

Straight Talk

Publication of the Red River Chapter of the Solid Axle Corvette Club

Come to the

Red River Chapter SACC Meeting & Garage Tour! President's Wessage

Saturday, November 20 at 1 PM at Lee & Jo Ann Brumit's garage

We will get to see all of their Corvettes plus their other cool collectible cars!

Directions to Brumit's Garage, 3701 Marquis Dr, #101, Garland, TX

Plenty of Parking-Drive your C1 if it's nice, Drive your street car if it's not!



From the North and West:

Take I-635 E to exit 15 for Miller Rd/Royal Ln	0.2 mi
Use the right 2 lanes to turn right onto Miller Rd/Royal Ln	
Continue to follow Miller Rd east	1.7 mi
Turn left onto S Jupiter Rd	0.5 mi
Turn left onto Marquis Dr	
Destination will be on the right	0.2 mi
From the East:	

Take TX-78 S to Garland
Use the 2nd from the left lane to turn left onto S 1st St .1 mi
Turn right onto W Avenue B 1.0 mi
which Continues west as Forest Ln 2 mi
Turn left onto S Jupiter Rd 0.5 mi
Turn right onto Marquis Dr Destination will be on the right

See you at the Annual Meeting!

I hope to see as many of you as possible on November 20th at Brumit's "Garage". I hear they've got something NEW they're picking up in Bowling Green for us to see.

Please bring cash or check for your 2022 dues for JoAnn to send on to National. Again this year we are waiving Chapter dues.

I am retiring as President of the Chapter effective this meeting. It has been a fun three years and I hope you all have benefitted from it. I have!

Can you step up and volunteer to be "elected" president? Think about it and keep the chapter going. It is a great group of people with an amazing amount of Solid Axle knowledge to share.

We've had some great tech sessions this year, but hope we can get back to some social activities soon. (For the guys tech sessions are a social activity.) If you have an idea for something you would like us to do, let me know. "Save the Wave",

Bill Preston
President, SACC, Red River Chapter
405-412-0502

Renewal Notice--Dues Are Due by December 1st

National and Chapter Memberships Expire December 31, 2021

(unless you've paid for multiple years)

Red River Chapter collects National SACC dues of \$45. We then forward all National dues and have record that all our members are also National members. Please pay by Dec 1, so we can forward your National dues before they send you a notice.

If you have sent in your own National dues, please let JoAnn know, so we can record it.

Please include completed application with your dues renewal Solid Axle Corvette Club Membership Renewal/Application Renewing Member Number_____ New Member _____ New Member _____ If you don't know, we can look it up. Applicant Name Co-Applicant Name____ Mailing Address New members please send City_____State____ photos of all your C-1 Corvettes and a face shot Zip______ Country_____ of you (and your spouse, together, if you have one) to: Phone #2 _____ Home___ Cell_ Work E-Mail____ Solid Axle VIN # 1 Yr Color Solid Axle VIN # 3_____ Yr___ Color____ Solid Axle VIN # 4_______ Yr___ Color_____ Yr____ Color____ Solid Axle VIN # 5 SACC publishes an annual membership & roadside assistance roster, which does not include your address. The roster does contain names, phone numbers, city & state. It also has a field to indicate that you are willing to help if a traveling SACC member needs roadside assistance in your area. If you **do not** want your name listed in the roster initial here: If you **do not** want to participate in the roadside assistance program initial here: FAILURE TO INITIAL ABOVE INDICATES YOUR PERMISSION TO BE LISTED IN THE ROSTER. **Red River Chapter Member Interests: SACC** Annual dues are: \$45.00 one year Would you like to serve our chapter as an officer, Red River Chapter dues are: 15.00 per year coordinator, writer, event volunteer, etc? Red River Chapter Dues Suspended for 2022 \$45.00

Just pay National Dues \$60.00 total (Make payable to SACC in U.S. funds only) What events would you like our chapter to host? Please return this application/renewal form with a check (Car Shows, Driving Tours, Tech Clinics, etc.) for chapter and national dues (\$60.) to: JoAnn Brumit, Treasurer How far are you willing to travel KARLEE KLASSIC AUTOS for a local chapter function? 3701 Marquis Dr., Suite 101

Check out the SACC website at http://www.solid axle.org

Garland, Texas 75042

Do you prefer overnight or single day events?

Indicate original, modified, race car or unusual options, etc.



Restoring Our 1954 Corvette

I bought our 54 Corvette in 1984 out of the Dallas Autotrader. It was a 10-step street car (looks good from 10 steps away) at best. The body (fiberglass) was in decent shape, it showed no signs of ever being wrecked. But the rest of the car left a lot to be desired.

The interior was gone, the carburetion was wrong, the instruments were there, but none worked. The exterior bright work was mostly there, but it needed a lot of attention. And the paint popped off in large pieces if you picked at it. The original wheels and hubcaps were about all that were in reasonable shape. I bought the car anyway.

Not having an endless bank account to fund the restoration, I simply made sure the car started, stopped and steered straight. I drove and enjoyed the car, as is, for 25+ years, while I collected parts. Even though it was in terrible shape, I had a lot of requests to display it, just because it was so unusual by any standards.

I found the side-draft carb trio and intake one weekend at the Pate Swap Meet only to receive a phone call that same weekend from a friend attending the Hershey swap meet and show – he ran across a 54 intake and carb setup and bought it for me. One day I had none, the next day, I had two.

The car was sold here in Arlington for an individual living in Louisiana. The individual selling it, told me it was fundamentally original, the only major modification was the transmission. The previous owner had removed the Powerglide and installed a 3-speed standard. I drove it like a 3-speed for over a year until I needed to back out of a parking space one day. When I put it in reverse (over and up) the car moved forward. I tried it again only to have the same experience. What is it they say about executing the same action and expecting different results? When I got

John & Loudene Spencer Wylie, TX

home, I crawled under the 54 to find a Muncie 4-speed.

The installation was functional but execution was a real kludge job. The clutch pedal was hung from a box end wrench tack welded to the pedal tree. The cross shaft and linkage assembly, went downhill from there. I decided to keep the standard transmission, even though it wasn't original, but I wanted it to look GM as much as possible. I acquired a pedal tree out of a 57 and modified it to fit the 54. I also used a cross shaft and frame perch from a 57 but I had to fabricate the engine-side cross shaft support, since the 6-cylinder did not have a boss for mounting one. I had to make a bracket strong enough to withstand the force of the clutch, to wrap around the dual exhaust, and reach the bell housing to which it attached.

The uniqueness of the 54 made it a desirable addition to many local shows and displays, even in its rough condition. Many viewers questioned whether the lack of door handles, the rock grills over the headlights, and/or the rocket taillights were custom features. I assured them these were the way the 54 was built originally.

I didn't start the actual restoration until 2010. I cleared out my two-car garage, inventoried my collection of parts, and planned the restoration process. First, I disassembled the 54 and identified any additional parts I would need to restore the car.

SPENCER--Continued on page 4

Editor's Note: I would like to run an article about your Solid Axle Corvette in this space. Contact Diane Preston cdiane1957@aol.com.

SPENCER--Continued from page 3

Once disassembled, I attacked the body. One surprise was the condition of the fiberglass itself. All other Corvettes I had restored or painted had press molded glass which was smooth. The glass on the 54 was hand laid and very porous (almost like cheesecloth). I debated whether or not to apply a gel coat to fill the glass surface, but decided not to. It took a lot of coats of primer and a lot of elbow grease, sanding, to get to a smooth surface. Never being wrecked, the body did not require a lot of body work, just cleaning it up and prepping it for paint.



Once in primer I separated the body from the frame. To do this I used an engine hoist (a story for another time). This technique will work on any convertible, but not a coupe. Once lifted, I built a rolling scaffold under the body. This allowed me to roll the frame out and move the body around inside my shop. With the frame exposed I went through all suspension, steering, driveline and brake systems. I used a power washer, wire brush, and more elbow grease to clean the frame – not recommended. Once cleaned and prepped, I used Eastwood Chassis Black paint. The results were marginal, but effective and inexpensive.



While I had the body off, I prepped the engine. Although the block was a correct "911" casting it was not an original Corvette block. I believe it was a GM replacement. In addition to unusual markings on its pad, it did not have a Corvette water pump on it. Because of the lower profile, and lower radiator, the water pump had to be lowered on the front of the engine so the fan would draw air properly. To do this GM used a pump adapter plate which blocks off the block's water port and draws water from a freeze plug lower on the block's face. The only modifica-

tion required to allow this is a threaded port for a mounting bolt on the pump. Once the water pump issue was resolved, I mounted the engine on the frame (an easy task without the body on).



Using the engine hoist/body lift, I placed the body back on the frame and started the painting process. I used Acrylic Lacquer like the original 54. MISTAKE !! I have used Lacquer many times previously with great results, but the current Lacquer is not the same product (thank you EPA). Previously I enjoyed Lacquer because it was so forgiving and would produce a mirror like finish with a little hand work, even without the benefit of a booth. No such luck with the current product. Another setback was - when I shot the color coat, all the glass fiber in the body, which I worked so hard to cover came back. By this time, I was so ready to get this car back on the road, I just stacked on the red, with the intention of polishing it out in the final process. If I had it to do again, I would use a newer tech paint and dispense with the headache.



Once painted, I started putting the 54 back together. I had Leo's trim shop in McKinney install the Al Knoch interior. Roy did a great job. We replaced the seat springs and all padding. The door panels incorporate an overlay skin

that forms the glove compartments on each door. To make a smooth cover we laid a ½ inch foam over the door skins, under the vinyl covers. The interior was one of the pleasant surprises – the red interior accented with white stitching is one of the most attractive interiors I've seen in a long time (indicative of 50's era autos).

One surprise, however, was when I picked up the 54 from Leo's, I almost wrecked it driving out of the driveway. I had been driving the car with seats that were no more than a board with some foam rubber padding, this gave me ample room to handle the steering wheel between the wheel and my knees. The new seats, with springs, were considerably thicker, the steering wheel rubbed my legs and did not allow me room enough to run my hands past my legs while trying to turn. With no adjustment in the steering column, I had to tie down (collapse) the seat springs to give me adequate space to clear my hands in a turn. I believe this to be a flaw in GM's design. The GM specs show a larger gap between the seats and the steering wheel, but in reality, it's not.

Reassembling the 54 was the fun part of the restoration, each action showed progress. I had to replace the bumper bullets and rear crescent bumper below the trunk lid, but was able to use all the other bright pieces. The rear side trim and windshield posts were all that required rechroming. Well – that's all the pieces I had rechromed - the grill oval and shark teeth could stand to be rechromed, but being pot metal, I didn't want to take the chance they would be damaged.

When I was ready to put the 54 on the road, I vacillated whether to put Bias or Radial tires on. I polled the Corvette community for opinions. Many Vette owners said they had two sets, one for driving, and one for showing. Not wanting to spend the \$\$ I opted to put Radial tires on. After I drove the 54 for the first time, I came home and

replaced the Bias tires on my 58 with Radials too. This is a no-brainer. Anyone running the old Bias ply tires should change to Radials. The handling of the car is night and day different.

I finished the 54 in 2013. The only thing that fell off, on its initial shakedown voyage, was one tailpipe extension, so I felt the assembly process was a success. However, unlike previously, the car ran hot. Apparently, letting the engine sit for three years while I worked on the car, allowed all the sediment in the block to settle in the water jacket, and I was getting no coolant circulation. So ---- I had to pull the engine, this time with the body on (this proved to be a real experience). This required, twisting, turning, tilting, dipping, and partially disassembling the long six-cylinder block to squeeze it out of the engine bay (don't want to do that again).

I didn't restore the rag top until the summer of 2018. I opted to use a (tan) canvas top, and am glad I did. It's one of those things that add to the uniqueness of the 54. Of course, doing this, led to requiring the purchase of one of the hardest parts to find in the restoration process. Many parts were hard to find, at least at any reasonable price, but probably the most difficult part to find was the flipper moldings, just behind the doors, in front of the convertible top deck lid. They are called flipper moldings because they have a tab that flips up to expose the slot through which the top frame slides when raised. They are very fragile, and are not seen when the top is up, but they are a must have on an early 54 with an operable rag top.

Since completion (you never fully finish) I have had the pleasure of showing the 54 with Legends and the SACC. I built the Vette to drive and enjoy. I especially enjoy discussing the car's uniqueness and the process of restoring it. When I can answer a "how to" question or relate a little-known historical detail about Corvette's history—it makes it all worthwhile.



Dot and Arbout Searching for Old Ventes & their Owners

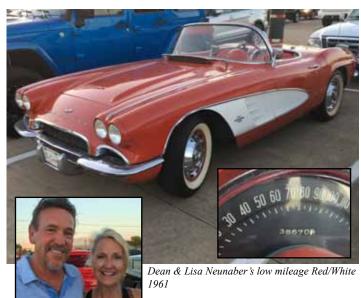
Christian Classic Cruisers Hot Texas Nights, Aug. 21, 2021, N. Richland Hills, TX



Norm Bartee's Blue/Silver 1959, Arlington, TX



Richard Pelham's Blue/White 1959, N.Richland Hills, TX



Granbury, Texas High School Homecoming Parade



SACC Member, Don Brittin drives his 1962 Red/White Corvette in the Granbury Homecoming Parade. He's carrying 2022 Seniors voted Most Intellectual, Nash Nevels and Madison Shaw.

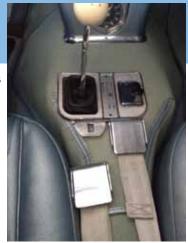


Seat Belt Bracket

Fits C-1 Stock Belts and some after-market belts

Keeps Belts Tidy No Damage to Car Easy to Use Removable

Easy to Install Just slide under shifter plate



Order from John Spencer 972-429-6000 LocoJohnS@verizon.net

C1 Rear Axle Bearing Replacement Tech Session







Tom Parsons shows Rocky Rainbolt the bearing.

John McIlvoy, Don Eckhart, Robert Cotner, Tom Parsons and Bill Preston

Tom Parsons installing the axle.



Tom drove his Red fuel-injected 1956 down from Oklahoma. He explains his air box to Don Eckhart and Bill Preston.

Curtis & Bill Preston, John McIlvoy, Tom Parsons, Don Eckhart and Kenneth Harding look over John's fuel-injected Black/Silver 1957

Don Eckhart's Red fuel-injected 1958

Bill Preston's 1957 started leaking rear end grease, so that meant it was time for a Tech Session on replacing the bearing! Long-time friend and SACC member, Tom Parsons from Mustang, OK knows all there is about this procedure. Tom agreed to come to Flower Mound, TX and show all our SACC members just how to do this repair. He supplied us with fully illustrated instructions for this procedure and demonstrated it for those attending.

Present were Bill, Diane & Curtis Preston, Kenneth Harding, Don Eckhart, John McIlvoy, John Spencer, Robert & Maggie Cotner, Keith May, John Yobi, Rocky Rainbolt and Tom Entrekin. We had four C1 Corvettes present and all four were fuel injected.

Rear wheel bearing replacement instructions start on page 8



Maggie Cotner, Tom Parsons, Curtis Preston, Robert Cotner and Bill Preston



Tom Entrekin and John McIlvoy listen to John Spencer explaining about soft top.

Replacement of 55-64 Chevrolet (55-62 Vette) rear axle bearings---(Topic#329498)

Tom Parsons, Link to Thread at Chevy Talk, DZAUTO, 10-14-15 01:10 PM - Post#2582465

From time to time, the question has come up about how to replace 55-64 Chevrolet (and 56-62 Vette) rear axle bearings. I once said the next time I replaced one, I would put together an article with pictures. Well, here it is. This is my 56 Vette and I'm replacing the left rear axle bearing. I'm not showing how to remove or replace the axle shaft in the housing (I presume everyone knows how to do that).

This is the axle (A), bearing (B), lock ring (LR) and retainer (R) after removal from the axle housing.



Using a BIG hammer and a chisel, punch a deep groove in the lock ring (this is also shown in the service manual).



Once the deep groove has been made.



The groove loosens the lock ring enough that it virtually slips right off.



The axle and bearing can now be placed in a press and the bearing pressed off. A cheap 20ton press that I got about 25yrs ago from Harbor Freight, it does everything I have ever needed pressed (on or off).





8

Once the bearing is off, clean and inspect the axle surface where the bearing seats (as well as the rest of the axle).



This is the left axle from the 56 Vette. As can be seen from inspection, the splined end has a slight twist (I'm still going to use it).



DO NOT, DO NOT, DO NOT FORGET to drop on the bearing retainer **BEFORE** pressing on the bearing!!!!!



This seal goes to the OUT-SIDE of the axle. I have seen several colors of seals (green, black, red, etc.), but they are all the same.



Some bearings have a seal on the other side (permanently sealed) and some do not (lubricated by rear-end oil). If your new bearing has a seal on both sides, this is what the INSIDE seal looks like.



Press the bearing on by itself first. DO NOT press on both bearing and lock ring at the same time. Again, this is how the service manual instructs installing the bearing. Press it until the bearing is tight against the seat on the axle. While pressing on the axle bearing, I partially press it on, release the pressure and rotate the axle 90deg, press some more, release pressure, rotate the axle another 90deg and finish pressing. This method IS NOT NECESSARY, but I feel it assures the bearing is pressed on evenly.



INSTRUCTIONS--Continued on page 10

C-1 Rear Wheel Bearing and Axle Info

(Written by Tom Parsons edited for publication by John Costales)

Frequently the subject of rear axle bearing replacement arises for 56-62 Corvettes. It should be pointed out that "some" differences do exist when replacing the outer rear wheel bearings between the 56, 57 and 58-62 Corvettes. Primarily you should first determine the bearings you currently have prior to purchasing new bearings. Without checking, you never know what rear differential is installed in your car.

Over the years there have been a total of 4 (actually 5) axle bearings for C1's.

- 1) The replacement bearing for a 56 Corvette (55-56 Chevy pass car) is the RW507EN or RW507ER (507 series). The RW507ER has a slightly thicker inner race.
- 2) The replacement bearing for a 57 Corvette (57 pass car) is RW307R (307 series).
- 3) The replacement bearing for 58-62 Corvettes is RW607NR (607 series).

All of the above 3 bearings are ball bearings.

4) JNR1542 was a roller bearing for 58-62 Corvettes with positraction as well as 58-64 passenger cars with positraction and also taxicabs and police cars (which may or may not have had posi). The JNR1542 (roller bearing) has been long discontinued and is replaced by (3) above ball bearing RW607NR that shares the same dimensions.

5) Many years ago, GM listed a roller bearing for the 55-56 pass car. I have never seen an aftermarket replacement part number for that bearing, but the GM part number was 7451414 (it has LONG since been discontinued).

Last year, a customer brought me a pair of (what appeared to be) original axles from his 55 Nomad for me to replace the bearings. They had the roller bearings and the RW507EN or RW507ER was a direct replacement (first time for me to actually ever see 55-6 roller axle bearings). The 507 and 307 series are the same thickness, but the 507 has a smaller outer diameter. The RW507EN or RW507ER are the only bearings that will fit a 56 Corvette and 55-56 pass car.



C1a Brg Dia -- C1 bearing diameter comparison

The RW307R is the ONLY bearing for a 57 Corvette and passenger car.

The 307 (57) series and the 607 (58-62) series bearings have the same outer diameter, but the 307 bearing is about .120" thinner. Note that the wider 607 (58-62) bearing has two "O" rings.

The inside diameter of all three bearings, and the bearing surface on the axle shafts 56-62 Corvette and 55-64 pass are the same, and they all three use the same lock ring.

Note: 56 Corvette bearings, axles and rear housings are unique to 56 only! Only the entire assembly can be used on other year Corvettes.

The original bearings used in these cars were usually NDH (New Departure-Hyatt) or Hyatt. If you pull an axle and the Bearing is NDH or Hyatt, it most likely is the original bearing installed in the car.

Shown below are the width differences between the 3 replacement bearings



C1a-BrgWidthw -- C1 bearing width

Before installing new bearings on their axles:

As shown in the pictures below, measure the housing bore and depth dimension and compare it to the thickness and outside diameter of the new bearing to be used. When installed, the outer race of the bearing should be nearly even with the outer edge of the housing.

If the bearing is recessed or protrudes in the end of the housing by about .100 -.120" you have the wrong bearing for that rear axle housing.

Axles

REGARDLESS of year model, the Left axle is ALWAYS shorter than the Right axle.

The 57 Corvette axle housing is 100% identical to a 57 pass car axle housing, EXCEPT the position where the spring pads are welded to the housing.



C1a-axle-housingw --C1 axle housing bearing depth Axles

The 56 Corvette and 55-56 pass car axles are the same and totally interchangeable.

If your car is a 56, and has a 56 axle housing, ONLY the 55-6 axles and axle bearings will fit PERIOD! I point this out because a 57-62 Corvette axle housing is a 100% bolt-in swap.

When searching for a new axle:

The 56 axles are unique to 56 Corvettes only.

Although the bearings might be different, the 57-62 Corvette and 57-58 pass car axles are the same. Shown to



C1a Axles -- C1 axle hub differences

the left is a comparison of a 57-62 Corvette (57-58 pass car) and 59-64 pass car axles. The splined end of the axle to the shoulder where the bearing seats are the same dimension. The difference is the distance from the bearing seat area to the outer side of the flange. When you look up the axles in the parts book, it shows different lengths for 57-58 and 59-64 pass car axles. As you can see

in the previous picture, the additional ½" in length for the 59-64 pass car axles is between the shoulder for the bearing and the wheel flange. If a 59-64 pass car axle were to be installed in a 57-62 Corvette axle housing, the overall tread width would become 1" wider. This was once a method of increasing rear tread width on early Corvette race cars.

Gaskets

The gaskets for the bearing retainer and for the rear end center section are still available from most parts stores (Fel-Pro 5188 or equivalent).

I hope this will be helpful to a few who like to work on their own cars.

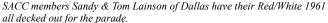
Tom Parsons 405-745-8383 tparsons6@cox.net

Southern California Solid Axle Corvette Club, Editor Note: A number of years ago I changed out the pumpkin on my car and when I pushed the axles back into place, I pinched one of the bearing O-rings and cut it. As you might expect, I soon had a leak all over my nice new brake shoes. The O-ring is not listed in any Corvette Parts books and I had to buy 5 or 6 packages of new rings off the Internet before I found something that seemed to fit properly. Thinking there might have been an easier approach to this problem, I asked Tom Parsons if there was a replacement O-ring that he knew about. He commented: "I have no part number information for axle bearing O-rings. PLUS, there were different sizes. Some bearings had wide-deep grooves for the O-ring and thick O-rings, some had narrow-shallow grooves with thin O-rings. So, without knowing exactly what O-ring was actually used with which bearing, it's just a matter of trial and error to locate a good O-ring." So, should you need O-rings be prepared for a trial-and-error process. Sorry!

DUT AND AROUT SEAVECHING FOR OLD VEHIERS & THERE DWITES

Lewisville, Texas, Cattle Drive Parade, September 18, 2021







Chapter President Bill & Diane Preston Back/White Fuel-Injected 1957 of Flower Mound, TX

Red River Chapter is recognized by the Solid Axle Corvette Club. SACC is a non-profit organization and membership is open to anyone who has an interest in 1953-1962 Corvettes. The Editor and Officers of Red River Chapter have made every effort to ensure that *Straight Talk* contains no inaccuracies, omissions or errors and is non-offensive and non-political and disclaim liability for any that may occur. Technical articles are many times based on personal experiences and preferences and are intended only as guidelines or helpful information for club members.

Officers: Bill Preston – President
Verle Randolph – Vice President
JoAnn Brumit – Secretary/Treasurer
Diane Preston -- Editor
John Spencer -- Technical Advisor

cell 405-412-0502 918-520-7861 cell 214-676-2265 cell 405-615-3856 cell 972-429-6000 Chapter Web site: www.http://vettelegends.com/newsletters
Newsletter: Published as appropriate in PDF format, e-mailed to members and posted on club web site. If you do not have e-mail, please ask Diane Preston to mail one to you. Send all articles for publication to: Diane Preston, Editor – cdiane1957@aol.com

Chapter Mailing Address:

Bill Preston, 1124 Lopo Rd., Flower Mound, TX 75028 **Dues:** Chapter and National membership year is Jan. 1 to Dec. 31.

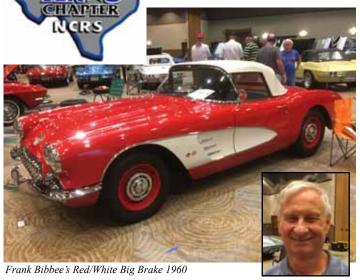
Chapter dues are \$15.00 and national dues are \$45.00 annually.

(No matter when you join) Chapter dues are suspended for 2022

Please return a chapter application / renewal form, available on our web site, with a check for chapter and national dues (\$45.00) to: JoAnn Brumit, KARLEE KLASSIC AUTOS, 3701 Marquis Dr., #101, Garland, Texas 75042. Make payable to SACC.

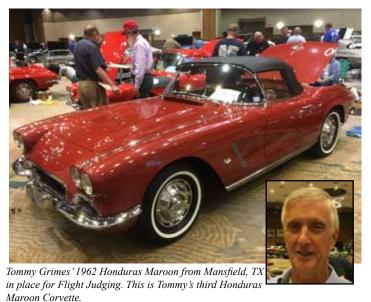
lone Star Regional NCRS Judging

Embassy Suites, Frisco, TX, October 21-23, 2021



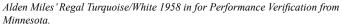


Andy Applegate's Blue/Silver, Fuel-Injected 1957 for Performance Verification











Todd Duncan's 1960 with rare Cascade Green paint for Perforance Verification.

NCRS for Modified Corvettes

The National Corvette Restorers Society (NCRS) has begun a new program of Concours Judging. The NCRS, famous for its meticulous Flight Judging process has expanded its judging offerings to include an entirely new category of Corvettes. This new category is called Concours Judging and is offered for both Stock appearing and Modified Corvettes. It is open to Corvettes built from 1953 to 2004. The car must have been born as a Corvette, have an original VIN Tag (or state issued replacement), and have a title/vehicle registration that states the car is a Corvette (i.e. no kit cars).

Concours judging is similar to flight judging in that there are five teams of judges who evaluate the car in Operations, Interior, Exterior, Chassis and Mechanical. Unlike Flight judging, however, the teams are not concerned with originality. They are concerned with the function of the systems—in the case of Operations and the appearance and completeness in all the other categories.

A Stock Corvette is one with the doors, hood and trunk (ISE) closed, and excluding wheels and tires but including paint color or scheme, the car basically appears like a production Corvette. Outwardly the car body appears to be stock or as it came from the factory. It can have show quality chrome and paint, a different motor than was originally

in the car and different suspension. The key in this class is whether the car looks like it might be stock.

Modified Corvettes includes all other Corvettes. These can have flared fenders, custom paint such as flames pin stripes or other custom touches. This







modified class opens the field for a wide variety of Corvettes that were not previously considered candidates for Flight judging. Concours judging is an exciting new concept within the NCRS and is an exciting new way to open the field for a new generation of Corvette fanatics.

For more details: ncrs.org/seminar/Concours_Judging.pdf



SACC members JoAnne & Lee Brumitt's 1967 White Coupe being flight judged.





What happens when NCRS prepares for judging each year model Corvette as they become eligible? They study examples and write a book! SACC members JoAnne & Lee Brumitt's 2007 White Coupe and Paul Wolpert's 2007 Atomic Orange with gold ribbon stripes Indy Pace Car Convertible serve as examples at the Lone Star Regionals for setting the standard for future judging of the 2007.



These and other questions and answers available at: solidaxle.org under Technical Help.

To submit a technical question regarding a 1953 to 1962 Corvette, simply e-mail sacctech@solidaxle.org. In the subject box you need to put "sacctech/ (your SACC membership number)". Example: sacctech/1234

Queston: On a 1962, is the rear license plate bracket, bumper reinforcement, painted black or body color? **Answer from Chip Werstein, SoCal Chapter Advisor:** Semi gloss black

Queston: If I have the ignition on, without the engine running, the ballast resistor gets extremely hot. Hot enough to melt the insulation on the wires attached to it. Is this normal? I know that without the points opening and closing, the current through it is constant but should it get that hot? No caution to not have the ignition on without the engine running in the owner's manual.

Answer from Larry Pearson, SoCal Chapter Advisor: If you leave the ignition on with the engine not running and the points in the distributor happen to be closed, and you leave the ignition on for some period of tine, both the ballast resistor and the coil will get very hot, and you will discharge the battery. This could be damaging to both of them, and you should avoid doing this. I have not heard of the resistor getting so hot that the insulation melts on the connecting wires. If you are running some kind of test and you want to leave the ignition on, "bump" the starter until the points are open, as evidenced by a low ammeter discharge reading.

If you are using an original "091" coil (these numbers are embossed on the side of the coil), you are supposed to use a ballast resistor of 0.5 ohms (marked with a black dot on the metal bracket). If you are using a service replacement "202" coil, you should be using a 1.5 ohm ballast resistor (marked with a blue stripe). If you are using an after market coil, I would play it safe and use a 1.5 ohm resistor, which should not cause so much heating.

that has been rebuilt from the ground up. We are having difficulty with the fuel injection unit. It has been rebuilt by known specialists (!), It stars cold easily, but when it warms up it stalls and won't start. Where do we start?? Answer from Doug Prince, SoCal Chapter Advisor: Well join the crowd with FI cars that won't/don't run in the heat. The problem is todays 10% gasohol gasoline which boils and then percolates at 40 degrees less than ethanolfree fuel does. The copper spider lines of FI cars are excellent for transferring engine heat and causing the fuel to percolate. If under hood engine temperatures reach or exceed 180 degrees, you will consistently have this problem and there are no known easy cures. Not sure if Canada has gasohol, but it looks like it does as this problem is rampant in the Southwestern United States. Racing fuel is an option but is crazy expensive and in California is illegal to use on surface streets and highways. I tell my customers to just "park it" if the ambient outside temperature exceeds 90 degrees as there is no solution to this problem.

Question: I have a 1958 fuel injected 250 HP Corvette,

Question: I can't figure out how the clips go for the chrome on the glove box on my 1956 Corvette.

Answer from Bill Preston, Red River Chapter Pres.: The aluminum trim clips (Part # 14818) for the Glove Box

Door are round on two opposite corners and square on the other two corners with an interference threaded hole in the middle. It takes four clips. You insert two clips inside the back channel of each door stainless trim pieces with the narrow sides parallel to the edges. Then rotate the clip 90 degrees clockwise until it is seated under the lip edges of the trim piece. (The top of the trim strip must be held toward the upward position and the clip must be rotated clockwise to keep from unseating the clip when the attaching screw is tightened) The clips should be located to line up with the holes in the glove box door. Then attach using a #10-24 screw with a washer head

The two short trim pieces below glove box door are put on by attaching NSS Clips to the outside of each side of the glove box compartment (with the friction clip toward the sides) using the 10-24 hinge-mounting bolts with counter-sunk head. Then put washer & nut on inside of glove box. The bottom stainless trim pieces can then be slid onto the clips since they have an open bottom end

The two top stainless trim pieces must be snapped onto two NSS clips on each side that are mounted directly to the fiberglass with sheet metal type screws (with the friction clip toward the sides), These pieces are closed on both ends making it necessary for you to snap them onto the clips.

Queston: Need some help locating choke connector rods for my 54. 115-221 is part number in old tech manuals. also my wiper motor is original and needs rebuilt, is there a kit to do this, or someone who rebuilds?

Answer from Bruce Fuhrman, SACC Secretary:

I assume you are referring to the rod that connects the mechanical movement from the cable to the choke plate at the bottom of the carburetor. These may be difficult to find. Check www.vettegal.com she has a lot of carburetor parts and just may have some laying around.

Answer from Chip Werstein, SoCal Chapter Advisor: Your wiper motor can be restored by Valley Vettes in San Diego......Mike Poirier. He does instruments too. I have used him for many years. 619-461-1952.

Question: I have Two 1962 Corvettes. One has steering column about 47 inches long. The other column 45 inches long. Can you please tell me witch one is correct? Answer from Chip Werstein, SoCal Chapter Advisor: I just measured a 1957 steering column I have out of the car. Measuring the mast jacket from the steering box is 49". The shaft extends approx 21/2 " past the end of the mast jacket. I don't know the actual length of a 58 to 62 column, but I know for certain it is shorter, probably by about 3". Answer from Bill Huffman, Michigan Chapter Pres.: You have two 1962 Corvettes with different length steering columns. The original one should have the VIN plate resistance welded to the top surface of the tube just forward of the cowl, under the hood. The VIN # should also match your vehicle title VIN Number. I'm guessing that the longer one is in the car with the shifted transmission and the distorted front motor support bracket. Wrecked cars can get strange parts. Your 1962 assembly manual should show the correct GM steering gear assembly P/N.

Question: What is the best way to adjust the steering box on a 1959 Corvette it has too much play in steering wheel? Answer from Bill Huffman, Michigan Chapter Pres.: The steering gear adjustment is a slotted screw & jam nut on the left side of the gearbox. Loosen the jam nut and turn the adjustment screw in or out till you achieve minimum free play then retighten the jam nut.

In order to make adjustment easier on my C-1s, I drilled a 1/2 inch hole in the left side inner fender in line with the adjustment screw.

However, a 58 year old steering gear set may well have extremely worn/flatted/brinnelled gears and may require rebuild.

In addition, there are several other components that affect steering freeplay which need to be checked. Loose wheel bearings, loose/worn kingpins, worn/loose drag link, loose third arm, bearing arm & loose tie-rod ends all contribute to freeplay in the steering wheel.

Question: I have a 62 Corvette, 300 HP with a Carter AFB. My question is about a sticking choke. The choke opens fine as the car heats up. The problem is that the choke sticks open. After the engine is cold and I tap the accelerator, the choke won't slam shut. I always have to take the top off the

air cleaner and push the butterfly closed while I hold open the accelerator. I've checked everything and it seems to be that the metal piston inside the choke housing binds in the cylinder. I've tried everything from silicone spray to emery paper but nothing seems to fix it. I could buy a new choke but I'd rather fix it and save money.

Answer from Chip Werstein, SoCal Chapter Advisor: I am experiencing a similar problem on my 62 340 hp car. All parts and linkage operate freely, but when cold the choke won't close and, as a result, the fast idle won't set either. Purely by accident, I left the three screws which hold the choke cover to the housing somewhat loose and the choke began to work perfectly. I am now trying to find the right "tightness" for those screws. I may attempt to put a second gasket between the choke cover and housing. My problem isn't solved yet, but I think I'm getting close.

Question: I have mufflers and exhaust pipes bought in early 70's for my "60" and never used. The pipes have the tags and the mufflers are still in the boxes. I'm going to put them up for sale, but would like to verify the numbers. I have searched on line and can't find any listing for parts this old. Is there someone I can contact or do you have this information. Part Numbers are: 3752558, 3752555, 3735167, 3735164, 3815511, 3815512.

Answer from Larry Pearson, SoCal Chapter Advisor: The exhaust system you have was for the base engines (230hp & 245hp) and uses the oval muffler. Each side of your dual exhaust system was serviced with five separate parts, listed from the engine to the rear bumper outlets: exhaust pipe, extension pipe (adapts muffler to the exhaust pipe, about 2' long), oval muffler, tail pipe, and tail pipe extension (about 19" long and adapts the tail pipe to the bumper opening). Originally the mufflers were manufactured with the extension pipe made as part of the muffler, but the mufflers were serviced without this extension, so a separate part was needed to connect the exhaust pipe to the muffler. Here is how the part numbers apply:

Exhaust pipe: 3735167 (L.H.), 3735164 (R.H.); Extension pipes: 3815513 (L.H.), 385514 (R.H.); Mufflers: 3815511 (L.H.), 3815512 (R.H.); Tail pipe: 3752555 (L.H.), 3752556 (R.H.); Tail pipe extension: 3762440 (L.H. & R.H.).

The tail pipes and tail pipe extensions were the same for all engines. Also, if you are using the oval mufflers with the solid lifter engines, the extension pipes and the oval mufflers would work on those applications. The exhaust pipes for the solid lifter engines had a crossover pipe arrangement, but otherwise were the same shape and diameter as the base engine application.

I can find no reference to your 3752558 part. Maybe it is 3752556. To complete the exhaust system you have, you are missing the extension pipes and the tail pipe extension pipes. The mufflers, without the extensions, were probably also used on the passenger cars.

Some additional information, since you are planning to sell these parts. I have a 1972 Chevrolet Corvette parts book, and it gives other applications for your exhaust parts. The mufflers are listed as the low noise service parts for all 1955 (V-8) through 1962 Corvettes. This would apply to the high performance engines also. The exhaust pipes are listed for all 1957-1962 base engine Corvettes. The tail pipes are listed for 1957 (without the extensions) through 1960 Corvettes (the 1958-1960 Corvettes would need the extensions, which you don't have).

Question: There are two pieces of ss trim on the side of the car, one right behind the gull wing and one on the door. Are they side specific? If so how can I tell right from left?

Answer from Bruce Fuhrman, SACC Secretary:
They are not side specific. The tapered edge on each strip belongs at the hinge door opening. This provides clearance when opening the door. If you do not put the tapered edge here, the door will not open without bending the s/s strips.

Question: I have just bought a 1962 Corvette. I found after I started driving it, there is a Bad Vibration in drive train. I put it on a lift and found that somebody shimmed the shifter to fit through floor hole. They also shimmed one side of the transmission mount. The transmission tail is touching the X Frame. I bought a new trans mount, installed it & took 15 washers out so shifter bolted up were it should. Transmission Mount would not bolt in right, so I looked into motor mounts and found by shimming up right side 3/4 inch the transmission moved into alignment. So I pulled radiator, fan, and hoses out of the way found Engine Tower Motor Mounts looked uneven. R/S tower angled down and lower than L/S tower. Looks like engine needs to come Forward 1/2 Inch. Can you help me? I need the Spec for front frame rails and Engine Tower Motor Mount.

Answer from Bill Huffman, Michigan Chapter Pres: Unfortunately, you might be one of those Corvette lovers who bought somebody's cobbled together wreck. If the frame front horns are not bent/buckled/twisted and the wheel alignment is correct, then I suspect that either one or both of the front engine mount bracket to frame (http://www.parts123.com/corvettecentral/dyndetail.pta?cat alog=0000050e&ukey=29659) are bent.

Worst case, if the frame is bent and alignment is out, new frames are available http://www.vetteproducts.net/.

Here's my answer to Anthony previously regarding the location of the motor mount bracket location on his '59 frame rails. The same procedure is applicable to your '62.

We have a 59 frame that the "L" brackets (both top and bottom) that mount the engine supports bolt to, have been destroyed and we would like to find the exact location for placement of the new "L" bracket. We have been unable to this point to find reference material with specifications & measurements. Can someone help with some direction to acquire these specifications or patterns that will position the brackets properly.

My answer was: I had the same problem in restoring a 1960 that had been "modified" into a straight front axle dragster. I also had no luck in finding correct dimensions for locating the "L" brackets.

Since the transmission crossmember & trans support were intact, and the transmission / bell housing / engine block / front motor mount support bracket are one structural member, my solution was to literally bolt the components up to the frame.

I used a floor jack to raise the front of the block, with the transmission support acting as a fulcrum. With the all the front motor mount components finger tight, the "L" brackets will pretty much locate themselves. Since my frame was sand blasted, I found grind marks where the previous brackets were ground off confirming the location. Make sure the your components are centered in the frame and the vertical brackets are perpendicular to the frame horns before clamping the "L" brackets for welding.

Question: On a 1962, is there a compression connection in the manifold? Also, I have a small exhaust leak.

Answer from Larry Pearson, SoCal Chapter Advisor: The tube from the carburetor to the exhaust manifold has a compression fitting under the nut that threads into the automatic choke cover. The other end simply pushes into what is called the "choke stove", which is a steel tube pressed into the exhaust manifold at an angle and is exposed to the hot exhaust gasses which heats up the air being sucked into the automatic choke assembly via manifold vacuum present under the choke cover. After years of use, this choke stove tube can burn through, causing an exhaust leak into the automatic choke assembly. Service replacement choke stove tubes should be available from Corvette Central. To install the new tube, you must carefully drill out the old tube, being careful not to enlarge the holes in the cast iron exhaust manifold.

Prior to 1962, the lower end of the choke stove tube was open to the ambient air, and whatever dust and dirt that might be present in that air. Starting in 1962, a lower tube assembly having a bracket on it that attaches to a special exhaust manifold bolt, with a short threaded stud formed on the top of it, was introduced. This tube pushes into the lower end of the choke stove tube and goes up to the vicinity of the rocker arm cover where it ends. A rubber hose pushes on to it and goes to a short tube located on the side of the carbureter air horn, where it gets filtered air from the air filter. This choke stove tube is not present on 1962 (only) fuel injected engines. The 1962 Corvette fuel injection unit is the first one that has a choke valve on the air meter, and this automatic choke is heated with a one-year only electrically heated cover assembly. Starting in 1963, the fuel injection automatic choke assemblies were again heated via a choke stove in the exhaust manifold. The 1962 right hand side 2 1/2 inch exhaust manifolds not having the choke stove tube are extremely rare and valuable.