pads I had made were needed. These 2½" diameter x 2" high jack pads by Katech are excellent. They include a rubber pad to protect the frame paint. They fit fine on three of the C7 "shipping slots" but were a very tight fit on the left front location. That shipping slot was not stamped the same as the others. This was easily corrected by filing the Katech top aluminum Tee section to remove ~1/16 inches from the sides and length of the Tee. It now works fine on all slots.

In this view the right side rear is jacked up and the stanchion we fabricated placed under the rear tire.

As a youngster, worked on many cars with my Dad. He insisted I hit a jacked-up car usually (supported on the frame using a cement block) with my shoulder to be sure it was safe! He'd accept this approach! He had a friend die by a jacked-up car falling on him and was always concerned about the possibility when we were replacing mufflers etc.

On the right side a jacking pad and an old scissor jack were used to raise the car. It is very low profile jack. A piece of 2X6 reduced the height that the jack needed to be raised to install the other tire stand.

Harbor Freight had a sale on a 3000 lb racing. Low profile jack for $59. Replaced the old scissor jack! Now have two making jacking the Vette quick and easy.

With the rear tires on the stanchions, the jack pads were moved to the front slots. The front is raised just enough to allow our large jack to fit under the car.

Jacking up the front (or rear if we needed to have those wheels off the car) requires a "cross beam" to lift at the GM preferred lifting points. With the light weight front and rear cross members, lifting in the center could cause cracking! Made a cross beam for my C6 and used it for the C7. Of interest, only 17 inch width is needed for the C7 compared to the C6. Note, it slips into the same hole in the jack as the rubber saddle which is removed when the cross beam is installed.

I had made 2X4 wood inserts to handle the different rear and front cradle jacking point widths for the C6. These wood pads have protruding bolts that slip into holes drilled into the 2X6 to keep them in place.

It worked fine for the front and previously for the rear when the cross beam was used during the installation of the Skip Shift Eliminator. (Subsequently cut the cross beam width to 17 inches for the C7.)

This is the jack and cross beam installed under the GM preferred lifting points on the C7 front cradle. The proper lifting locations are shown in the C7 Owner's Manual.

Note, cross beams are available for sale, even at Harbor Freight. They are adjustable for width; however all I found had the minimum width much wider than needed for the Vette.

This is a view from the side of the car showing the pads touching the two lifting locations.

Jack stands were placed under the spring supports as a precaution in case the jack was to creep and lower the car.

WA Technology

Other 2017 Grand Sport & 2014 Stingray PDF's Available:

Some 40 items discuss improvements or information about a 2017 Grand Sport and 2014 Stingray function and/or esthetics. Some are minor and others, like the installing ceramic brake pads, include detailed install information.

Below are the PDF's available. Click on picture (may need Ctrl pressed.) Or just copy and paste the PDF info (Blue type) into your browser. Or email me at GUttrachi@aol.com **and state the title desired, shown in Yellow:**

Note: **GS indicates that info may only be in the process of being added to C7 PDFs.**

Rusty GS/C7 Muffler ***Why the C7 muffler is rusted and a simply way to make rust turn matte black.*** ***Bottom pic rusted, top pic treated*** **http://netwelding.com/Muffler_Rust.pdf**	
Change GS/C7 Oil ***WHY change your own oil and HOW to do it*** ***Revised, includes C7 Lifting Methods*** **http://netwelding.com/Changing_Oil.pdf**	
C7 Carbon Fiber Side Skirts ***How to install side skirts with jacking information for DIY's without lifts*** **http://netwelding.com/Side_Skirts.pdf**	
C7 Carbon Fiber Splitter w/End Plates ***How to install Splitter & Nylon bra fit*** **http://netwelding.com/CF_Splitter.pdf**	
C7 Removing GM Plastic Film ***How To Remove The Rocker Panel Film*** **http://netwelding.com/Rocker_Panel_Film.pdf**	

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GS/C7 Mirror Proximity Alarm ***Limit switch alarm warns when passenger mirror is too close to door frame*** **http://netwelding.com/Mirror_Proximity_Alarm.pdf**	
Jacking Pads for GS/C7 ***Jacking Pads must 2 1/2 inch max OD. Made four. Also Hockey Puck pad and 2 1/2 inch OD x 2 inch high pads bought after installing side skirts.*** **http://netwelding.com/Jacking_pads.pdf**	
GS/C7 Radar Power ***The C7 cannot tap the mirror or sun visor for power !*** **http://netwelding.com/Radar_Detector_Power.pdf**	
GS/C7 Belt Rattle ***Passenger seat belt rattles against the seat back. The solution, add a shoulder belt pad.*** **http://netwelding.com/Eliminate_Rattle.pdf**	
Aluminum C7 Chassis and Weld Repair ***The C7 has an all aluminum chassis, made from 117 welded pieces*** **http://netwelding.com/Aluminum_Chassis.pdf**	
GS/C7Ceramic Brake Pads ***The Z51 has very dusty brakes. These pads help!*** **http://netwelding.com/Ceramic_Pads.pdf**	
GS/C7 License Plate Frame; **Must Meet South Carolina Law** **http://netwelding.com/License_Plate_Frame.pdf**	
Manage GS/C7 Spilled Gas ***Protect the side of the C7 when filling up with gas*** **http://netwelding.com/Manage_Spilled_Gas.pdf**	
GS/C7 License Plate & Cargo Lights ***LED license plate light & cargo area bulbs are brighter and whiter*** **http://netwelding.com/License_Plate_Light.pdf**	
GS/C7 Rear Cargo Area ***Rear cargo area needs storage device and rear protector*** **http://netwelding.com/Rear_Cargo_Area.pdf**	

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C7 Door Panel Protector ***protector plate added to prevent scuffing of door when exiting*** **http://netwelding.com/Door_Panel_Protector.pdf**	
GS/C7 Improved Cup Holder ***A solution to the cup holder spilling under hard braking or shape turns.*** **http://netwelding.com/Improved_cup_Holder.pdf**	
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 GS/C7 Vette ***Safely jacking either front only or back and front*** ***http://netwelding.com/Jacking_A_C7.pdf***	
Deer Whistle Installed on GS/C7 ***Do they work? Plus Install Info*** ***http://netwelding.com/Deer_Whistle.pdf***	
Replacing C7 Battery ***After using a GM type charger and showing fully charged, voltage low, replaced battery with AGM!*** **http://netwelding.com/Battery_Issues.pdf**	
GS/C7 Window Valet ***Lower Windows with FOB*** ***Window Valet Helps 2014/2015 Latch Hatch*** **http://netwelding.com/Hatch_Latch.pdf**	
GS/C7 Splash Guards ***GM offers splash guards for the C7 Corvette. An easy DIY installation.*** ***http://netwelding.com/Splash_Guard.pdf***	

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GS/C7 Blind Spot Mirror

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 driveway ramps etc. Plastic protector helps.

http://netwelding.com/Skid_Pad_Protector.pdf

GS/C7 Wheel Locks

Wheel locks, torqued to required 100 ft-lbs, help protect your expensive wheels from theft.

http://netwelding.com/Wheel_Locks.pdf

GS/C7 OnStar Lights

The OnStar LED's in the rear view mirror, 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

C7 Catch Can & Clean Oil Separator

Direct inject engines like the LT1, are particularly subject to "coking." What is Coking and how to reduce the potential?

http://netwelding.com/Catch_Can.pdf

GS/C7 Round Shift Knob

A round shift knob shortens throw.

http://netwelding.com/Shift_Knob.pdf

GS/C7 Stingray Sill Plate

Stingray sill plate replaces original.

http://netwelding.com/Sill_Plate.pdf

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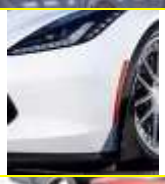
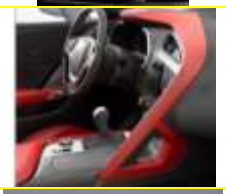
GS/C7 Nylon Bra ***Nylon Bra Stops Bugs on Front and Grill.*** **http://netwelding.com/Nylon_Bra.pdf**	
GS/C7 Clutch Fluid Change ***Clutch fluid after 3000 miles gets dirty*** **http://netwelding.com/Clutch_Fluid.pdf**	
C7 Carbon Fiber Hood Vent ***Replaces Plastic Hood Vent*** **http://netwelding.com/Hood_Vent.pdf**	
GS/C7 Cold Air Intake ***Low Restriction Air Filter & Duct*** **http://netwelding.com/Cold_Air_Intake.pdf**	
Garmin GPS for GS Cubby ***Garmin Mounts in GS Cubby*** **http://netwelding.com/GPS_In_Cubby.pdf**	
GS Splitter Stage 3 Winglet ***Stage 3 Winglets Intergrate 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**	
GS Splitter Protectors ***Cone Washers Protect Splitter Bottom*** **http://netwelding.com/Splitter_Protectors.pdf**	
May Be Of Interest: **Engineering a ProStreet Rod** ***How Our '34 ProStreet Rod Was Designed and Built 8.2 Liter Engine, 4 Wheel Disk Brakes & Coilover*** **http://netwelding.com/Engineering%20Street%20Rod%203-08.pdf**	

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