

2014 C7 & 2017 Grand Sport Blind Spot Solution

The Society of Automotive Engineers (SAE) published a paper in ~1993



suggesting how outside mirrors could be adjusted to eliminate blind spots. The paper advocates adjusting the mirrors so far outward that the viewing angle of the side mirrors just overlaps that of the cabin's rearview mirror. They state this can be disorienting for drivers used to seeing the flanks of their own car in the side mirrors. But when correctly

positioned, the mirrors negate a car's blind spots, in most cars. This reduces the need to glance over your shoulder to safely change lanes.

They note you must learn to use these SAE-recommended mirror positions. The cabin's rearview mirror is used to keep an eye on what is coming up from behind, while the outside mirrors reflect the area outside the view of the inside rearview mirror. **However that inside rear view mirror *MUST HAVE* a wide view of the road to make this adjustment fully effective.**

The claim is those who have switched to the SAE's approach swear by it, however, some drivers can't adjust to not using the outside mirrors to see directly behind the car and miss being able to see their own car in the side mirrors. ***Note, I do adjust the mirrors per their recommendation, see below for details! But with the C7 I found that the limited rear view required more. In above pic in the main mirror car is not visible. In the small blind spot mirror but the rear of my '34 AND the Grand Sport rear fender are!***

The Use of Small Convex 'Blind Spot' Mirrors C7

NEVER felt the need nor added a small convex mirrors in my '88, '93 or '08 Vettes because rear visibility with the center mirror was much better than the C7. However I believe it's needed for the C7 and Grand Sport!

The C7 has a relatively narrow view through the rear window. Adding a small convex blind spot mirror allows you to fully follow cars from your center cabin mirror as they pass on either side of the Vette! The time when you can see a passing car in your center rear view mirror to when it shifts to the side mirror, is short at best. This leaves a blind spot before it is visible in the outside mirror! Yep you can see one when it is right behind the fender but not when it is just about to get there!

This picture story provides some perspective on why.

Photo Sequence

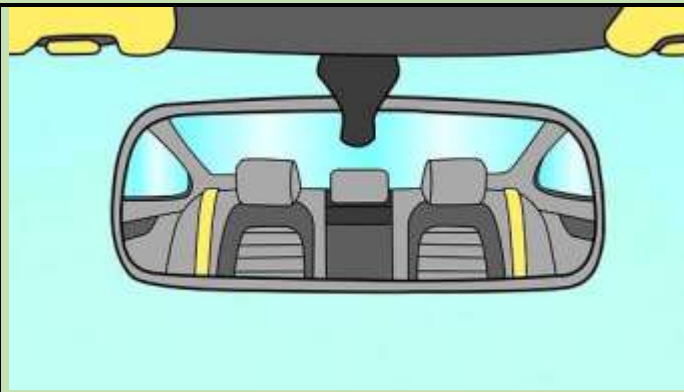
First, we'll review the way it is advised to set standard mirrors to avoid blind spots. The words in quotes are paraphrased:

"Lean your head over until it almost touches the driver's window, and then position the side mirror on the car's left side so you can just see the rear quarter panel (the rear end of the car) in the mirror. This will have it positioned farther out than you may have had your mirrors adjusted before."



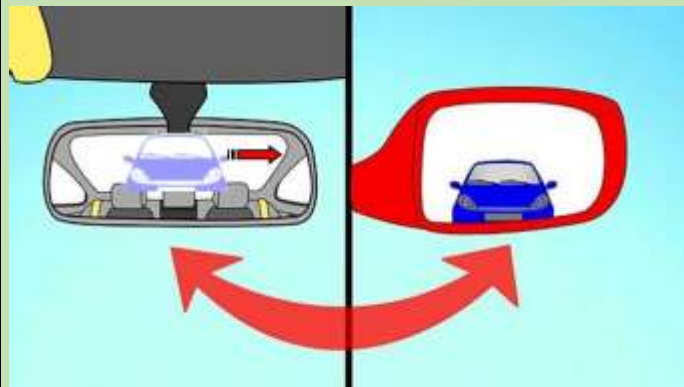
Next:

"Lean your head to the right to align it with the center of the car, for example, just between the 2 front seats; stretch to hold it at your normal height. From there, position the right side mirror so you can just see the rear quarter panel of the passenger side in the mirror."



"Adjust the center rearview mirror to place it facing the center of the rear window."

At the end you'll see one recommendation made to train yourself to use the side mirrors. It was to cover the rear view mirror so, like a tractor trailer driver, you learn to use you side mirrors! Not sure I would do that but you must train yourself to use all 4 side and your center mirrors!



In practice, if properly adjusted, a car passing on the right, as shown here, begins in your rearview mirror. As it approaches, it moves to the side of the center rear view mirror, and at the same time appears in the right side mirror. This shows that there is no rear blind spot, because there is an overlap between the mirrors. This works best for the right mirror because it is convex but it also shows cars smaller and what appears to be further back then they really are.

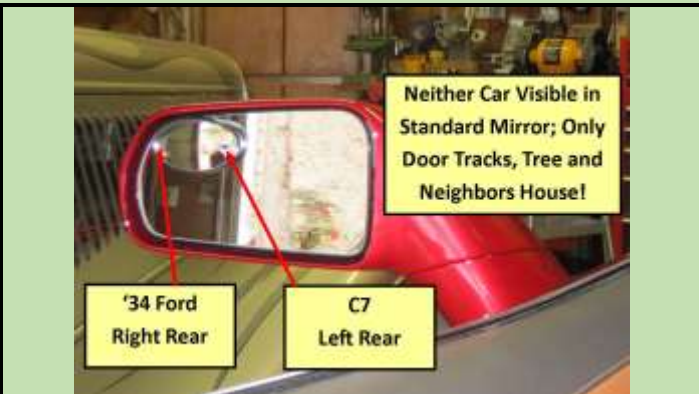
For the left mirror which is flat, not convex, what appears is in actual size.

“In theory, when adjusted as described, side mirrors capture additional amount of information about what is in the lanes right next to the car. Previously a head turn may have been required to ensure nothing was beside the car before changing lanes. Now, side mirrors do a much better job of covering this blind spot on the sides.”

That is the theory; however in practice you can no longer see the sides of your car! This can be disconcerting. Especially in the C7, the time for the car to be visible in both the rear mirror until it can be seen in the side mirrors is small since the C7 has a narrow rear view.



Therefore I have found the addition of small oval “blind spot mirrors” provide better prospective. I purchased somewhat more expensive mirrors made of glass. I adjusted the main mirrors as described above. However the small blind spot mirrors provide a full picture.



Here is a close-up of the C7 parked next to my '34 Street Rod. In the main mirror, neither car is visible, only the rear two garage door tracks and my neighbor's house.

In the blind spot mirror both the right rear of the '34 and the left rear of the C7 are visible providing perspective of the where the '34 is relative to the Vette

Photo right is a close-up of the C7 parked next to my wife's Cayenne. In the main mirror, neither car is visible, only the rear two garage door tracks and both closed garage doors. Since the mirror is convex, more is visible that in the left mirror.

In the blind spot mirror both the right rear of the C7 and the left rear of the Cayenne are just visible providing perspective of the where the Cayenne is relative to the Vette



Bottom Line:

The use of the blind spot mirrors provides more perspective about cars on either side. The left side mirror is particularly helpful in providing a much wider view of that side of the car. The trick is to continually be looking at both side mirrors and the blind spot mirrors, as well as the rear view mirror to provide a good feel of what is around you. They help

An added advantage in the C7 and Grand Sport is night driving. Several forum folks have mentioned they did not like the automatic dimming of the left side mirror at night. They claimed it reduced the perspective of knowing a car is coming up on that side. However, dimming does reduce the glare when driving at night. With the small blind spot mirror there is no dimming so the bright headlights coming up on the left are visible. However it is small enough that there is no excess glare.

One suggestion made on the internet to train yourself to use your side mirrors was to block the center rear view mirror and learn to drive like a tractor trailer driver, who has no choice but to use only side mirrors. However their mirrors are very large! Not sure I agree, but it would provide an interesting way to train yourself. Also a Forum Poster who drives an 18 wheeler said he always has blind spot mirrors added to his rig!

Particularly in today's world where folks are on their cell phone or worse text messaging while driving, I find I need to keep my eye more frequently in the rear view mirror. Recently I was driving the C7 and a young man came up behind and had his cell phone in both hands on top of his steering wheel. He was obviously using both thumbs to text message! I was going at the 45 MPH speed limit and slowed down to see if he would pass and to be further from the car in front. He just kept on texting! I pulled to the left lane slowed further to let him pass, which he did on my right. As we came to a light I could see he was still texting!

Having never had an accident with another vehicle in over 50 years of driving. (I have had several off the road excursions as I refer to them but only minor harm came to my 260Z and my CJ5, but those don't count!) It will be difficult to keep that record, especially with folks coming up from behind. Will keep my eyes in all 5 mirrors and also try to stay ahead of the pack!

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 GUtrachi@aol.com and state the title desired, shown in Yellow:

Note: GS indicates the info was updated from that available for the C7 Z51 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



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. Bought 2 1/2 inch OD x 2 inch high pads after installing side skirts; Bought pads right for the GS.

http://netwelding.com/Jacking_pads.pdf



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. 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/C7 Ceramic 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 Vette 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



GS/C7 Door Panel Protector

Black plastic protector 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 sharp 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 & 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 a 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. ACS Best Front Guards for GS.

http://netwelding.com/Splash_Guard.pdf



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



GS/C7 Nylon Bra

Nylon Bra Stops Bugs on Front and Grill. 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



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 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



GS Splitter Protector

Rugged Plastic Protection for Splitter
http://netwelding.com/Splitter_Protectors.pdf



GS: Vitesse Throttle Controller

Adjustable Throttle-by-Wire Control
http://netwelding.com/Throttle_Control.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 & Coilovers*
<http://netwelding.com/Engineering%20Street%20Rod%203-08.pdf>

