WA Technology

Safe Removal of E-Ray Wheel/Tire with "Tire Slide"
Rear Vent Mesh for Wide Body E-Ray & Z06

Removing Wheels and Tires: Critical for You and the CCB Rotors to Do Safely:

Had a slow leak in a front tire. Have Discount "Tire Insurance" for the E-Ray so IF a new tire is needed, free to me. BUT removing the tire/wheel on an E-Ray with its CCB ceramic rotors requires care. If the heavy wheel drops on the rotor, could mean new rotor! Had purchased Steelman 8 inch Long M14 X 1.5 Female Thread Lug Extenders from Amazon for ~$80. Worked great to get the wheel off.

But putting the wheel back was not as easy. Heavy to lift. As I have in the past used my extended legs to lift the tire on to the lug extenders. To assure the inside of the wheel did not touch the tire, used what is recommended and supplied with the car, foam protectors. Four are supplied with the E-Ray and I installed two. One protects the upper part of the rotor the other the bottom.

With my Nickel Pewter wheels with large openings between the 5 spokes allowed installing or removing the foam rotor protectors with the wheel installed, easily.

Turned out the slow leak was due to a nail, like a roofing nail, that had punctured the tire and came out. Discount Tire used a Plug/Patch and repaired, Free to me. As I did for two 2020 C8 tires. The 1st required replacement and 2nd repair. I offered a $20 tip IF there were no marks on the rim! All Techs earned the tip!

It was difficult enough to lift to install the front wheel with 275 section width tires on 10 inch wide rims. But thought, what about the heavier rear tires that are 345 section width on 13 inch wide rims? Heck my 8 inch long lug extensions won't allow the rim to be removed or installed without the ceramic rotors being exposed to being hit by the wheel rim. Yep I would use the foam rotor protectors but lifting with my extended legs under the heavy wheel would be difficult.

Thought what I need is a board with wheels to "SLIDE" the wheel/tire off and on.

"TIRE SLIDE": Pics of What I Made for $10 and Scrap Wood!

There are tire lifts with casters available for sale. Some can support enough weight to actually move the car IF you use four.

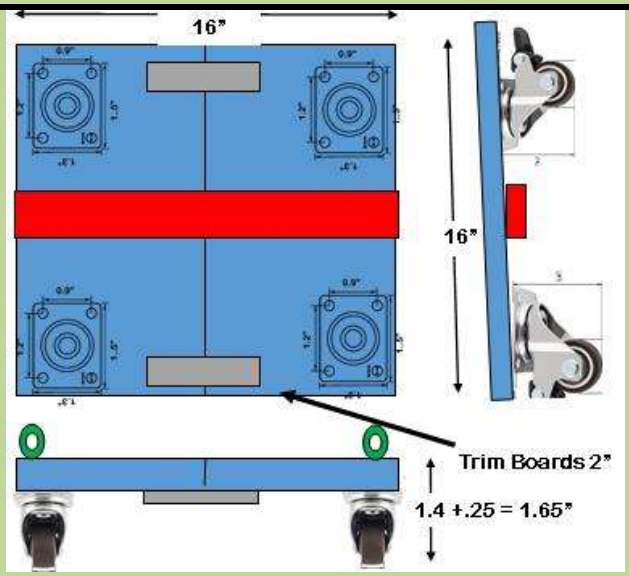
None are wide enough for 345 section width (13.6 inches) rear tire and not what I need.

For my occasional use, also need something easy to store.

This is a sketch of what I planned to make from some scrap wood with small casters. *A "Tire Slide."*

Had a 1/4 inch thick board that was 10 inches wide in my pile of "might need some day" stash! Determined measuring the rear tire, that a 16 inch square board work be best.

By trimming the 10 inch board to 8 inches and joining two pieces together would work.

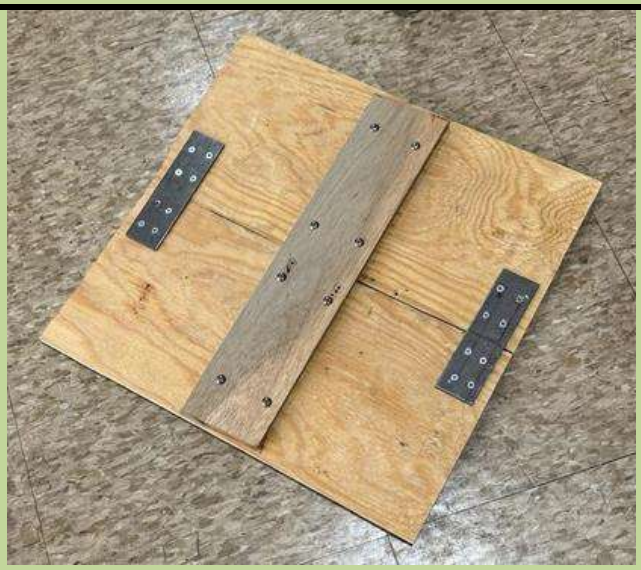


Found perfect small casters on Amazon for $10. Total load capability is 100 lbs, more than needed for a tire and wheel. They have ball bearing swivels.

Very well made. Surprised they can be made, shipped from China, a supplier in China making sufficient profit and Amazon making a profit, shipping free to me! Heck, cost me ~$9 to ship my smaller products via USPS in a Padded Envelop!

Joined two 8" wide by 16" long pieces of ¼ inch thick wood with a wood strip in the center and two metal plates on the ends.

All were screwed to the 8" X 16" boards making the 16" square needed.



Board painted matte gray.

The casters came with 16+ screws that were perfect length for attaching to the ¼ inch thick board.

Pic of "Tire Slide"

In Pic are ½" hollow aluminum square tubes (*I had in my stash of scrap stuff)* on outside edges to stop tire from rolling off the "Tire Slide."

TO USE FOR REMOVAL: **Three wheel stud extensions are installed (as shown.)**

The car is raised with Jack so tire is ~2" off ground to clear the ~1 ¾ inch high "Tire Slide." The "Tire Slide" is placed under the wheel. When remaining 2 lugs are removed, wheel is pulled off the lug extensions and it drops down ~¼", Rotor not Touched.

Similar installing. Only need to lift ~¼ inch to put onto lug extensions.

An important part of this infrequently used "Tire Slide," is limited room needed to store. Here it is on a shelf with the two wood wheel stanchions I made in 2014. Those have been used to support one end of my 2014 Vette while jack stands were used on the other to change oil. Same with my 2017 Grand Sport.

For my 2020 C8 they were used to install side skirts, splitter and as was shown here with the E-Ray for support under the "A" arm for safety after removing the front tire.

Had Need to Remove Rear Tire

As thought, more difficult than front as 8 inch long lug entensions will not clear 13 inch rims, as they did the 10 inch wide front wheel!

Wanted to a safely lift so used my light weight race jack employing an approach similar to a fellow who used my *How To change* brake pads. Have a 1" high jack pad in oval Lift Slot. Have a 10" high jack stand that can be placed close to the Jack/Lift Pad.

With tire ~2 inches off floor, Jack Stand has clearance to frame.

Decided could fit my Jack Stand Plastic Pad that just barely fit snug with no load on the E-Ray frame.

Full rear corner car load is on the Jack and the Jack Stand is just a safety precaution.

1st: Installed Foam Pads on the Ceramic Rotor. Cut 1/3 off top one to fit between caliper and Parking Brake. Full on bottom. Both fit fine and installed easily thru 5 spoke wheel. Will be easy to remove when wheel is installed.

2nd: Installed 3 Lug Extensions. 3rd: Put "Tire Slide" under tire. 4th: Pulled tire off and it dropped ~ ¼ inch onto Tire Slide. Rim never came close to ceramic rotor!

Discount Tire Insurance Saved The Day

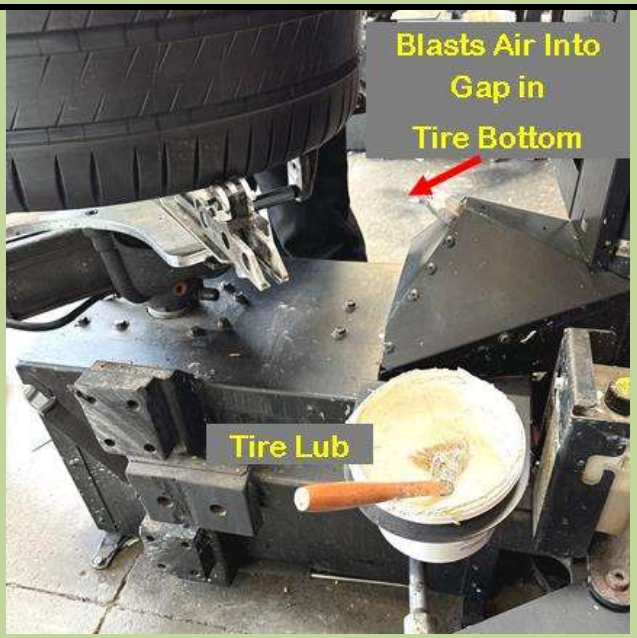
The parking lot at Harris Teeter is always crowed but after installing a Gas Sation on one corner it's a mess. They have left curbs that separated lanes, which should have been removed, I hit one that caused rubber to be pulled from a sidewall. Drivable but earned a new tire with my insurance, I bought week one!

Young Tech had no issue getting old tire off. In addition to the very wide tire that 13 inch wide rim is intimidating.

Store Manager helped get the install of new tire started. He tossed it on and pushed with his body to get it started. Went on pretty easy.

Getting the tire to seat on the rim was another matter. Young Tech tried what they called the air blaster to squirt air in the bottom gap while he used high pressure in the valve stem. He tired another air blaster on a top gap, but still would not seat.

He did not use what they had a month ago on my front tire. They removed the tire pressure sender by having a thin wire hold it in the wheel while a direct air blast was put in the hole. Was told that was the last resort! *Tech was assigned to another job!*



The Manger came out and after trying a few things, removed some fittings on an air hose so he had unrestricted high line pressure flow. Inserted on the valve stem with high line pressure. I heard a loud SNAP. It was seated. Another Tech balanced. Took very little weight.

Brought new tire home.

Put tire on "Tire Side." Easy, just rolled over 1/2" aluminum side tube! Centered one lug hole up by rolling. Ready to capture top Lug Extension.

So bottom Lug Extensions didn't interfere with top one entering 1st placed a ½ inch wood block in front, tiling tire with small amount of negative camber. That worked great.

After top lug extender entered wheel, two others followed. Slid wheel on extensions. No lifting, no lifting with legs under tire, as I did with front tire!
"TIRE SIDE" WORKED PERFECTLY.

With all three lug extensions still in place installed lug nuts on the remaining two wheel studs. Tightened them snug to wheel hub so it was held and centered by the lug nuts not the Lug Extensions.

After two lug nuts were installed, removed the bottom lug extensions and installed and snugged those two lug nuts.

The top Lug Extension was removed last and its lug nut put in place. Lightened all sufficiently with ½ inch ratchet so car could be lowered.

The Jack Stand, that was just being used for safety security, was pulled out. Jack had not budged at all in two days.

Removed foam pads from rotor.

Used torque wrench in 3 steps:

1st 75 ft-lbs

2nd 110 ft-lbs

3rd the specified 140 ft-lbs.

Removed wheel chock from left side.

With Rear Tire Removed, Opportune Time to Install Mesh in Open Rear Side Vent

Custom Car Grills (CCG} offers for two mesh pieces that fit for $29. Can't beat the price. Their instructions are very simple. Used those for this install.

I had some leftover *CCG* Mesh from my 2020 C8 grill mesh install, so used it.

As *CCG* notes, the mesh is held in by a gap in Mud Guard with the outer fender.

I had PPF installed on my rockers behind the ¾ length side skirts and behind the rear tires. Tech installing on the rear showed me gravel that was laying on bottom of vent. Mesh prevents some from accumulating.

The CCG ¼ inch hex power coated black mesh is about the same size mesh in the center of the rear E-Ray.

ACS Rear Rock Guard
~$529

Of interest, ACS supplies rear Rock Guards (*replacing OEM Mud Guards*) for the E-Ray rear vents. They also incorporate mesh in their design.

But in the ACS Website they show a Z06 with not only the Coarser than ¼ inch hex mesh but with fine mesh behind the coarser plastic mesh that is molded with the Rock Giard.

Could always attached a fine mesh to the CCG ¼ inch Hex BUT as when it's used to protect the front Rads IMO good enough to stop pebbles thrown by the rear tires dinging the front painted opening,

Custom CARGRILLS

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INSTALLATION INSTRUCTIONS

What's in the Box: (2) Rear Mesh Pieces

Tool List:
Jack & stands or a lift
22mm lug wrench
T15 Torx driver
7mm socket & rachet

1. Loosen the (5) 22mm lug nuts on both rear wheels.
2. Elevate the car off the ground.
3. Remove the (5) 22mm lug nuts on both rear wheels. Remove the rear wheels from the car, and set them off to the side.
4. Remove the two (2) T15 screws from the rear mud guard bezel in the wheel well, circled in red on the first image to the right.
5. Remove the one (1) 7mm bolt underneath the rear mud guard bezel, located on the bottom of car, and circled in green on the second image to the right.
6. Pull rear mud guard bezel at edge of rear wheel well to release three (3) clips.

The CCG Mesh inserts come with instructions. They have Pics with each step but left is the text and tools required.

Very simple easy install. If you have a rear tire off for whatever reason, install. It will keep large pebbles thrown the huge rear tires from dinging the paint at the open exit.

Step by step procedures with pics follow.

To install mesh need tire removed. First remove the two T15 screws from back of Mud Guard.

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Next, remove the one 7mm bolt holding the Mud Guard from underneath.

Last, there are 3 clips holding the Mud Guard that are on the Outer Edge. Normally would require a Trim Tool but *CCG* instructions and what I found- NOT NEEDED.

Just pull from the outer edge with your fingers.

I made a mesh pattern by tracing around the lip (yellow Arrow) that will hold the mesh between the Mud Guard and outer fender part. Where it inserts Can feel the gap before removing. Note gap is only on the inside not outside. Pics are my cardboard pattern and cut mesh.

Mesh just rests in place before Mud Guard is installed.. At first it appears the gap that holds the mesh is on both sides. BUT it is only on the inside of car. Can feel where the gap with your fingers before removing the Mud Guard.

Mine could have been placed slightly higher in gap. But it works, and looks fine from outside.

Finished vent with Mesh installed. View from inside and from behind Mud Guard.

Should help avoid what Tech installing PPF found, a large pebble sitting on bottom that could have left a ding in exterior body panel paint.

Thought I would wait for a need to remover the driver's side rear wheel to install mesh in that opening. Came sooner that I wanted!

This piece of what looks like ceramic tire was removed from the center of the tire by Discount Tire! They were able to use a Plug Patch and repair.

With tire removed to bring to Discount Tire for repair, before reinstalling opportunity to install left side mesh.

Now symmetrical and both sides match!

The Left side was the same as the right. Pic on left is OEM Mud Guard removed. Oi on right is with mesh being held in place only by its sides pressing in opening. Once Mud Gard is reinstalled it is sandwiched permanently in place.

Left side finished with mesh installed held my OEM Mud Guard reinstalled.. Drop light shining thru opening before rear wheel reinstalled makes mesh visible.

Will stop rocks dinging the painted body opening,

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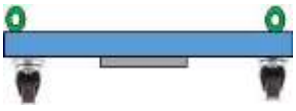
"60" E-Ray, C8 Z51, 2017 Grand Sport & 2014 Z51 Stingray Mods or Info Available As PDFs:

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* **and state the title desired, shown in Yellow:**

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

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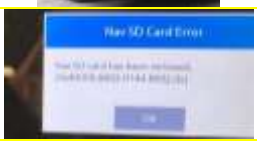
E-Ray, C8, C7 eLSD vs Positraction ***eLSD is a Modern Dif; Positraction is from 1960s*** **http://netwelding.com/eLSD _VS_Posi.pdf**	
E-Ray, C8 FWD Hybrid ***WFWD Hybrid Provides More Power & MPG*** **http://netwelding.com/C8_FWD_Hybrid.pdf**	
C8 Edge Red Engine Cover ***Engine Cover Matches Valve Cover***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

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Jacking Pads for E-Ray/C8/GS/C7 ***Manual says Jacking Pads 2 1/2-inch max OD..*** **http://netwelding.com/Jacking_pads.pdf**	
E-Ray/C8/GS/C7 Radar Power ***For C7 tapped rear fuse panel. For GS tapped mirror*** **http://netwelding.com/Radar_Detector_Power.pdf**	
E-Ray, C8 & 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***	
E-Ray/C8/GS/C7 Wheel Locks ***Wheel locks, help protect your expensive wheels.*** **http://netwelding.com/Wheel_Locks.pdf**	
Deer Whistle Installed on E-Ray/C8/GS/C7 ***Do they work? Plus Install Info*** ***http://netwelding.com/Deer_Whistle.pdf***	
C8 & C7 Splitter Protector ***Scrape Armor Protection for Splitter*** **http://netwelding.com/Splitter_Protectors.pdf**	
E-Ray, C8 & C7 Cargo Area ***Rear cargo area storage device and rear protector*** **http://netwelding.com/Rear_Cargo_Area.pdf**	
C8 Front Coilover Tower Covers ***Prevent water from filling Cast aluminum cavities*** **http://netwelding.com/Tower_Covers.pdf**	
C8.R Info & GS Rear Diffuser (Fits Any C7) ***Rear Carbon Flash Composite Diffuser*** **http://netwelding.com/Rear_Diffuser.pdf**	
GS/C7 Belt Rattle ***Passenger seat belt rattles against the seat back.*** **http://netwelding.com/Eliminate_Rattle.pdf**	
Aluminum C8 & C7 Chassis and Repair ***The C7 aluminum chassis. Includes weld repair info.*** **http://netwelding.com/Aluminum_Chassis.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 Light ***LED license plate light & cargo area bulbs*** **http://netwelding.com/License_Plate_Light.pdf**	
E-Ray/GS/C7 Door Panel Protector ***Black plastic protector prevents scuffing of door*** **http://netwelding.com/Door_Panel_Protector.pdf**	

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C7 Carbon Fiber Grille Bar ***Install genuine carbon fiber grille bar overlay*** ***http://netwelding.com/CF_Grille_Bar.pdf***	
GS/C7 Blind Spot Mirror ***Smaller rear and side windows cause C7 blind spots.*** **http://netwelding.com/Blind_Spot.pdf**	
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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*** **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**	
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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**	

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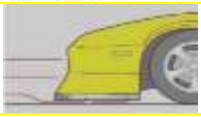
GS/C7 Soler Modified Throttle Body ***For Improved Throttle Response*** **http://netwelding.com/Soler_Mod_TB.pdf**	
GS Splitter Stage 3 Winglet ***Stage 3 Winglets Integrate with Spats*** **http://netwelding.com/Stage_3_Winglets.pdf**	
C7 Removing GM Plastic Film ***How To Remove The Rocker Panel Film*** **http://netwelding.com/Rocker_Panel_Film.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**	
Rusty GS/C7 Muffler ***Why the C7 muffler rusts way to turn matte black.*** **http://netwelding.com/Muffler_Rust.pdf**	
GS Engine Compartment Mods ***Cosmetic Additions in Engine Compartment*** **http://netwelding.com/Engine_Compartment.pdf**	
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**	
Rusty GS/C7 Muffler ***Why the C7 muffler rusts way to turn matte black.*** **http://netwelding.com/Muffler_Rust.pdf**	
Engineering a ProStreet Rod ***How Our '34 ProStreet Rod Was Designed and Built*** **http://netwelding.com/Engineering%20Street%20Rod%203-08.pdf**	
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