



To All interested Stinger Owners:

I don't know if you are aware of a crisis situation for us concerning the Yenko Stinger. Both Warren LeVeque and I have written letters to the S.C.C.A competition Board concerning board action and inactions that, I believe, have contributed to the lessening of the competitiveness of the Stinger in Road Racing. This has shown up first in "National" level competition, due to the greater competition (\$\$\$\$) at this level. However, it is only a matter of time until the Stinger is a regional level also-ran. If you have as much time, effort, and dollars tied up in your car as I do, and I am sure of you have more than I do in your cars, you had better be concerned right now.

At the recent Portland Bonus National, Doug Hargrove and Bill Sanders talked with Tex Arnold for ½ hour concerning Stinger problems and needs, among them rear tire stress problems and brake availability. Tex, an SCCA Comp board advisor, said the best way to move the Comp Board is letters-lots of letters from interested parties--- that's us!

I personally believe that moving the Stinger to E production is not the answer. In our area the E cars are virtually as fast as the D cars. The changes asked for in my letter, copy enclosed, would be more beneficial, resulting in lower ultimate cost and safer more reliable cars.

I am also enclosing letters from Doug Hargrove and Warren LeVeque to the SCCA board. Please read these letters thoroughly, then take pen in hand and write your own. If you have other items in mind please include them, but the important thing is to write NOW. The comp board will be meeting in late July to look over many items. If we can furnish them with 20 or so letters from concerned Stinger owners and drivers, we may be able to swing the tide and help our cause. Feel free to paraphrase any or our letters-copying might be too obvious, though. The Competition Board wants to make racing more competitive, but supposedly keep the cost down. Weber Carbs or Fuel injection are quite expensive and I doubt whether the Comp Board would approve them, but your letter is your letter. 14 or 15 inch Dia wheels are quite available, thanks to GM, so these make a reasonable request for safety and other reasons.

When you have completed your letter, please make a copy for me, then mail it immediately to the Comp Board office. Send it to the attention of "Director of Club Racing" at the National office in Denver.

Director of Club Racing  
Sports Car Club of America  
P.O. Box 22476  
Denver, Co. 80222

Remember, this is the only way we have of making the Board aware of our needs and intentions. British Leyland(JRT) Datsun and Porsche have paid staffs that maintain a liaison with SCCA. Since we are orphaned owners, we must speak up for ourselves through SOCUM. If you are interested in learning more about "Stinger Owners of Corsa United in Motorsports " write Jackie Guion at 11923 Quincy Lane, Dallas Texas.

Thank You- If you need more info call or write me, Seth *Seth*

**STINGER RACING** |

Seth T. Emerson • (408)

247-2237

3462 Kirkwood Dr, San Jose, Ca 95117



Nov 29 ]978

Sir

I've been a member of SCCA for six years and have raced a Yenko Stinger in Solo 1, Solo 2, regional races, and national races, winning events in all four and winning a Regional Title. The Yenko Stinger was homologated in 1966 for SCCA class D production racing. The specification have not changed for the twelve years.

I've watched cars moved from C production(Cp) to D production(Dp) that were too fast for Dp in 1969, and cars that had won national titles move down a class because they were no longer competitive against the new technology and could not be made competitive in their present class and to keep other cars competitive in Dp they were allowed changes. ( Lotus, Alfa, TR7, TR6, Jensen Healey. The Yenko Stinger can not be competitive against this kind of up to date technology without some kind of changes to the car.

The weight bias is approximately 35% (750#) on the front and 65% (1350#) on the rear. Running the same size rims as other cars in class, the Stinger has a definite disadvantage in cornering power. To help equal this out the seven inch rims that was a factory option should be listed as standard for the rear instead of the five and a half that is now listed, and increase in track should also be made to reflect this increase.

Other cars are allowed different carburetors that do not come on the specific car from the manufacturer, one reason given, to hard to work with. The Stinger carbs are stock General Motors carbs that are supplied with the Corvair engine, and are very hard to work with. An alternate carburetor is requested with intake adapter. (ex 40 IDA) Porsche 911 in Dp can use two 3 barrel Webers.

Request the use of front disc brakes for safety and reliability.

These changes to the Yenko Stinger would make the car more competitive with the new engineering that produced disc brakes, single overhead camshaft, double overhead camshaft, four valve per cylinder, and others that are in the newer production race cars.

Sincerely

  
Douglas Hargrove

Douglas Hargrove  
1402 PEARL ST  
Modesto, Calif.

95350

JUNE 14 79

Sir:

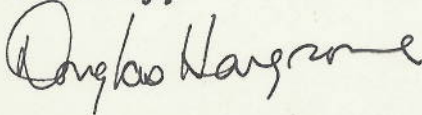
I drive a Yenko Stinger in National and Regional Races. During the past five years of racing I've watched my car fall further back in the Dp group of cars. The time has come that the Stinger is no longer competitive at a national level. At the past two Bonus Nationals I qualified 8th at Riverside and 4th at Portland. The Stinger is as fast as in the past, but I am running further back in the Dp group.

Hank Thrope's statement at the 79 convention that the trend for increasing class competitiveness seems to make slower cars faster and more expensive, and this is very true as far as I am concerned.

If the Yenko Stinger is to be competitive in Dp it has to have some improvement. The Stinger has had no improvements for 13 years!

One change that is needed to improve competitiveness is 8 1/2 inch rims on the rear. Since the bolt pattern is the same as all the Corvette, the logical change as far as cost and supply would be to allow 8 1/2 by 15 inch wheel on the rear. No changes to the car would be needed to install these rims.

Sincerely,



Douglas Hargrove  
1402 Pearl Street  
Modesto, CA 95350

YenkoStinger.org



Jim's Stinger, one of the original 100 cars produced by Yenko, is a 1966 stage IV Stinger, Serial #YS043. The stage IV modifications are quite sophisticated and put out some 220+ horsepower, depending on individual modifications.

Jim ran the car in many regional and national races in 1973 and earned enough points to take him to the national runoffs, where he, and YS043, placed 5th. Not bad for a 1966 Stinger. Again in 1974 Jim won 5 of 6 national races, placed first in the SCCA central division, set many lap records, won the supernatural series, and placed 3rd at the Champion Sparkplug Road Racing Classic National Runoffs. WOW! As Don Yenko once said, "Don't get stung, drive a Stinger!"

Jim did not run the car in the 1975 season because of lack of time. The car was recently sold to Chuck Coan, who, I hope, will continue to race it. Jim's future racing plans are indefinite at this writing; but, those few Stinger enthusiasts that are still left have to thank Jim Schardt for his hard work and enthusiasm in keeping the Yenko Stinger a competitive road racing car, as Don Yenko intended it to be. Jim is now heavy into the futher development of Dayton Wheel Products and has, through extensive racing and research, developed many fine parts and services for the Corvair enthusiast. One of Jim's main objectives for making these products available is to PRESERVE the Yenko Stinger as a competitive road racing car.

If racing is not your thing, perhaps you should consider some of these products for the preservation of your Corvair. Jim has included in his catalog a booklet which he has written, The Complete Preparation of Yenko Stingers for Road Racing. Items included in the catalog: aluminum fly-wheels, metallic clutch disc, Stinger deck lids, and landau panels, gauges, distributors, pistons, cams, oil cooler, carbs, and a complete machine shop service for the engine building enthusiast. You can order Jim's catalog by sending \$1.00 to: Dayton Wheel Products, 2326 East River Road, Dayton, Ohio 45439. To Jim Schardt, I give a very special thank you for sharing part of your story with our many readers. If things work out for next year, you can bet my Stinger will have some Schardt-developed products helping work our way to the winners' circle.



JIM SCHARDT IN YS043.



SOCUM NEWS BULLETIN

I wish to thank T. K. Lagerman for helping put this newsletter together. Also for designing an excellent logo (in my opinion). Let's hear your comments.

NEWS IN BRIEF

Doug Hargrove out for the year. Doug's car was totalled at the national race in Portland.

Rod Bean to 'retire' from Road Racing. Will continue in SOCA Slalom events. Has car for sale. \$4000-4500 depending on spares. Write: Rod Bean, 2410 Nelson Avenue, Redondo Beach, CA 90276.

We now have two tech editors. Dennis Bowman and, new member, Charles Lee of Dallas, TX. Charles will share some tricks in the next newsletters. Next month's.

PLEASE SEND RACE RESULTS!!!

JOE BURCH HAS A NEW STINGER FOR COMPETITION! THE CAR IS A BEAUTY ALTHOUGH I DON'T KNOW HOW IT RUNS. HOW ABOUT IT JOE UNDER ALL THAT BEAUTY IS THERE A REAL MONSTER? WE PLAN A FEATURE ON JOE AND ALL HIS STINGERS. HE HAS ONLY THREE. FOLLOW!

EDDIE MEADOWS OF BALTIMORE, MD AREA IS PREPARING FOR DRIVERS SCHOOL IN A ..... YOU GUESSED IT. A YENKO STINGER 45 06Z, SURE WISH I COULD FIND ONE. (REAL CHEAP!) JOE BURCH FOUND ONE (LITERALLY) IN A DITCH ABOUT TO BE COVERED WITH DIRT. IN IT (THE STINGER) WAS 1200# OF SOAP, SO JOE COULD CLEAN UP HIS ACT. NOT SURE HE HAS YET!

SEND US YOUR STORIES, IDEAS, RULE CHANGE SUGGESTIONS, AND RACE OR AUTOCROSS RESULTS.





# SCCA

STINGERS OF CORSA UNITED IN MOTORSPORTS



**Yenko Stinger**  
1967 SCCA D/Production Champion



November, 1977

## EXCERPTS FROM STINGER SALES BROCHURE

" If your idea of a gutsy Grand Touring sports car can be met by a nose-neave, large bore bomb that has been beefed up to imitate sports car performance, then the Yenke Stinger is not for you.

Here is America's only air-cooled rear engine sports car with independent four-wheel suspension. Inspired by the inherently excellent design of the Corvair Corsa, the Stinger was created to handle in true GT tradition. It transforms sophisticated chassis engineering into a competition-bred road machine that will make YOU want to do the chauffeuring.

Inside there are two honest bucket seats (three-passenger removable rear seat included); a four-speed, full-synchro, closer-ratio gearbox; responsive, feather-light, quick steering (3.0 turns lock to lock). And that's just the beginning.

It corners like it "invented rails." Race-spawned dual master cylinders command the heavy duty brakes. A few racing modifications make the Stinger a winner in Class D Production of the Sports Car Club of America or Class H Stock (NASCAR) at the drags.

Even the basic Stinger (Stage I) a fine five-passenger family car, offers you an eager 160 horsepower in a race-suspended chassis. A dual-purpose Stinger for the sexour rallyist and the occasional race driver boasts a Stage II tune that unleashes a husky 190 horses. Stage III is all spirit with 220 horses for the street -- the 'detuned' race car. Stage IV is something else -- with ALL the racing goodies at 240 horsepower. For this one you'll need a competition license, a race course, and lots of trophy space. And, if it's brute horsepower you're after, try Stage V -- up to 250 horsepower. Stinger anyone?"

DON YENKO

Prices, 1966-1967	
Stage I -- \$3520.00	Stage IV -- \$4420.00 (plus, according
Stage II -- \$4020.00	to options)
Stage III-- \$4420.00	Stage V -- \$5079.00

We will print options of various stages next month. Thanks to Steve Lovejoy of Modesto, Ca., for loaning me the Stinger sales brochure.

## NEW SOCUM MEMBERS

New member Jan Bristow of Ft. Wayne, Ind., joins our ranks with Stinger YS303, recently Stingerized by Yenke. Jan plans to run the car in local autocross events. He told us Corvairs have been doing quite well in autocross events in his area.

Another new member, Eddie Meadows of Havre De Grace, MD., joins us with YS062. Eddie told me he found the car in a junk yard totally stripped. After five months of preparation, TLC, and MONEY, Eddie debuted his Stinger at the Line Rock Drivers School. Eddie now has his regional license. We wish him the best in the coming year of competition.

John Woodward of San Diego is our newest member. Although John doesn't own a Stinger, his sincere interest is in Corvairs and Stinger racing.



November, 1977

T. K. Lageman will no longer edit this bulletin; but, I do wish to thank him for his interest and sincere efforts. I also would like to express that his logo design has been accepted by the majority of the membership. Thanks again, T.K.

I am currently looking for a new editor to do this bulletin. I honestly don't have the time. Until we find one, please forward all info to me. Any volunteers?

## ON THE TRACK

Autocrossers go to Texas Run-Offs.

Steve Lovejoy and Tom Simms of Modesto, California's Toy Racing, towed Steve's Stingerized Corsa to the Dallas, Texas area for the SCCA's National Solo II run-offs. The Stinger is set-up for Class D stock and Steve and Tom both qualified in the top five of their division. Steve has won the class in his division two years in a row (75-76). Due to a rule change this year, he was unable to place first this year.

At the run-offs in Texas, Steve placed 7th and Tom placed 22nd out of 29 entries. They both feel they could have done better had they been able to run 13x7 rims and different tires. However, the course was very tight and quite advantageous to the smaller wheel base cars.

Steve and Tom stopped in Denver on their way home. I had the pleasure hosting them in our home, where we had a lot of good fellowship, and much Corvair talk.

We heard from Steve and Tom that Joe Burch and his DP Stinger were also in Dallas. Joe, we think, ran a corvair-powered formula car. No results were sent; so we can't share how he did. Congratulations to these fine enthusiasts!

ROAD ATLANTA -- SCCA National Run-offs, DP Race

James Reeve and Eric Meislahn were the only two Stingers to qualify for this year's race. Reeve, who has been in the top five finishers (except for last year) for the past four years, once again drove his way to a fourth place finish against stiff factory-backed competition. Meislahn on the other hand has never placed high in the run-offs. Last year, his first run-off year, he placed 21st, while Modesto's Doug Hargrove placed 22nd. This year, Eric drove his Stinger to a 7th place finish after qualifying in the 12th position.

SCCA RACE FUNDS payed \$49.00 each to Eric and James. The monies were raised from the poster project. Congratulations to these two superb drivers!

Reeve will definitely sell his Stinger this year, as plans call for building a Buick Skyhawk for IMSA's RS circuit next year. Our hat's off to James for his persistence in top running against the big bucks boys from across the pond.

## TECH TIPS

No questions! No tips! Sorry, it's for your info. So, if you want a tech section send in some questions and/or tips.



November, 1977

WHERE TO BUY STINGER PARTS AND SERVICES.

CROSS ENGINEERING  
1431 Kansas, #2  
Modesto, Ca. 95355  
1-209-526-9230

DAYTON WHEEL PRODUCTS  
Racing Division  
91 Gershwin Drive  
Centerville, OH 45459


STINGER RACING  
Setn Emerson  
1351 Mauna Kea Lane  
San Jose, CA 95132

TARAMITA ENTERPRISES  
Rich Harris  
61 So. Hooker St.  
Denver, Co. 80219  
~~1-303-934-2579~~  
429-8767

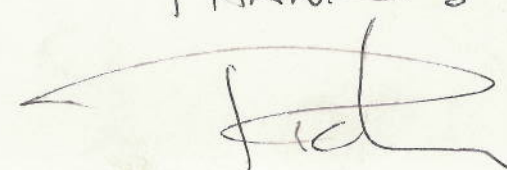
We now have 18 members. Let's see if we can recruit some more. If you have some suggestions as to how to improve this organization for the betterment of Corvair racing, please let us know. Send all info, questions, and suggestions to me:

SOCUM  
Rich Harris  
61 So. Hooker St.  
Denver, Co. 80219

Please help me find an editor for this bulletin so we can get it out on time. Thank You!

YenkoStinger.org  


CHARLES,  
HOW ABOUT SOME TECH TIPS? MAYBE  
EXPLAIN HOW THE 3 SPD SHIFTER WORKS  
AS A QUICK SHIFT UNIT.  
CAN YOU SEND ME THE TEMPLATE FOR THE  
WINDAGE TRAY. PLEASE!  
WILL APPRECIATE ANY HELP YOU CAN OFFER  
THIS ORGANIZATION.

THANKS!  




Charlie

YOU MAY PRINT THIS  
IN THE SOCCUM  
NEWS LETTER

Bob Coffin



CHASSIS SPECIFICATION DATA

Yenko Stinger D/Prod. SCCA

FRONT

- Caster: 3° to 5°      Camber: 1° to 1¼°      Toe-In: 1/8 to 3/16"
  - Springs: HD Corvair (008) Cut one coil, Crown cut to 8½", 73 Pinto cut to 8"
  - Steering: Factory Quick Steering Box plus Otto or Clarks Quick Arms
  - Shocks: Koni or Carrera set 2/3 to 3/4 Hard. Revalve for racing.
  - Sway Bar: 1" to 1¼" Crown type or tubular equivalent (depends on rear bar diameter to obtain balance).
  - Brakes: Chevelle Disk brakes with metallic pads or HD drum\* with GM Metallic linings and finned drums (adjust loose).
  - Bushings: Nylon or spherical (Heim) in upper control arm (2) and lower control arm (1), inner ends of arms.
  - Wheels: 14x7 (disk brakes) or 13x7 (drum brakes)
  - Tires: Goodyear 22x8.5x14 (R8) or 21x8.5x13 (R8)
  - Pressure: 24-26 psi cold
- \*15/16 or 1" wheel cylinder

YenkoStinger.org

REAR

- Camber: 1¼ to 2°      Toe-In: 1/8" with Crown Bracket
- Springs: HD Corvair 090 Cut one coil, Crown cut 1½ coils
- Shocks: Koni set 1/3 to 1/2 Hard (3/4 turn in from full soft)
- Sway Bar: 3/4 to 1" Crown type or equivalent tubular
- Brakes: Camaro Disks with metallic pads or HD Corvair drums\*\* with GM metallic shoes/finned drums. Adjust loose.
- Bushings: Heim in fwd end of trailing arms. Heim end lower control arms. Use Crown lower control arm bracket
- Wheels: 14x8 (disk brakes) or 13x8 (drum brakes).

(OVER)



Please run this ad  
RHC

For Sale (Parts & Accessories)

Yenko Racing Parts : 4 Yenko 1 1/2" carbs, less linkage - \$450 ;  
Yenko Close Ratio (1.31) Trans - \$450 exchange ; 1" Rear Dragbar  
- \$90 ; 8909 Crank welded hub, polished & balanced - \$150 ;  
Isky 310° cam (new) - \$90 ; Isky 330° cam (used) with  
set screws gear - \$140 ; 4 - 14x7 Alumite Alum  
Wheels with Lugs - \$400 or B.O. ; 2 Alumina Front Brake  
Drums, microhoned for metallic linings (new) - \$120

Misc. Services (Title: Performance Parts & Services)

MDRE is now offering complete cylinder head  
service including guaranteed valve seats, weber  
conversions and oversized 1 1/2" exhaust tubes. Also  
available are custom built close ratio transmissions,  
engines and chassis hardware including disk brake kits  
Send business letter size SSAE for listing to:

BOB COFFIN % MOBY DICK RACING ENTERPRISES  
26 CAMP MEETING RD TOPSFIELD MASS 01983  
TEL 617-887-5822 (6-10 PM EST.)



Stinger Tech Tip

Stinger and Corvair come with rear lower control links made out of heavy steel with rubber bushings at the rear end and wheel end. Rubber bushings are too soft they let the camber and toe change. This makes chassis tuning impossible. Here is the answer, lower control links made out of steel or aluminum tubing with rod ends. This is one of the stinger tech tips that is in the new stinger manual. Bob Coffin is putting together

Bob Coffin

Weight watcher tip

Rear lower control links made out of aluminum as Bob Coffin shows are 9 Big Pounds lighter than stock

Y.A.R.

Yenko Stinger Registry

Please fill out and send to Jim Rice 1826 Columbus Pekin, Illinois 61554

HELP HELP HELP !!!

Need more tech tips. For news let me know. Thank you.

For sale and Trade

This is for all members at no cost!

Corvair Moders unopened 1/25 scale AMT. 65-68 supply very limited \$25.00 each also custom build ask about having one made for yourself, including Race cars with rollcages and fat tires

(309) 347-6536 Jim Rice

1826 Columbus

Pekin Illinois

61554

Considering duplicating stg III Stinger cam ( best for autox, short track SCCA ) need 15 orders to go ahead, \$ 25,00 Deposit ( bal \$ 65. C.O.D. ) and your old cam. Deposit refund if insufficient orders are receiveds

(617) 887- 5822 Moby Dick Racing

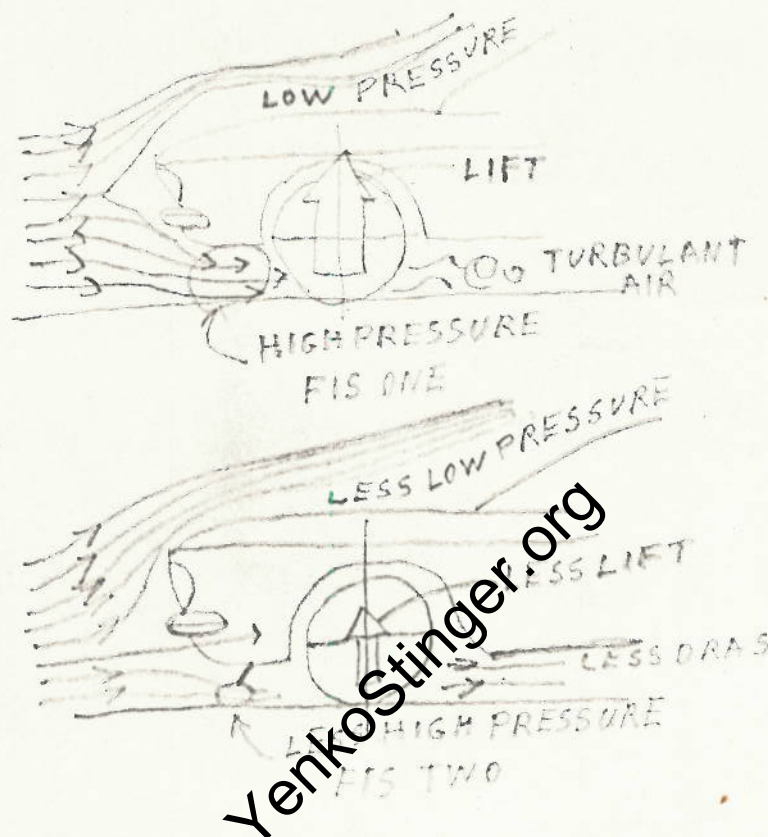
26 Campmeeting Rd.

Topsfield, Mass.

01983



## Don't be a Spoiler



You probably don't know it, but along with it's many other firsts and sometimes only's in American Automotive History, the Corvair was this Country's first production car to have a spoiler. Gm Called it a "Valance panel" and this piece of plastic first appeared on all '66 vairs. It's purpose to solve a stability problem that all Corvairs h have .... front end wander at speed or in crosswinds.

Let me try and explain, briefly and non technically why and how of front spoliars. Please refer to the two drawings as we go along. Figure one shows the normal condition of a car at about 60 mph. air speed. that could be 40 mph plus 20 mph wind. Anyhow , most of the air trys to go over or under the car. As it goes over the car, it arches above the hood, cresting a high pressure area. The pressure Difference between above and below the car causes the body to lift, removing weight from the tires. ( I have never seen any studies on the lift a spoilerless Corvair has, but back when sports car Graphic existed, they did lift studies on all cars they road tested, and many had 300 plus pounds of lift in the front, which is in the neighborhood of 25% of the total



weight on the front tires of a 'Vair ) The front end wanders when either the high pressure area forms a forms a kind of bubble that squirts out one side or the other, making the car move toward the opposite side, or when a cross wind pushes on the car, making the tires follow a slight sideways path even though they're pointed straight. You've seen small planes flying slightly sideways in a strong wind. Same thing.

Putting a spoiler under a car, figure two, forces more air to go over or around the car. Thus reducing the amount and size of the high pressure area under the car. Depending on the size and location of the spoiler, the amount and size of the low pressure area above the car is reduced. Less pressure difference. less or sometimes no lift. Because there is more weight on the tires the car is harder for cross winds to move.

One side benefit, besides the added stability, is an improvement in fuel economy. the bottom of a car is full of sdes and crannies that air loves to get hung up onto. All that turbulence creates drag. Reduce the volume of air going under the car, and you will generally reduce drag, thus improving fuel economy. I say generally, because the size, shape and location of the spoiler determines which is reduced, lift or drag, or if one is reduced and not the other. But thats getting into an area that only experimentation and instruments can accurately tell us.

Now read the accompanying information ( Tech Tips Yearbook 1975, pg.6 ) from the San Diego chapters newsletter of a couple of years ago. Notice the factory spoiler increased the stability but slightly hurt gas mileage, all other spoilers they tested improved both fuel economy and stability. I've put a couple fairly large sheet metal spoilers under two of my "Vairs. Both cars, one with factory spoiler wandered more than I wanted to accept. With my "snow plows" the cars are solid. I've gone down 2 lane highways at 60 mph with on coming semis and the cars do not move when the trucks pass. I can feel the air blast hit the car, but no sideways movement. did it no hands just to make sure I wasn't correcting for wander. No sideways motion.

I expect the stock Gm spoiler is still available. The early model z-28 Camaro spoiler ( p/n 3938689 ) looks good and does the job. IECO, Corsa Enterprises, Garvin Enterprises, Clarks. and Taranta a all have spoilers available. Car & driver March & May 1974 offers some practical help. SAE papers 700036, 710212 & 720100 have info on spoilers and auto aerodynamics.

..... Get One !

Jim Rice





EVEN DARTH VADER WANTED A CLOSER LOOK AT YS096 AT THE JANUARY 1978 AUTORAMA IN DALLAS.



## SWAY BAR STIFFNESS CALCULATIONS

by R.T. Coffin

Sway bar stiffness is a 4th power function of the diameter given that the other parameters of bar twisting length and torque arm length are the same for all bars being considered. These two variables, length and arm length, are 1st order variables and can be accounted for proportionately, two bars of the same material and diameter with the same twisting length and arms of 6" and 8", the bar with 6" arms will be 8/6 or 1.33 times as stiff as the 8" arm bar. It is in this manner that bar adjustments for chassis tuning can be made and accounted for.

### FORMULA FOR STIFFNESS CALCULATIONS

Polar Moment of Inertia,  $IP = \frac{\pi D^4}{32}$ . Calculated for each bar and ratioed to each other will give stiffness comparisons. EXAMPLE:

$$3/4'' \text{ bar, } IP = \frac{\pi (.750)^4}{32} = .0311$$

$$1'' \text{ bar, } IP = \frac{\pi (1)^4}{32} = .0982$$

$$\text{Ratio} = \frac{1'' \text{ Bar}}{3/4'' \text{ Bar}} = \frac{.0982}{.0311} = 3.15 \text{ ie;}$$

One inch bar is 3 times as stiff as 3/4" bar. IP of tubular bars can be obtained by calculating the Ip of the OD and subtracting IP of the ID.

EXAMPLE: 1 1/8" tube, 1/8" wall thickness

$$OD = 1.125, \quad Ip = \frac{\pi (1.125)^4}{32} = .1573$$

$$ID = .875, \quad Ip = \frac{\pi (.875)^4}{32} = .0575$$

$$\text{SUBTRACTING, } Ip \text{ tube} = .0997$$

By working the equation backward, we can find what this tube is equivalent to in a solid bar, ie:

$$D = \sqrt[4]{\frac{Ip(32)}{\pi}} = \sqrt[4]{\frac{.0997(32)}{\pi}} = 1.004'' \text{ ie,}$$

A 1 1/8" tube with 1/8" wall is equivalent to a one inch solid bar.



SWAY BAR STIFFNESS CALCULATIONS (cont'd)

The weight comparison of the two is equivalent to the difference in cross sectional area if configuration and material are the same:

$$\text{For a 1" bar } A = \frac{\pi D^2}{4} = \frac{\pi (1)^2}{4} = .785 \text{ in}^2$$

$$\text{For 1 1/8" tube } A = A_{OD} - A_{ID} \text{ or}$$

$$\frac{\pi (1.125)^2}{4} - \frac{\pi (.875)^2}{4} = .994 - .601 = .393 \text{ in}^2$$

$$\text{For the ratio: } \frac{A_{\text{Tube}}}{A_{\text{Bar}}} = \frac{.393}{.785} = .5 \text{ or}$$

Tube will weigh 1/2 what the solid bar weighs.

YenkoStinger.org



COMPARISON TABLE

Solid Bar

Bar Diameter	Ip	A
3/4 " .750	.0311	.441
7/8 .875	.0575	.601
1 1.000	.0982	.785
1 1/8 1.125	.1573	.994
1 3/16 1.1875	.1952	1.1075
1 1/4 1.250	.2397	1.227
1 5/16 1.312	.2973	1.353

A = Cross-Sections Area  
Ip = Polar Moment of Inertia

Tubular Bar

Bar Diameter	Wall Thk	Bar ID	Ip	A
3/4 " .750	.125	.500	.0250	.245
↓ ↓	.093	.564	.0212	.191
↓ ↓	.062	.625	.0161	.134
7/8 .875	.125	.625	.0425	.294
↓ ↓	.093	.690	.0352	.227
↓ ↓	.062	.750	.0264	.160
1 1.000	.125	.750	.0671	.343
↓ ↓	.093	.814	.0550	.264
↓ ↓	.062	.875	.0406	.184
1 1/8 1.125	.125	.875	.0997	.393
↓ ↓	.093	.939	.0809	.302
↓ ↓	.062	1.000	.0591	.209
1 1/4 1.250	.125	1.000	.1415	.441
↓ ↓	.093	1.064	.1139	.338
↓ ↓	.062	1.125	.0824	.233
1 5/16 1.312	.135	1.040	.1743	.502



STINGERS OF CORSA UNITED IN MOTORSPORTS

July 24, 1979

Director of Club Racing  
Sports Car Club of America  
P. O. Box #22476  
Denver, Co 80222

Sir:

This letter is, of course, in reference to the Yenko Stinger Corvair currently crippled in D-production racing.

A few years back some of us Stinger owners decided to join forces to keep our cars alive and well. We formed a group of hardcore, knowledgeable enthusiasts to do just that. We now have a roster of 60 members, and a following of 7000 National club members (Corvair Society of America).

The Corvair is fast becoming a favorite of many people across the nation. It also seems to be a crowd favorite at the track; which should be pleasing to the SCCA, especially here in the Colorado region.

We are cognizant of the fact that since its birth in 1966, the Yenko Stinger has not been allowed one change or update; while, in fact, many other cars of foreign make have. For instance, Datsun 2000 (no longer produced) - allowed better carburation. Jensen Healey - CP to DP and the addition of a real nice 5-speed. How many Jensens are running now? Porsche 911S - CP to DP. Alfa - 2000# allowed weight reduction. And, the good, old Triumph GT-6 - allowed better carburation. Well, Sir, the good old American-built Stinger get nothing. Why? Why not? Some (any) reason or explanation would be appreciated.

I firmly believe it was the intention of the producer of the Yenko Stinger to have some American representation in Sports Car Club Racing.

I represent to you a group of enthusiasts who sincerely want to keep that idea alive. Obviously that cannot be done without your cooperation and understanding of our cause. It seems to me that the SCCA would want to keep as many cars competitive as possible. You have shown this kind of enthusiasm toward the other makes, so why not ours. If I may interject a thought from a fellow Stinger racer at this point. His comment to me was, "Perhaps the SCCA should consider changing its name on club level racing to the Sports Car Club of Great Britian and Japan -

SCCPRIAR." Well, needless to say, I understand and share his

STINGERS OF CORSA UNITED IN MOTORSPORTS

Director of Club Racing  
Sports Car Club of America  
July 24, 1979  
--Page 2--

frustrations. It is not our goal or purpose to degrade the SCCA; but, in fact, to upgrade club racing. We have supported the SCCA, so why can't the SCCA give us a fair shake?

We are in dire need of better carburation. Specifically, Weber carbs of the three barrel, downdraft breed. These would be a great help to the Stinger. Consider also the need for better, safer disc brakes (GM has discontinued the metallic linings). These can be easily adapted from the 67-69 Camaro. One additional item that should definitely be considered to allowing 8.5" wheels on the rear. This would definitely be a safety factor which we can all agree upon. The Yenko Stinger did have a factory produced 7" wheels available to the consumer. I still have a copy of the original Yenko sales brochure stating just that. This has come up before; but you still chose to ignore it. It's time the SCCA looked at the facts.

I think, that in view of all the foregoing facts and issues, we can honestly say that the SCCA has not given us a fair and serious consideration -- the American DP car and our efforts.

Thank you. We look forward to your positive response.

Sincerely,

Richard L. Harris for SOCUM  
2590 West 80th Avenue  
Denver, CO 80221  
(303) 429-8767



# SOQUIM

STINGERS OF CORSA UNITED IN MOTORSPORTS

March 1982

Editor : Charles Lee 9113 Friendship; Houston Texas Ph 467 3978



Litho in U.S.A.

Dear Member

We need your help to keep this paper going Please send in things that you want us to write or I am not going to keep this small paper going We need your help this paper is all of yours also

Charles Lee



We Also need the PH.numbers we don't have in the roster

Thank You

YenkoStinger.org



Stingers Of Corsa United in Motorsports  
Membership Roster

Steve F. Avery  
7 Fredericksburg Dr.  
Greenville, S.C. 29607  
Ph. 1-\_\_\_-288-4168

Joe Burch  
1947 California Crossing  
Dallas Texas. 75220  
Ph.1-214-241-0196

Charles M. Cain  
P S C Box 3935  
A.P.O. New Youk 09633  
Ph 011-49-6198-9370

Bob Coffin  
26 Campmeeting Road  
Topsfield ,Ma 01983  
Ph.1-617-887-5822

CSA-ISMA AUTO PRODUCTS  
12882 Brookhurst Way  
Garden Grove, Ca. 92641  
Ph. 1-714-537-7427

Seth T. Emerson  
3462 Kirkwood Dr.  
San Jose, Calif. 95117  
Ph. 1-408-247-2237

Richard L. Harris  
2590 West 80th Avenue  
Denver Co. 80221  
Ph. 1-303-429-8767

J.R. Mike Harrison  
17 Bell Burff G.  
Gaithersburg, Md. 20879  
Ph.

John F. Kerkhoff  
2233 El Segundo Blvd.  
El Segundo, Calif. 90245  
Ph. 1-213-640-3200

YenkoStinger.org

Kenneth W. Klingaman  
156 Warren St.  
Newark, N.J. 07103

Ph. 1-201-643-2027

Charles G. Lee  
9113 Friendship  
Houston Texas 77080

Ph. 1-713-467-3978

Tom Ludwey  
% 161 Hill St.  
Medland Park NJ 0743

Ph. 1-201-444-1859

Eddie M. Meadows  
109 Matte Lane  
Havre De Grace, Md. 21078

Ph.

Randy Morri  
12306 Kemmerton Lane  
Bowie M.D. @0715

Ph.

Thomas P. Murpht  
90 Spring St.  
Wilkes Borre Pa. 18702

Ph.

Mr. R. Paul  
# 45-27 Silversprings Dr.  
Calgary, AB T3B 4N3

Ph.

Jim Rice  
1826 Columbus  
Pekin, Il. 61554

Ph. 1-309-347-6536

Steve C Spence  
2912 River Oaks Dr.  
Monrde, La. 71201

Ph.

YenkoStinger.org



Stephan C. Spence  
2912 River Oaks Dr.  
Monroe, La. 71201

Ph. 1-\_\_\_\_- 322-5912

Mrs Scotty Smathers  
7022 Holiday Rd. N.  
Jacksonville, Fl. 32216

Ph. 1- 904-725-4723

Stan Szymanel  
1127 W 18 th St  
Lorain, Ohio 44052

Ph. 1-216-244-6547

Wade Tanning  
Rt. 2 Box 46 a 18  
Prince George Va. 23875

Ph.

Leslie Will  
2341 So. 16 th  
Milw. Wis. 53215

Ph. 1-414-647-1494

John L Woodward  
2602 Transportation # G  
National City Calif 92050

Ph.

YenkoStinger.org

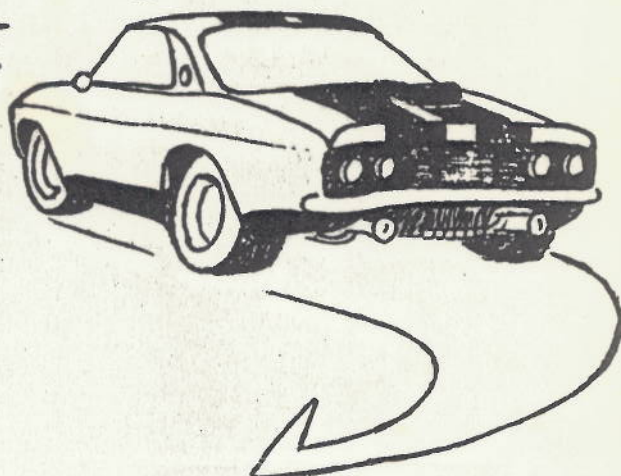


# CHEEP RACING AUTOMOTIVE

Registered Retail  
Merchant 345158 05

## CORVAIR SPECIALTIES

4821 St. Rd. 9 No.  
Anderson, Indiana  
46012  
(317) 643-9290



SCCA Club Racing  
Comp. Board  
BOG

Sirs:

In reference to the deletion of Corvairs in  
SCCA club racing.

Corvairs (Stingers) are obviously being legislated out  
of club racing. The reasons are not so obvious.

The reasons could be:

The Corvair isn't British (or Japanese)

It isn't factory backed--timing towers, bridges,  
conventions.

It can be raced cheaply. Money = sophistication.

It isn't current-like bug-eye sprites, bathtub Porsches,  
and Morgans.

It isn't interesting-rear engine, air cooled, IRS

It isn't modern-like 911 Porsche-see above.

It isn't significant- 1.7 million produced.

It has no following- 7000 Nat'l members of CORSA.

\*\*\* It looks funny on the track sitting next to a Lotus 7.

\*\*\* It isn't a SPORTS CAR, its a Sedan with exactly the same  
bulk as a Camaro, but, SCCA DOES NOT RECOGNIZE THE  
CORVAIR AS A SEDAN!

The fact is, the Corvair used to be competitive with the  
FR-4 (now in E/P), and the GT-6 (now with non-produced larger  
carbs.) It had superior suspension until everyone got free  
suspension. It had superior traction until everyone got fender  
flares and increased track width. It had barely adequate brakes  
until everyone else got alternate brakes. The Stinger is the  
ONLY car in the PCS which must use DRUM brakes (and the linings  
for these are no longer available). It still has restrictive  
manifolding and Camaro frontal area.



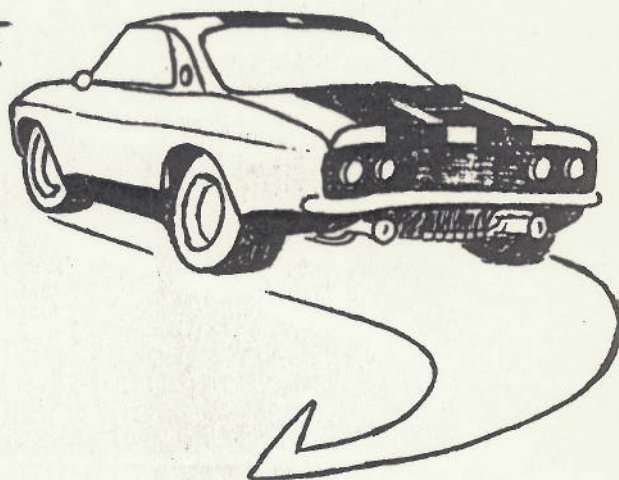


# CHEEP RACING AUTOMOTIVE

Registered Retail  
Merchant 345158 05

## CORVAIR SPECIALTIES

4821 St. Rd. 9 No.  
Anderson, Indiana  
46012  
(317) 643-9290



The shots rang out clear:

Alfa 1750	to E/P
Alfa 2000	minus 41 lbs.
Austin Healy	1" track increase
Datsun 2000	C/P carburetion
Jensen Healey	D/P to C/P to D/P and 5 speed
Lotus 7	C/P to D/P
Lotus S-7	3" track increase
Porsche Carrera	C/P to D/P
Triumph TR-7	5 speed
Triumph TR-7	Roadster
Triumph TR-6	C/P to D/P
Triumph TR-6	minus 139 lbs.
Porsche 911s	C/P to D/P to provide comp. for TR-6
Triumph GT-6	increased carburetion
Triumph TR-4	D/P to E/P

Yenko Stinger Corvair - NOTHING!

Plus fuel additive wich gave an additional advantage to cars with undersquare bore/stroke ratios and water cooling.

The Corvair lays mortally wounded.

A move to E/P would be of dubious value. The MG-B with non-produced 2" carbs is faster than most all D/P cars.

People don't necessarily come to SCCA races to see only current cars; that's what IMSA is fer. They like variety and underdogs; like Sprites Bathtubs, Morgans, Elvas, and Corvairs. Your "No changes after 1982" rule would cause defacto elimination of the above variety.

There were some flashes of brilliance for Corvairs. Jim Schardt finished the run-offs a close third behind a GT-6 (which now has increased carb.) and about a mile behind the Jensen Healey. He hasn't returned since the C/P cars began pouring into D/P. James Reeve also had some good finishes. He had the money and the talent and you were kind enough to hold the CSPRRRC at his home track.



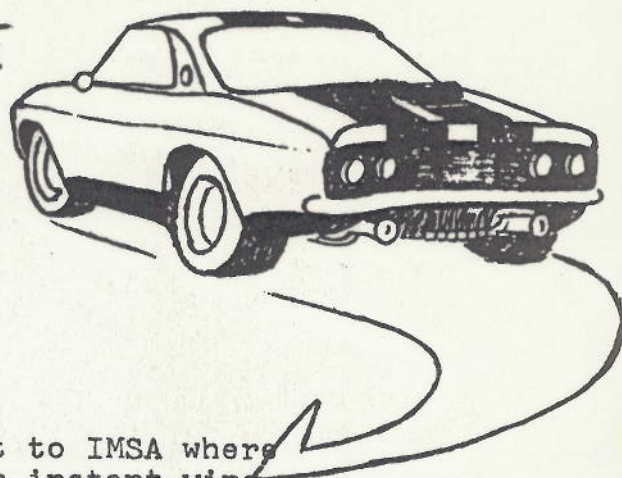


# CHEEP RACING AUTOMOTIVE

Registered Retail  
Merchant 345158 05

## CORVAIR SPECIALTIES

4821 St. Rd. 9 No.  
Anderson, Indiana  
46012  
(317) 643-9290



James Reeve quit in disgust and went to IMSA where the same effort in a Skyhawk brought him instant wins and national recognition.

If the Stinger is to stay in D/P and be competitive, it needs: Increased Carburetion, Porsche type Webers or Turbocharging ( Corvairs were produced with turbochargers ), and Camaro disc brakes- which is in fact only an update- the drums are Camaro parts. The Stinger was also produced with 7" wheels.

If the Corvair cannot get help than it has to get out. But where can it go? Sports Racing-impossible. The new A/Sedan rules seem taylor made for the Corvair, but it isn't recognized-why?

Corvairs would look much better beside Camaros than Lotuses. Corvairs and Camaros have the same body dimensions.

Corvairs weight 2600 lbs. stock. Corvairs are under 200 cid-104 cid. Corvairs came turbocharged STOCK. Camaro brakes and wheels will BOLT ON.

There is no fear of class domination. The best carbureted Corvair would be 10 lbs./HP, Turbocharged- 8 lbs./HP, Camaros- 6 lbs./HP.

If the Corvair, for whatever reason, is going to continue to decline in D/P, please give consideration to recognizing it in A/S so we enthusiasts will have something to be enthusiastic about.

Please respond quickly as both of my engines are badly broken and I need to know which direction to proceed,if at all.

Thank you,

*Warren E. LeVeque*  
Warren E. LeVeque





Director of Club racing, SCCA

Dear Competition Board Members;

It is, I feel, again necessary to ask the Competition board for action concerning the Yenko Stinger. Several factors, including some past Comp. board actions have resulted in the loss of competitiveness of the Stinger in regional competition. When originally classed in D/production, the Stinger, with a lot of preparation and factory help was able to compete successfully with the class car of that era, the TR-4, and others. Since that time several notable events have removed much of the class competitiveness of the Stinger. The relocation of 911 Porsches into D from C, moving the TR-6 into D from C, the classification of the Jensen Healey into D when everything pointed (and at one time SCCA had even classified it) as a C car. Some D-prod cars received compensation. TR-7 got a 5-speed, the Austin Healey got a track increase, the Datsun 2000 got C-prod Carburetion. The Yenko Stinger got nothing - absolutely nothing. The TR-4 was moved down to E Prod because D was too fast for it. The crowning achievement though, was the D/prod classification for the "Ringer" 924 porsche with special 928 brakes, special handling group, and Factory chosen special Carbs. We know that Porsches presence in the Trans-Am is needed to overcome the Winston GT threat, but do they have to be handed D/prod on a platter! National Racing may provide much publicity for SCCA but regionals pay the way for them.

In reference to the requested changes. I ask that the following be allowed:

1. 7" rim width be considered factory stock (My car YS003 came from the factory with them) This would allow 8.5" rims to be run. This is also a safety move, on a car with the weight of a Stinger and the rearward weight bias, Available tires won't live above 90° ambient temp. Shredding of tires is common on western tracks. The 8.5" rim will allow tires to live longer, decreasing costs and improving safety.
2. The camaro disc brakes be allowed as an option. These brakes, common variety Camaro discs from 1967 to 69, are the brakes that replaced the factory metallic linings that our Stingers/Corvairs used. The factory metallic linings are out of production, and

**STINGER RACING**

Seth T. Emerson • (408) 258-2678  
1351 Mauna Kea Lane, San Jose, CA 95132





aftermarket linings will not live at racing speeds. Virtually every production car has optional brakes allowed- the grossest example being the Z-car Hurst -Airheart 4-wheel discs and the 924 Porsche's 928 brakes. Honestly are we asking for much? Note\_ 14" diameter wheels are needed for the adaptation of these discs.

Perhaps it has been a while since any of you have seen a Yenko Stinger in action. Without exception it is a crowd pleasing underdog against the factory giants. The classic dirt tracking style which is common (and, with narrow wheels, maybe dictated) has brought accolades to the drivers and crowds to their feet. With all of the adverse publicity that the Corvair received during it's lifespan of production, perhaps the drivers of Yenko Stingers have more to prove than the drivers of the other cars. Please don't let these cars be relagated to a museum. I personally feel that they are fun to drive, I drive a street Corvair too!

When Corvette Publicists refer to their fiberglass wonders as America's "only sports car", they can be forgiven their error as ad agency enthusiasm. If SCCA lets the Stingers fade from the racing scene by legislating them into non-competitiveness, they cannot be forgiven. Everyone would lose!

Thank you for your consideration

Seth T. Emerson





To All interested Stinger Owners:

I don't know if you are aware of a crisis situation for us concerning the Yenko Stinger. Both Warren LeVeque and I have written letters to the S.C.C.A competition Board concerning board action and inactions that, I believe, have contributed to the lessening of the competitiveness of the Stinger in Road Racing. This has shown up first in "National" level competition, due to the greater competition (\$\$\$\$) at this level. However, it is only a matter of time until the Stinger is a regional level also-ran. If you have as much time, effort, and dollars tied up in your car as I do, and I am sure of you have more than I do in your cars, you had better be concerned right now.

At the recent Portland Bonus National, Doug Hargrove and Bill Sanders talked with Tex Arnold for 1/2 hour concerning Stinger problems and needs, among them rear tire stress problems and brake availability. Tex, an SCCA Comp board advisor, said the best way to move the Comp Board is letters-lots of letters from interested parties--- that's us!

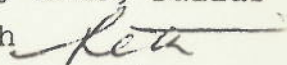
I personally believe that moving the Stinger to E production is not the answer. In our area the E cars are virtually as fast as the D cars. The changes asked for in my letter, copy enclosed, would be more beneficial, resulting in lower ultimate cost and safer more reliable cars.

I am also enclosing letters from Doug Hargrove and Warren LeVeque to the SCCA board. Please read these letters thoroughly, then take pen in hand and write your own. If you have other items in mind please include them, but the important thing is to write NOW. The comp board will be meeting in late July to look over many items. If we can furnish them with 20 or so letters from concerned Stinger owners and drivers, we may be able to swing the tide and help our cause. Feel free to paraphrase any or our letters-copying might be too obvious, though. The Competition Board wants to make racing more competitive, but supposedly keep the cost down. Weber Carbs or Fuel injection are quite expensive and I doubt whether the Comp Board would approve them, but your letter is your letter. 14 or 15 inch Dia wheels are quite available, thanks to GM, so these make a reasonable request for safety and other reasons.

When you have completed your letter, please make a copy for me, then mail it immediately to the Comp Board office. Send it to the attention of "Director of Club Racing" at the National office in Denver.

Director of Club Racing  
Sports Car Club of America  
P.O. Box 22476  
Denver, Co. 80222

Remember, this is the only way we have of making the Board aware of our needs and intentions. British Leyland(JRT) Datsun and Porsche have paid staffs that maintain a liaison with SCCA. Since we are orphaned owners, we must speak up for ourselves through SOCUM. If you are interested in learning more about "Stinger Owners of Corsa United in Motorsports " write Jackie Guion at 11923 Quincy Lane, Dallas Texas.

Thank You- If you need more info call or write me, Seth 

**STINGER RACING**

Seth T. Emerson • (408)

247-2237

3462 Kirkwood Dr, San Jose, Ca 95117



Nov 29 ]978

Sir

I've been a member of SCCA for six years and have raced a Yenko Stinger in Solo 1, Solo 2, regional races, and national races, winning events in all four and winning a Regional Title. The Yenko Stinger was homologated in 1966 for SCCA class D production racing. The specification have not changed for the twelve years.

I've watched cars moved from C production(Cp) to D production(Dp) that were too fast for Dp in 1969, and cars that had won national titles move down a class because they were no longer competitive against the new technology and could not be made competitive in their present class and to keep other cars competitive in Dp they were allowed changes. ( Lotus, Alfa, TR7, TR6, Jensen Healey. The Yenko Stinger can not be competitive against this kind of up to date technology without some kind of changes to the car.

The weight bias is approximately 35% (750#) on the front and 65% (1350#) on the rear. Running the same size rims as other cars in class, the Stinger has a definite disadvantage in cornering power. To help equal this out the seven inch rims that was a factory option should be listed as standard for the rear instead of the five and a half that is now listed, and increase in track should also be made to reflect this increase.

Other cars are allowed different carburetors that did not come on the specific car from the manufacturer, one reason given, to hard to work with. The Stinger carbs are stock General Motors carbs that are supplied with the Corvair engine, and are very hard to work with. An alternate carburetor is requested with intake adapter. (ex 40 IDA) Porsche 911 in 3rd can use two 3 barrel Webers.

Request the use of front disc brakes for safety and reliability.

These changes to the Yenko Stinger would make the car more competitive with the new engineering that produced disc brakes, single overhead camshaft, double overhead camshaft, four valve per cylinder, and others that are in the newer production race cars.

Sincerely

  
Douglas Hargrove

Douglas Hargrove  
1402 PEARL ST  
Modesto, Calif.

95350



JUNE 14 79

Sir:

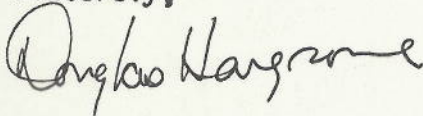
I drive a Yenko Stinger in National and Regional Races. During the past five years of racing I've watched my car fall further back in the Dp group of cars. The time has come that the Stinger is no longer competitive at a national level. At the past two Bonus Nationals I qualified 8th at Riverside and 4th at Portland. The Stinger is as fast as in the past, but I am running further back in the Dp group.

Hank Thrope's statement at the 79 convention that the trend for increasing class competitiveness seems to make slower cars faster and more expensive, and this is very true as far as I am concerned.

If the Yenko Stinger is to be competitive in Dp it has to have some improvement. The Stinger has had no improvements for 13 years!

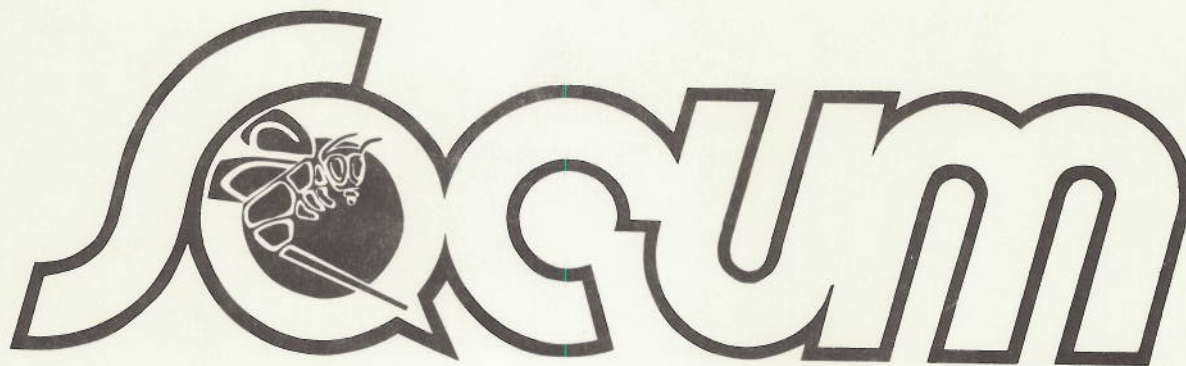
One change that is needed to improve competitiveness is 8 1/2 inch rims on the rear. Since the bolt pattern is the same as all the Corvette, the logical change as far as cost and supply would be to allow 8 1/2 by 15 inch wheel on the rear. No changes to the car would be needed to install these rims.

Sincerely,



YenkoStinger.org

Douglas Hargrove  
1402 Pearl Street  
Modesto, CA 95350



NOVEMBER - DECEMBER 1978

Editors: Jackie Guion, 11923 Quincy Lane, Dallas, Texas 75230  
Joe Burch, 1947 California Crossing, Dallas, Texas 75220

In late 1975, Rich and Joyce Harris were co-editors of Rocky Mountain Corsa, the monthly newsletter for the Rocky Mountain Chapter of CORSA. Rich was also interested in racing and felt that the owners of Yenko Stingers and other racing Corvairs should form a group to help preserve their cars. As part of his campaign to form SOCUM (Stingers of CORSA United in Motorsports), he wrote a "Corvair Racing Series" for Rocky Mountain Corsa.

"Schardt's Stinger" was originally published as "Corvair Racing Series, Part I, Schardt's Stinger" in Rocky Mountain Corsa in October, 1975. Thank you for letting us reprint the article, Rich.

## Schardt's Stinger by Rich Harris

Back in 1973, when I began hearing about Yenko Stingers still being competitive in SCCA D-Production racing, it blew my mind. So, I decided to do some research on the subject and found there were several very competitive Stingers across the nation. This is the story of one Stinger and its owner.

Jim Schardt of Dayton, Ohio, began his racing career some 8 years ago, and somehow wound up in the seat of a winning Yenko Stinger. Jim is 34 years old, married with twin boys, age 9. He is an engineer and President of Dayton Wheel Products. Why did Jim Schardt, who probably could have driven any car in SCCA D-P racing choose a Yenko Stinger -- a Corvair? Jim quite frankly and simply states, "It's the best car in the class". Perhaps even better than the factory-backed Jensen-Healeys which have won DP championships in the last two years in a row; but, let's not forget the Yenko Stinger won DP championship in 1967 and was not factory backed.



**JIM SCHARDT  
IN YS043 AT  
ROAD ATLANTA  
RUNOFFS.  
PLACED 5TH**



The price and address are still correct for the Dayton Wheel Products catalog according to Joe Burch.

We also thought you might like to see some of the answers we got to the questionnaires we sent out in August. This month we are including the first ones to give you an idea of the responses we got.

## **TARANTA ENTERPRISES**

**STINGER PARTS & ACCESSORIES**  
2590 W. 80th Avenue  
Denver, CO 80221  
Phone: (303) 429-8767

### NEW FROM TARANTA

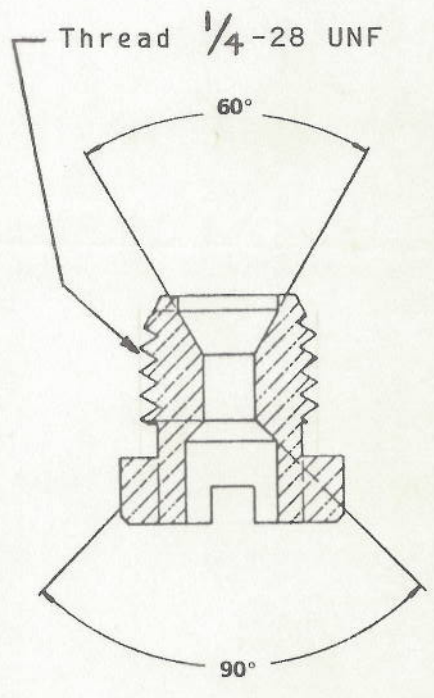
- ALUMINUM FLYWHEEL FOR 64-69 ENGINES, WEIGHS ONLY 5 LBS.**  
\$80.00 plus \$2.50 shipping
- ALUMINUM DEGREED CRANK PULLEY**  
\$37.95 plus \$2.50 shipping
- 4 SPIDER DIFFERENTIAL HOUSING, STRONGER THAN STOCK GM, COMPLETE WITH GEARS**  
\$99.00 plus \$2.50 shipping
- 4 PUCK FERAMIC CLUTCH DISC**  
\$38.95 plus \$2.50 shipping
- FOAM AIR FILTERS FOR H & HV CARBS**  
\$10.00 ea., \$1.00 ea. shipping
- CATALOG -- \$1.25**

**RACER DISCOUNTS AVAILABLE, ASK AND YOU SHALL RECEIVE.**

TYPICAL  
METERING  
JET

ROCHESTER JETS

PART NUMBER	ORIFICE DIA.
	.050
	.051
	.052
	.053
	.054
	.055
	.056
	.057
	.058
	.059
	.060
	.061
	.062
	.063
	.064
7031963	.066
7031964	.067
7031966	.068
7031967	.069
7031968	.070
7031969	.071
7031970	.072
7031971	.073
7031972	.075
7031973	.076
7031974	.078
7031975	.079
7031976	.080
7031977	.082
7031978	.083
7031979	.085
	.086
	.087
	.088
	.089
	.090
	.091
	.092
	.093
	.094
	.095
	.096
	.097
	.098
	.099



YenkoStinger.org



Racing

# 1

~~Auto~~ Part #  
Carburetion ~~Racing~~

If you are SCCA racing with a Yenko Stinger the rules specify Rochester H or H V carbs. The production car specifications name two part numbers P/N 7025023 and 7025026. These are the original P/N's for 140 HP primary and secondary carburetors. Then the PCS mentions 1 1/2" throttle bores. These are not stock. The original carbs had 1 1/4" throttles and a 1" Venturi bore (past the cluster). The popular modification has been to bore this <sup>venturi</sup> passage out to 1 1/8" for increased flow. This is cheap and effective, but for all out Road Racing the bigger <sup>venturi</sup> Yenko-called High CFM carbs <sup>(1 1/2" throttles)</sup> seem to be the good set-up. These carbs were supplied by Yenko originally and have been made by other sources ~~since~~ since, essentially the center of the carb is bored out and a sleeve (1 1/2" ID) is pressed and glued in from the bottom, a new throttle shaft hole is bored through the sleeve and perhaps an idle ~~screw~~ needle hole is drilled. The Venturi cluster <sup>can be</sup> modified to extend the legs closer to the walls of the chamber. Accidentally the throttle plate (butterfly) used by Yenko was the plate from the Turbo Carter YH carb. A little authenticity at least.



These carbs were essentially hand built and each part tailored for the job. I have seen throttles with half the shaft removed, ~~and~~ the other half filed smooth and the throttle attachment screws rounded for air flow. This seems like a lot of work but it is necessary for best breathing.

Aside from the throttles there are several ~~other~~ <sup>other</sup> mods that can help the fuel system work better.

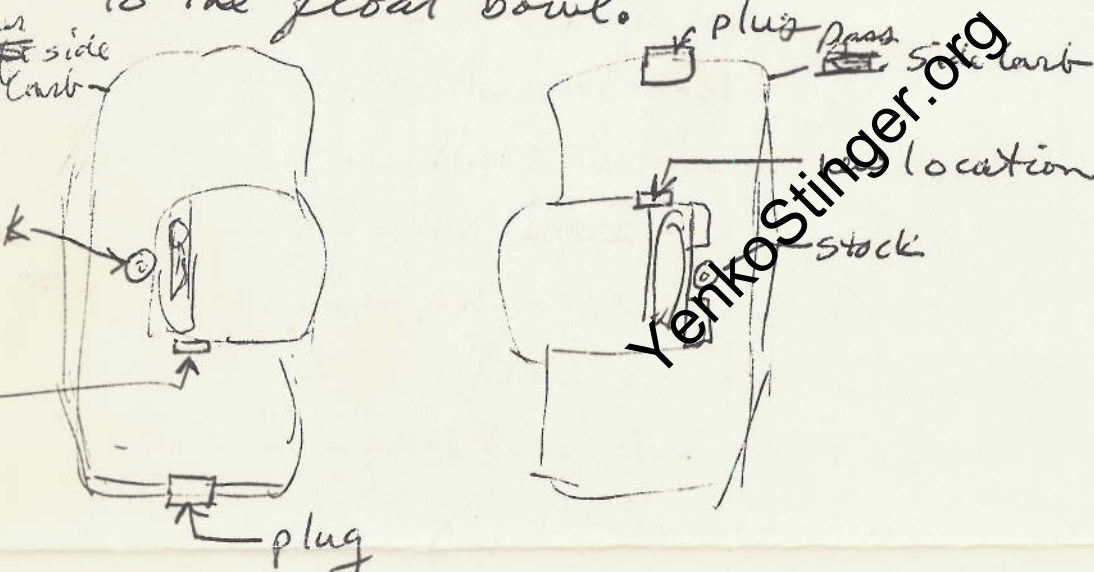
The vent tubes have been prominently mentioned and I doubt if there is a high performance street race Corvair motor that doesn't have them. For Reference see

Bill Fishers "How to Hot rod Corvair engines" what the tubes do is allow you to run high float settings to combat fuel starvation without having fuel spillover from the vents. a higher float level will richen the mixture so jet accordingly.

The large throttles will result in a leaner mixture with the same jet. If you go to the large bore carbs you have to richen the ~~the~~ main jet about 20%. many 1 1/2" throttle carbs are running #75, #80 to #90 jets. This is because you have less vacuum signal through the large bores so a richer initial mixture is needed. Jet Location is another "hot tip". The stock location can run dry when there is still 1/2" of fuel in the



float bowl, or when extreme cornering forces the fuel in the carb toward the extreme ends of the float bowl. There may be fuel, but not where the main metering system can reach it. The main jet can be relocated, however, and the job is not very difficult. You can relocate all the jets to the rear of the carb, but if you want, you can just relocate them to the same side relative to the float bowl.



Both jets will be submerged during hard left and right cornering. Unless your car accelerates like a AA fueler you won't uncover the front location (the world's fastest ~~unblown~~ <sup>per the drawing</sup> unblown Corwin is equipped ~~with~~ <sup>per the drawing</sup> drawing).

Relocation of the jets is a delicate job. You need a drill set, a 1/4-28 tap (for the jet hole) a 1/8-27 NPT Pipe Thread tap for the bowl plug, a soldering iron + solder (to plug a hole in the bowl).



# 4

You also need 4  $\frac{1}{8}$ "-27 pipe plugs preferably allen head type or screw driver slotted.

First determine where the jet should be. If you have a <sup>late</sup> ~~VT series~~ carb you have a brass <sup>metered orifice</sup> ~~plug~~ in the float bowl which feeds the main <sup>circuit</sup> under high speed <sup>enrichment</sup> circumstances. There is also a plug in the <sup>enrichment</sup> outer bowl wall at this location. Remove the plug and drill the pilot hole for the  $\frac{1}{8}$ -27 pipe thread - do not tap the hole at this time. With a <sup>(3/32)</sup> small drill, drill and remove the metered orifice from the inner wall. Make sure the cluster ~~is~~ and the tapered piston for the ~~high speed circuit~~ <sup>is</sup> removed. Drill the passage from the bowl to the main well out to  $\frac{7}{32}$  as a pilot for the ~~tap~~ tap. You can counter bore this area to sink the jet in from the bowl if you want. This will eliminate any interference with the float, don't go <sup>much</sup> deeper than the head of the jet though.

Now tap the inner hole to  $\frac{1}{4}$ -28. Make sure you have full threads to the depth of the jet's threads, about  $\frac{1}{4}$  inch ~~minimum~~. Do a trial installation of the jet through the bowl access hole. A wooden match stuck into the top ~~of the jet~~ works perfectly to hold the jet. Start it with the match but tighten it with a screwdriver.



if it goes all the way in and tightens, it is okay.  
 Remove the jet (the match or a tooth pick works fine)  
 and tap the outer hole to  $\frac{1}{8}$ -27 Pipe (Warning - Do not  
 tap too deep as you do not want the plug pro-  
 truding into the float bowl. ~~and~~

When done ~~and~~ solder up the hole in a standard  
 jet and install it in the original jet location.  
 You can do this exactly as above in a  
 H series carb but you won't have a pilot plug  
 or metered orifice to start with - Remember you  
 have to end up in the main system well

If you do want to locate a Rt side carb  
 jet at the rear it is possible but be careful  
 to stay out of the idle system - a drilled  
 passage travels across the carb at about  
 the same location as you will have to drill  
 through. Also linkage can <sup>and will</sup> interfere with the  
 bowl plug so be careful.

~~Note~~

Stingeracing  
 Seth Emerson