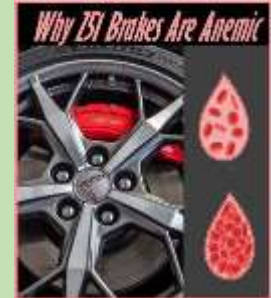


## Why the C8 Z51 Brakes Are Anemic!

Before I placed a Hold-A-Spot order for my C8 (shortly after the launch in July 2019) I had considered a car Porsche was announcing, the 2020 718 Cayman GT4. Porsche finally put a 6-cylinder engine in their ME sports car. HP for the Boxer 6-cylinder engine was only 414, not as much as the C7 Grand Sport I was driving at the time. It's 0 to 60 time was only 4.2 seconds, worse than the 2017 C7 Grand Sport! BUT it could be purchased with a 6-speed manual trans and every DD I had for 62 years prior to the C8 was a standard shift! One thing it also had was significantly bigger brakes! The only info available at the time were pics of C8 tests in Germany BUT they looked small!



Posted pic below left on the Forum early July before placing my C8 order. Don't like backing up and it appeared for whatever reason the C8 Z51 was not going to have large brakes. The C7 Grand Sport is considered one of the best stopping Corvettes GM ever made. BUT on aggressive stops that FE car had 75+% of stopping being done by the large front 6 piston brakes. The C8 should be closer to 50/50 or 60/40 in an aggressive stop with its 60% rear weight. **It should be better?**



Well turned-out stopping Stats were NOT as good as my prior C7 Z51 OR other ME cars with similar weight distribution. Far from my Grand Sport **WHY?**



2020 Porsche Cayman 718 GT4 Steel Rotors	2020 Corvette C8 Z51 Steel Rotors	2020 Ferrari 488 Pista Carbon/Ceramic	My 2017 Corvette C7 Grand Sport Steel Rotors
Front: 15.0" 6 Piston Rear: 15.0" 4 Piston	Front: 13.8" 4 Piston Rear: 13.0" 4 Piston	Front: 15.6" 6 Piston Rear: 14.1" 4 Piston	Front: 14.6" 6 Piston Rear: 14.4" 4 Piston
Pilot Sport 4S	Pilot Sport 4S	Pirelli P Zero	Pilot Super Sport ZP
Front: 235/35/20 Rear: 295/30/20	Front: 245/35/19 Rear: 305/30/20	Front: 245/35/20 Rear: 305/30/20	Front: 285/30/19 Rear: 335/25/20
FstLp 70 to 0 = 142' GT4 RS, Cup Tr = 132'	GM 60 to 0 = 108'; 97* R&T 70 to 0 = 149'	FstLp 70 to 0 = 124'	MotTrd 60 to 0 = 90' C&D 70 to 0 = 136' **

\*Although GMs states 108', several Mag tests showed 97'. \*\* C&D Grand Sport w/Cup 2 Tires & Carbon Ceramic Rotors = 129'. Min stopping distance is dependent on tires, driver, track surface/temp, Brake Size etc. Unlike some comments, tests show it's NOT ALL TIRES!

## WA Technology

As seen in the comparison pic above, two ME cars stop faster from 70 mph! Not that minimum stopping distance from 70 mph is critical as most aggressive stops when Tracking or aggressive street driving, when making a shape turn don't reach 0 or activate ABS! BUT it's a good indicator. It's obvious those 15 inch "steel rotors" on the Porsche 718 Cayman GT4 were that size for a reason! The Ferrari 488 Pista is a similar configuration to the C8. It has a V8, albeit smaller but with ~40% more hp. Note it has very large 15.6" front /14.1 rear brakes. It's Tested stopping distance by FastestLap from 70 was 124 feet versus the C8 Z51 by Road & Track of 149 feet. Even my C7 Grand Sport was only 136 feet (*with Cup 2 tires only 129 feet!*) Again, an indicator!

## BUT WHY?

Jason Fenske, "*Engineering Explained*," interviewed the GM engineers that developed the C8 Z51 brakes and found out why (*see video link at end in References.*)

Jason states: GM engineers said there is nothing about ME physics that should have the C8 taking longer to stop than the C7. After you start braking it switches to a front brake bias but with more uniform tire loading. ***It should stop faster than the C7*** that has 75+% braking on the front tires. So why is it taking ~8% longer to stop than a C7 Z51?

The GM engineers said ***if they used bigger brakes***, or perhaps didn't bias ABS front to rear brake application the way they did, in panic type stops any small steering wheel input makes the back end "very twitchy" and it wants to kick out!

Jason goes on to discuss another issue some have criticized in addition to poorer stopping than the C7, "Understeer." He states, when offering a very capable performance car, it's a recipe for an inexperienced driver to get in trouble with Oversteer. Understeer is safer if you're inexperienced and don't know what you're doing behind the wheel.

Jason was given these two cars by GM to make this video. His words are somewhat tempered. An excellent automotive writer, Brian Gillogly's interpretation of what Jason said was written for Hagerty:

*"Compared to the C7, the C8 has an increased 60-0 mph stopping distance. With similar tests of a 2020 Stingray and 2014 Corvette convertible showed the new car takes an additional 7 feet to stop: 97 feet compared to 90. It turns out that the C8's mid-engine configuration, which is biased heavier in the rear then switches to more weight on the front tires as the brakes are applied (aggressively) that makes ABS programing more difficult. As the rear tires get closer and closer to the limit, any steering input makes the car twitchy. The engineers decided that predictable handling at the braking limit was a priority over stopping distance.*

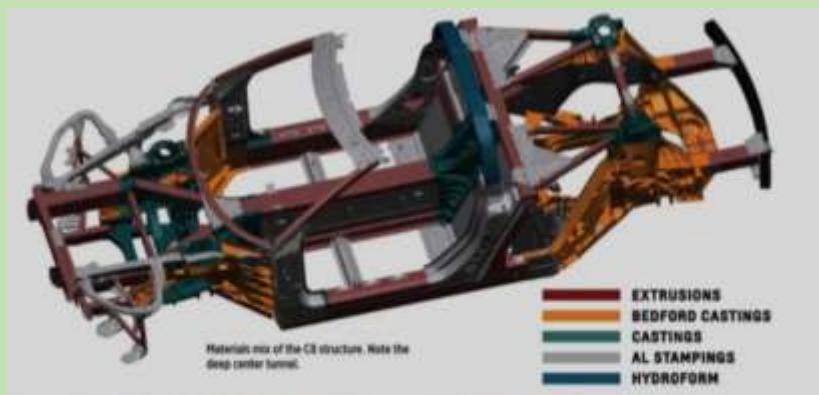
*He states the reason in tougher wording! When pushed to its limits on a track, the C8 Stingray will tend to Understeer. That behavior means that **it helps keep novice drivers from swapping ends and winding up in a ditch!**"*

## WHAT TADGE JUECHTER SAID ABOUT C8 HANDLING

During a 1+ hour interview on Autoline After Hours TV show, Tadge Juechter, Executive Chief Corvette Engineer, was asked: **What his biggest concern was when they were designing the C8 Corvette?**

Tadge Answered: Because I came from a Porsche family and my dad was a fighter pilot and rang his cars out at the limit, **“I was Paranoid and Deathly Afraid of Trailing Throttle Oversteer.”** Throughout the design we did everything we could do to make the car handle benignly. That included: suspension geometry, very stiff attachment at ridged chassis to suspension attachments etc. And not have it feel like it’s getting away from you (*in a high-speed turn.*)

On the subject of chassis construction, he said, unlike the C7 they used much less welding because welding heat causes distortion and the C8 is much more dimensionally stable. In an interview in Motor Trend Magazine, he said:



**Gussets, built into castings! All of the Bedford castings have these gussets.**

“We knew of all the bugaboos that other brands (*read Porsche*) had to discover and correct over a period of many generations ... We were always sensitive to the car’s rear mass with the mid-engine placement. We had to do it right the first time (**AND they did!**)

IMO that may be a key reason they used a novel chassis construction of large precision aluminum castings for the C8.

Tadge said they could not find a supplier, so they had to invest themselves in a GM plant in Bedford Indiana, hence the name!

If you tried to fabricate these thin gussets by welding there would be a lot of

distortion due to the weld heat. For a minimum of weight, the castings make the chassis very ridged. Especially where Tadge said it was needed where the suspension mounts. *He also said, can’t have the chassis flexing like and undamped spring!* Unlike Porsche, who use a rigid unibody type construction to help stiffen the chassis, the C8 body panels provide zero support.



To help understand Tadge's paranoia, this is a definition of *"Trailing Throttle Oversteer"* also known as *Lift-off Oversteer, Snap-Oversteer, Throttle Off Oversteer, or Lift-Throttle Oversteer*; that occurs while cornering when closing the throttle causes a deceleration. This causes the load on the tires to shift from the rear to the front, in a process called load transfer. This decrease in load on the rear tires causes a decrease in the lateral force they can generate. So their lateral acceleration (into the corner) is also decreased. **This causes the vehicle to steer more tightly into the turn, hence oversteering.** In other words, easing off the accelerator can cause the rear tires to lose traction, with the potential for the car to leave the road tail first.

## MY EXPERIENCE WITH OVERSTEER

Had two early "swing axle" Corvairs that, like the C8, had 60% rear weight. I also had a 1967 Corvair with racing prepared mods, like Plus 1 wheels and performance low profile radial tires. Bought the '67 with every HD option GM offered, that included quick steering, HD springs and shocks, sway bar, metallic brakes (*terrible stopping until warm/hot.*) I added a number of mods including headers, carb mods, oil cooling finned pan, valve covers etc. Just like Tadge's dad's early Porsche, it still had "snap oversteer." In fact, you had a fraction of a second to react properly (*the opposite of a front engine car skidding off the road*) or you'd be sliding off in the blink of an eye - rear



first. Porsche and Corvair owners who raced had a saying, *"Better to hit a tree with the rear than plow into it with the front!"* Yep, if going too fast for a turn you were going off the road! More likely issue when racing was when another driver caused you to take less than an ideal line through a turn and you had to lift. But if you reacted like Tony Stewart drives his dirt car (pic left) you might save it! Only had a fraction of a second to turn in the direction of the

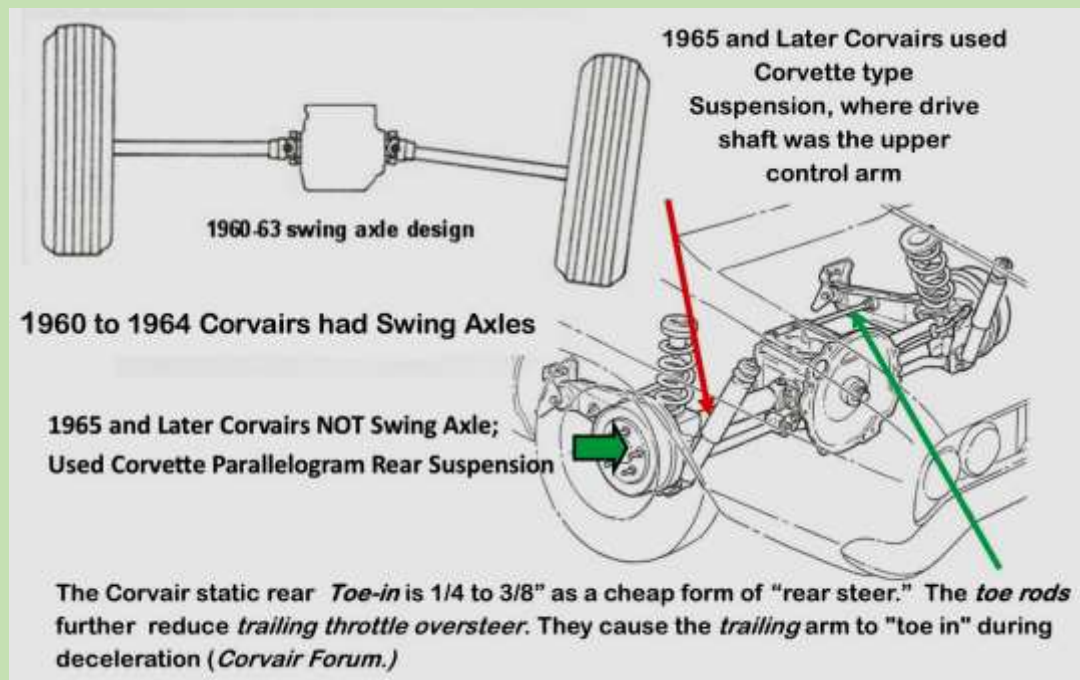
slide, or anticipate like a dirt track racer!

In a front engine car, if going too fast for a turn you are "plowing" off the road front first. A normal and proper reaction, even for folks racing cars, is to turn the wheel further and try to get the front tires to gain grip and move back to the road center. Turn back to the road center with and oversteering rear heavy car and you're just off the road faster, probably looking the other way IF no trees are in the way! You have a split second to react. It became fun, once practiced and as you anticipated the skid, turned like a dirt track driver in the direction of the skid!

I followed what Porsche accomplished over the years from when their rear heavy 912 ('65-'69, same years as the later design Corvair) and 911. As Tadge said they slowly eliminated the Oversteer problem and now with the same rear weight bias have what is considered a great handling car. Lots of progressively learned suspension and other tweaks, which as Tadge said they (GM) **"had to do it right the first time!"**

This is what a November 15, 2017, Road and Track article said re the Corvair, "To avoid spinning the car, I have to counter-steer almost immediately after initiating the turn. I could see how the lightly trained driver might get into trouble. That was Nader's point: The average driver wasn't equipped to handle an over-steering car."

With the C8, Chevy obviously learned what Tadge said took Porsche "generations" to achieve! As the R&T comment said, racers generally prefer an Oversteering or "loose" car (*another word used for Oversteer which those that follow NASCAR will hear.*)



## RALPH NADER

I had two early swing axle Corvairs before the Corvette type rear suspension in my '67 Corvair. Ralph Nader said the swing axle was the safety cause in his foolish book "Unsafe at Any Speed." From his book, it was obvious he knew nothing about cars! He actually used the 1965 and later Corvairs as "PROOF" that GM knew the safety issue as they fixed it with the 1965 and later cars! That was BS, it was a better suspension system BUT the prior Corvair swing axles were used on all VW's and had been for years. Early Porsche's and some other cars like some Mercedes used swing axles. In fact, my skepticism of lawyers started with Nader where he obviously had a goal, and the truth should not stand in the way. One example was the swing axle spring compensator from a JC Whitney catalog he quoted one of bullet benefits that said it made in safer. He didn't include that in that same catalog location they offered one for VW's and Porsche. Lots of other half truths. This skepticism has been reinforced reading most of John Grisham's books. He is a former attorney and defines the BS very well.

## WA Technology

Nader never discussed (*nor probably understood*) one reason for folks skidding off the road was gas station attendants, who pumped gas and also checked tire pressure. Most didn't follow the GM requirement of 16 psi front tire pressure for Corvairs that promoted Understeer. They typically filled all cars with 30 psi all around. That made the Corvair very twitchy and prone to having the ass end slide out in a turn. I recall the OEM tires on my '67 were Uniroyal "Tiger Paws." They were terrible and would "roar" like a Tiger with about 0.5 "g" in a turn! Yep, kept the average driver out of trouble! Tossed those a few months after I got the car!

The thing that ticked me off most was when I bought my 1974 Datsun 260Z it had a government dictated buckle your seat belt or the car would not start! I thought that was fine as it made my passengers use their belt when back-in-the-day many did not want to! Congress bent to public pressure and eliminated that feather and Ralph Nadar never said a word. He was pushing stupid 5 mph crash bumpers that don't help cost much as the crushable sections cost a lot more to repair!

***I WAS CONCERNED, LIKE TADGE , THAT IF THE C8 OVERSTEERED MANY DRIVERS COULD GET IN TROUBLE AND BLAME THE CAR! Glad they solved that issue!***

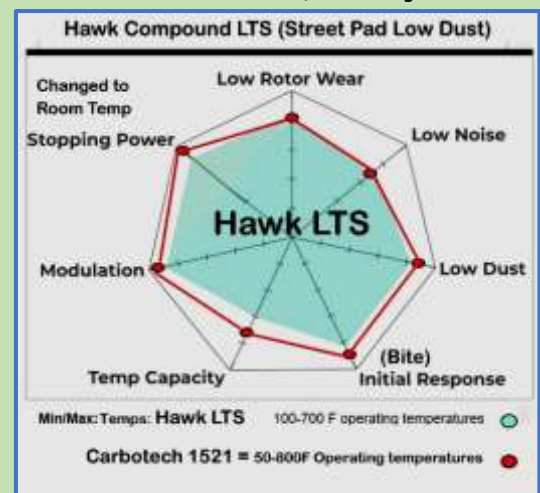
I can understand the concern for the average driver that bigger brakes could cause in panic stops or if you were foolish and applied them when in a turn because you realized you were going too fast. Just have to learn and practice dealing with the issue for the quicker stops they can provide! Loved racing my modified '67 Corvair.

It had metallic brakes that stopped fine when hot BUT were terrible at ambient temp! Ambient temp performance was the reason I tossed the PowerStop Z26 brakes on my 2017 Grand Sport after 900 miles.\* They were not that bad, but not as good as my 2014 Z51 stopped with Carbotech 1521 pads for 3 years. And they should have stopped better having bigger rotors, brake pads and 6 piston front calipers! Stopped fine when warm/hot but not when at ambient temp where I need great braking leaving a ~70 mph highway turning onto a small rural road. The Carbotech 1521 pads I replaced those with stopped great when at ambient temp, even better that the 2014 C7 Z51, as they should.

*\*If you want "Just the Technical Facts" about low dust brake pads from several vendors with my and others observations, start with pages 30 to 32 in the Appendix on my How To Install C8 Brake pads PDF:*

<http://netwelding.com/Ceramic Pads.pdf>

*There is a lot more to good braking than ABS stopping distance, like Modulation, Initial Bite, Low Temp Friction. Left is an Octagonal comparison chart of a quality Hawk street pad with Carbotech 1521 low dust street pad added.*





**An Interesting Braking Comparison:** was published by Car & Driver July 5, 2023. They tested a C8 Z06 w/Z07 package and a Porsche 911 GT3. I was most interested that with significantly smaller width tires the Porsche stopped faster than the C8 Z06. Both with Ceramic Brakes and Michelin Pilot Sport Cup 2R. Porsche front brakes were just slightly larger BUT for smaller width tires. The 911 GT3 is 10% lighter that is a factor for shorter stops. The E-Ray takes even longer but is 17% heavier. My 2017 C7 Grand Sport was only 4.5% heavier and has ~10% smaller brakes but stopped almost as fast! With CCB brakes the C7 Grand Sport stopped even faster!

**Was GM Concerned of Possible Oversteer with Aggressive Stops Z06 and E-Ray?**



Car	F/Rotor	R/Rotor	Front Tire	Rear Tire	70 to 0	100 to 0
<b>C8 Z06 w/Z07</b> 3550 lb	15.7 in. Ceramic	15.4 in. Ceramic	Michelin Pilot Sport Cup 2R ZP <b>275/30/20</b>	Michelin Pilot Sport Cup 2R ZP <b>345/25/21</b>	<b>143 feet</b>	<b>280 feet</b>
<b>Porsche 911 GT3</b> 3216 lb	16.1 in. Ceramic	15.0 in. Ceramic	Michelin Pilot Sport Cup 2R C <b>255/35/20</b>	Michelin Pilot Sport Cup 2R C <b>315/30/21</b>	<b>133 feet</b>	<b>259 feet</b>
<b>E-Ray W/ZER</b> 3774 lb	15.7 in Ceramic	15.4 in. Ceramic	Michelin Pilot Sport 4S ZP <b>275/30/20</b>	Michelin Pilot Sport 4S ZP <b>345/25/21</b>	<b>152 feet</b> C&D	<b>300 feet</b> C&D
<b>C7 Grand Sport</b> 3363 lb	14.6 Iron 6 Piston	14.4 Iron 4 Piston	Michelin Pilot Super Sport SP <b>285/30/19</b>	Michelin Pilot Super Sport SP <b>335/25/20</b>	<b>136'</b> <b>129'/w</b> CCB C&D	<b>?</b>

Note: The E-Ray stops “Great” brakes are Warm/Hot. “Good” with ambient temp pads. Carbotech makes their 1521 street only pads to fit the C8 Z06 and E-Ray. They have made and are used on C7 Vettes with CCB brakes for street only driving. They have excellent stopping power from ambient to warm (*not designed for very hot, Tracking.*) Talked to one of their brake engineers who said they will stop great at ambient temps on the CCB rotors as they had on my Grand Sport with ambient temp pads, which was great Will follow if anyone switches to **“better stopping ambient temp pads.”**

# *WA Technology*

## References:

**Jason Fenske** Video ~ 3 minutes in:

[5 Genuinely Impressive "Flaws" Of The C8 Corvette - Bing video](#)

**Brandan Gillogly**, Interpretation of Jason's comments written for Hagerty

<https://www.hagerty.com/media/news/the-c8-corvette-is-not-without-flaws/>

**Autoline After Hours** Interview Tadge Juechter ~9 minutes in:

<https://www.youtube.com/watch?v=BBfXm1Yczdo>

**Motor Trend** Interview with Tadge Juechter

<https://www.motortrend.com/how-to/1907-2020-c8-corvette-engineering-interview-tadge-juechter/>










## “60” E-Ray, C8 Z51, 2017 Grand Sport & 2014 Z51 Stingray Mods or Info Available As PDFs:



60 PDFs discuss improvements or info about a E-Ray, C8, 2017 Grand Sport, 2014 Z51 Stingray function and/or esthetics. Some are minor and others, like 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 [TechSupport@NetWelding.com](mailto:TechSupport@NetWelding.com) and state the title desired, shown in Yellow:

<b>E-Ray PDI &amp; Info</b> <i>Details of My E-Ray PDI</i> <a href="http://netwelding.com/E-Ray_PDI.pdf">http://netwelding.com/E-Ray_PDI.pdf</a>	
<b>E-Ray 1<sup>st</sup> Mod</b> <i>Details of My E-Ray Cross Brace</i> <a href="http://netwelding.com/E-Ray_Mod_1.pdf">http://netwelding.com/E-Ray_Mod_1.pdf</a>	
<b>E-Ray Need Lift?</b> <i>Yep, How I Scraped My Front Aero Panel</i> <a href="http://netwelding.com/E-Ray_Lift.pdf">http://netwelding.com/E-Ray_Lift.pdf</a>	
<b>E-Ray PPF Bottom Of Rocker Panels</b> <i>Small Amount of PPF Added To Rocker Panels</i> <a href="http://netwelding.com/E-Ray_PPF.pdf">http://netwelding.com/E-Ray_PPF.pdf</a>	
<b>E-Ray Tire Slide</b> <i>Safe way to remove and install wheels</i> <a href="http://netwelding.com/E-Ray_Tire_Slide.pdf">http://netwelding.com/E-Ray_Tire_Slide.pdf</a>	
<b>C8 Bigger Brakes</b> <i>C8 Brakes Are Anemic Compared to Other MEs</i> <a href="http://netwelding.com/C8_Big_Brakes.pdf">http://netwelding.com/C8_Big_Brakes.pdf</a>	
<b>C8 PDR SD Card Selection</b> <i>Things to Consider When Buying SD Card</i> <a href="http://netwelding.com/PDR_SD_Card.pdf">http://netwelding.com/PDR_SD_Card.pdf</a>	

<p><b>E-Ray, C8, C7 eLSD vs Positraction</b>  <i>eLSD is a Modern Dif; Positraction is from 1960s</i>  <a href="http://netwelding.com/eLSD_VS_Pos.pdf">http://netwelding.com/eLSD_VS_Pos.pdf</a></p>	
<p><b>E-Ray, C8 FWD Hybrid</b>  <i>WFWD Hybrid Provides More Power &amp; MPG</i>  <a href="http://netwelding.com/C8_FWD_Hybrid.pdf">http://netwelding.com/C8_FWD_Hybrid.pdf</a></p>	
<p><b>C8 Edge Red Engine Cover</b>  <i>Engine Cover Matches Valve Cover</i>  <a href="http://netwelding.com/Engine_Cover.pdf">http://netwelding.com/Engine_Cover.pdf</a></p>	
<p><b>C8 Engine Compartment Lights</b>  <i>Multicolor Lights Remote operated</i>  <a href="http://netwelding.com/Engine_Lights.pdf">http://netwelding.com/Engine_Lights.pdf</a></p>	
<p><b>C8 Side Skirts &amp; Splitter</b>  <i>Install C7 Carbon side skirts &amp; splitter on C8</i>  <a href="http://netwelding.com/Side_Skirts.pdf">http://netwelding.com/Side_Skirts.pdf</a></p>	
<p><b>C8 Z51, GS/C7 Z51 Ceramic Brake Pads</b>  <i>Performance Vettes have dusty brakes. These help!</i>  <a href="http://netwelding.com/Ceramic_Pads.pdf">http://netwelding.com/Ceramic_Pads.pdf</a></p>	
<p><b>C8 Low Restriction Air Intake</b>  <i>Low Restriction Air Filter Why &amp; How To</i>  <a href="http://netwelding.com/C8_Air_Intake.pdf">http://netwelding.com/C8_Air_Intake.pdf</a></p>	
<p><b>C8 &amp; C7 Splitter &amp; C8 Condenser Mesh</b>  <i>Mesh Protects AC Condenser &amp; Splitter Install</i>  <a href="http://netwelding.com/CF_Splitter.pdf">http://netwelding.com/CF_Splitter.pdf</a></p>	
<p><b>C8 NAV SD Card Removed Error</b>  <i>Error When SD Card and Reader Are Fine</i>  <a href="http://netwelding.com/NAV_SD_Card.pdf">http://netwelding.com/NAV_SD_Card.pdf</a></p>	
<p><b>C8/GS/C7 Splash Guards</b>  <i>GM splash guards. ACS Best Front Guards for GS.</i>  <a href="http://netwelding.com/Splash_Guard.pdf">http://netwelding.com/Splash_Guard.pdf</a></p>	
<p><b>Jacking a E-Ray/C8/GS/C7 Vette</b>  <i>Safely jacking either front only or back &amp; front</i>  <a href="http://netwelding.com/Jacking_A_C7.pdf">http://netwelding.com/Jacking_A_C7.pdf</a></p>	
<p><b>E-Ray, C8 &amp; C7 Plates &amp; Frame;</b>  <i>Must Meet South Carolina Law</i>  <a href="http://netwelding.com/License_Plate_Frame.pdf">http://netwelding.com/License_Plate_Frame.pdf</a></p>	
<p><b>Change C8/GS/C7 Oil</b>  <i>WHY change your own oil and C7 Lifting Methods</i>  <a href="http://netwelding.com/Changing_Oil.pdf">http://netwelding.com/Changing_Oil.pdf</a></p>	
<p><b>E-Ray/C8/GS/C7 Mirror Proximity Alarm</b>  <i>Limit switch alarm warns when close to door frame</i>  <a href="http://netwelding.com/Mirror_Proximity_Alarm.pdf">http://netwelding.com/Mirror_Proximity_Alarm.pdf</a></p>	

<p><b>Jacking Pads for E-Ray/C8/GS/C7</b>  Manual says Jacking Pads 2 1/2-inch max OD..  <a href="http://netwelding.com/Jacking_pads.pdf">http://netwelding.com/Jacking_pads.pdf</a></p>	
<p><b>E-Ray/C8/GS/C7 Radar Power</b>  For C7 tapped rear fuse panel. For GS tapped mirror  <a href="http://netwelding.com/Radar_Detector_Power.pdf">http://netwelding.com/Radar_Detector_Power.pdf</a></p>	
<p><b>E-Ray, C8 &amp; C7 Wheel Chatter/Hop</b>  Why sharp, low speed turns with cold tires causes  the front tires to chatter/hop.  <a href="http://netwelding.com/Wheel_Chatter.pdf">http://netwelding.com/Wheel_Chatter.pdf</a></p>	
<p><b>E-Ray/C8/GS/C7 Wheel Locks</b>  Wheel locks, help protect your expensive wheels.  <a href="http://netwelding.com/Wheel_Locks.pdf">http://netwelding.com/Wheel_Locks.pdf</a></p>	
<p><b>Deer Whistle Installed on E-Ray/C8/GS/C7</b>  Do they work? Plus Install Info  <a href="http://netwelding.com/Deer_Whistle.pdf">http://netwelding.com/Deer_Whistle.pdf</a></p>	
<p><b>C8 &amp; C7 Splitter Protector</b>  Scrape Armor Protection for Splitter  <a href="http://netwelding.com/Splitter_Protectors.pdf">http://netwelding.com/Splitter_Protectors.pdf</a></p>	
<p><b>E-Ray, C8 &amp; C7 Cargo Area</b>  Rear cargo area storage device and rear protector  <a href="http://netwelding.com/Rear_Cargo_Area.pdf">http://netwelding.com/Rear_Cargo_Area.pdf</a></p>	
<p><b>C8 Front Coilover Tower Covers</b>  Prevent water from filling Cast aluminum cavities  <a href="http://netwelding.com/Tower_Covers.pdf">http://netwelding.com/Tower_Covers.pdf</a></p>	
<p><b>C8.R Info &amp; GS Rear Diffuser (Fits Any C7)</b>  Rear Carbon Flash Composite Diffuser  <a href="http://netwelding.com/Rear_Diffuser.pdf">http://netwelding.com/Rear_Diffuser.pdf</a></p>	
<p><b>GS/C7 Belt Rattle</b>  Passenger seat belt rattles against the seat back.  <a href="http://netwelding.com/Eliminate_Rattle.pdf">http://netwelding.com/Eliminate_Rattle.pdf</a></p>	
<p><b>Aluminum C8 &amp; C7 Chassis and Repair</b>  The C7 aluminum chassis. Includes weld repair info.  <a href="http://netwelding.com/Aluminum_Chassis.pdf">http://netwelding.com/Aluminum_Chassis.pdf</a></p>	
<p><b>Manage GS/C7 Spilled Gas &amp; Door Lock</b>  Protect when filling gas. Preventing door lock failure.  <a href="http://netwelding.com/Manage_Spilled_Gas.pdf">http://netwelding.com/Manage_Spilled_Gas.pdf</a></p>	
<p><b>GS/C7 License Plate Light</b>  LED license plate light &amp; cargo area bulbs  <a href="http://netwelding.com/License_Plate_Light.pdf">http://netwelding.com/License_Plate_Light.pdf</a></p>	
<p><b>E-Ray/GS/C7 Door Panel Protector</b>  Black plastic protector prevents scuffing of door  <a href="http://netwelding.com/Door_Panel_Protector.pdf">http://netwelding.com/Door_Panel_Protector.pdf</a></p>	



<p><b>GS/C7 Improved Cup Holder</b>  <i>A solution to the cup holder spilling</i>  <a href="http://netwelding.com/Improved_cup_Holder.pdf">http://netwelding.com/Improved_cup_Holder.pdf</a></p>	
<p><b>C7 Carbon Fiber Grille Bar</b>  <i>Install genuine carbon fiber grille bar overlay</i>  <a href="http://netwelding.com/CF_Grille_Bar.pdf">http://netwelding.com/CF_Grille_Bar.pdf</a></p>	
<p><b>GS/C7 Blind Spot Mirror</b>  <i>Smaller rear and side windows cause C7 blind spots.</i>  <a href="http://netwelding.com/Blind_Spot.pdf">http://netwelding.com/Blind_Spot.pdf</a></p>	
<p><b>GS/C7 Skid Pad Protector</b>  <i>After the air dam, the aluminum "skid pad" hits</i>  <a href="http://netwelding.com/Skid_Pad_Protector.pdf">http://netwelding.com/Skid_Pad_Protector.pdf</a></p>	
<p><b>GS/C7 OnStar Lights</b>  <i>Rear view mirror OnStar LED's, at a quick glance, look like a police car flashing light! This is a fix.</i>  <a href="http://netwelding.com/OnStar_Lights.pdf">http://netwelding.com/OnStar_Lights.pdf</a></p>	
<p><b>GS/C7 Skip Shift Eliminator</b>  <i>Skip Shift Eliminator install</i>  <a href="http://netwelding.com/Skip_shift_Eliminator.pdf">http://netwelding.com/Skip_shift_Eliminator.pdf</a></p>	
<p><b>GS/C7 Catch Can &amp; Clean Oil Separator</b>  <i>What is Coking and how to reduce the potential</i>  <a href="http://netwelding.com/Catch_Can.pdf">http://netwelding.com/Catch_Can.pdf</a></p>	
<p><b>GS MGW Flat Stick Shifter</b>  <i>The MGW shifter shortens throw and is more precise</i>  <a href="http://netwelding.com/MGW_Shifter.pdf">http://netwelding.com/MGW_Shifter.pdf</a></p>	
<p><b>GS/C7 Round Shift Knob</b>  <i>A round shift knob shortens throw on OEM shifter</i>  <a href="http://netwelding.com/Shift_Knob.pdf">http://netwelding.com/Shift_Knob.pdf</a></p>	
<p><b>GS/C7 Stingray Sill Plate</b>  <i>Stingray sill plate replaces original.</i>  <a href="http://netwelding.com/Sill_Plate.pdf">http://netwelding.com/Sill_Plate.pdf</a></p>	
<p><b>GS/C7 Nylon Bra</b>  <i>Nylon Bra Stops Bugs. Fits with Stage 3 Winglets</i>  <a href="http://netwelding.com/Nylon_Bra.pdf">http://netwelding.com/Nylon_Bra.pdf</a></p>	
<p><b>GS/C7 Clutch Fluid Change</b>  <i>Clutch fluid after 3000 miles gets dirty</i>  <a href="http://netwelding.com/Clutch_Fluid.pdf">http://netwelding.com/Clutch_Fluid.pdf</a></p>	
<p><b>C7 Carbon Fiber Hood Vent</b>  <i>Replaces Plastic Hood Vent</i>  <a href="http://netwelding.com/Hood_Vent.pdf">http://netwelding.com/Hood_Vent.pdf</a></p>	
<p><b>GS/C7 Cold Air Intake</b>  <i>Low Restriction Air Filter &amp; Duct</i>  <a href="http://netwelding.com/Cold_Air_Intake.pdf">http://netwelding.com/Cold_Air_Intake.pdf</a></p>	

<p><b>GS/C7 Soler Modified Throttle Body</b>  <i>For Improved Throttle Response</i>  <a href="http://netwelding.com/Soler_Mod_TB.pdf">http://netwelding.com/Soler_Mod_TB.pdf</a></p>	
<p><b>GS Splitter Stage 3 Winglet</b>  <i>Stage 3 Winglets Integrate with Spats</i>  <a href="http://netwelding.com/Stage_3_Winglets.pdf">http://netwelding.com/Stage_3_Winglets.pdf</a></p>	
<p><b>C7 Removing GM Plastic Film</b>  <i>How To Remove The Rocker Panel Film</i>  <a href="http://netwelding.com/Rocker_Panel_Film.pdf">http://netwelding.com/Rocker_Panel_Film.pdf</a></p>	
<p><b>GS 2LT to 2.5 LT</b>  <i>Red Upper Dash Pad Like 3LT</i>  <a href="http://netwelding.com/Red_Dash_Pad.pdf">http://netwelding.com/Red_Dash_Pad.pdf</a></p>	
<p><b>Jake Emblem/Decals for GS</b>  <i>Jake Symbols Support GS Racing Image</i>  <a href="http://netwelding.com/Jake_Emblems.pdf">http://netwelding.com/Jake_Emblems.pdf</a></p>	
<p><b>Rusty GS/C7 Muffler</b>  <i>Why the C7 muffler rusts way to turn matte black.</i>  <a href="http://netwelding.com/Muffler_Rust.pdf">http://netwelding.com/Muffler_Rust.pdf</a></p>	
<p><b>GS Engine Compartment Mods</b>  <i>Cosmetic Additions in Engine Compartment</i>  <a href="http://netwelding.com/Engine_Compartment.pdf">http://netwelding.com/Engine_Compartment.pdf</a></p>	
<p><b>GS Vitesse Throttle Controller: Fits All C7s</b>  <i>Adjustable Throttle-by-Wire Control</i>  <a href="http://netwelding.com/Throttle_Control.pdf">http://netwelding.com/Throttle_Control.pdf</a></p>	
<p><b>Boomy Bass Solution</b>  <i>Use Presets to Adjust Bass etc. Tone/Balance</i>  <a href="http://netwelding.com/Boomy_Bass">http://netwelding.com/Boomy_Bass</a></p>	
<p><b>GS/C7 Air Dam, Functions</b>  <i>Why Missing from Z51, Some GS &amp; Z06</i>  <a href="http://netwelding.com/Air_Dam.pdf">http://netwelding.com/Air_Dam.pdf</a></p>	
<p><b>Rusty GS/C7 Muffler</b>  <i>Why the C7 muffler rusts way to turn matte black.</i>  <a href="http://netwelding.com/Muffler_Rust.pdf">http://netwelding.com/Muffler_Rust.pdf</a></p>	
<p><b>Engineering a ProStreet Rod</b>  <i>How Our '34 ProStreet Rod Was Designed and Built</i>  <a href="http://netwelding.com/Engineering%20Street%20Rod%203-08.pdf">http://netwelding.com/Engineering%20Street%20Rod%203-08.pdf</a></p>	
<p><b>Motorsports Welding Article</b>  <i>Wrote Article on NHRA and NASCAR Chassis Design</i>  <a href="http://netwelding.com/Motorsports_Welding_2018.pdf">http://netwelding.com/Motorsports_Welding_2018.pdf</a></p>	