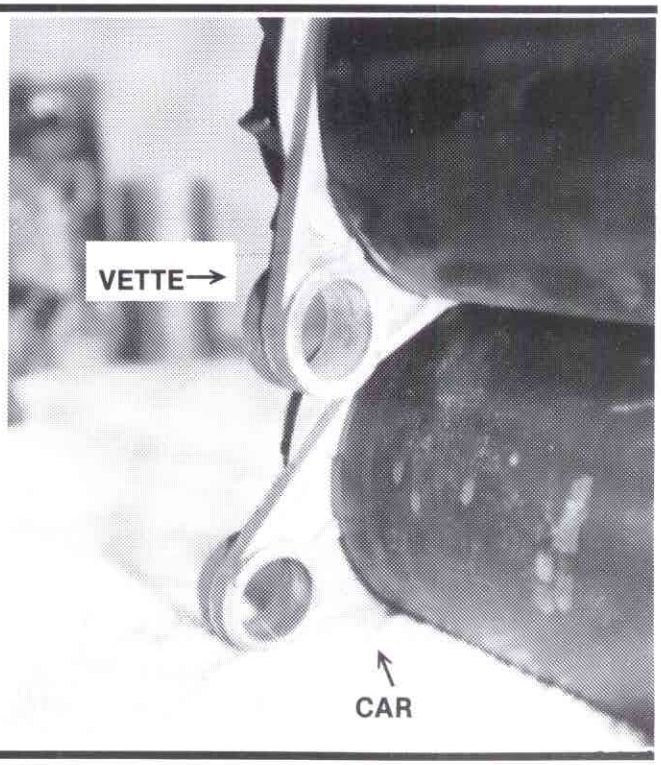
STRAIGHT TALK

VOLUME 5, NUMBER 2 June 1991

STILL TIME FOR WESTERN REGIONAL CONFERENCE
(SEE BACK COVER)

GENERATORS
Car
vs.
Corvette

See Page 2



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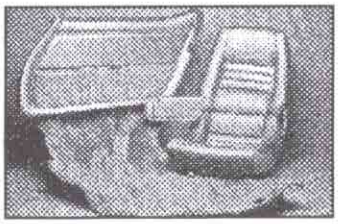

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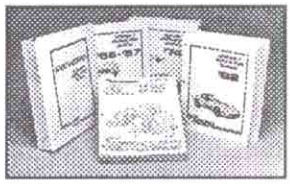

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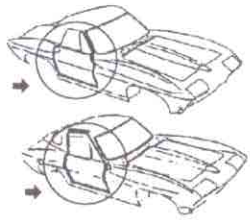

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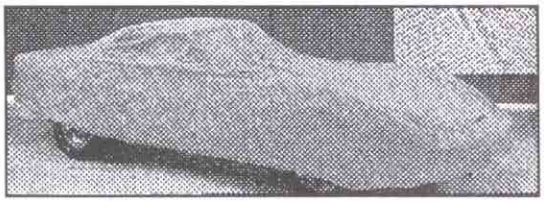

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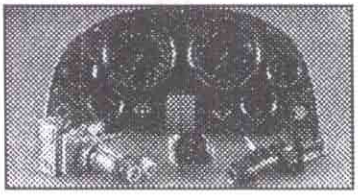

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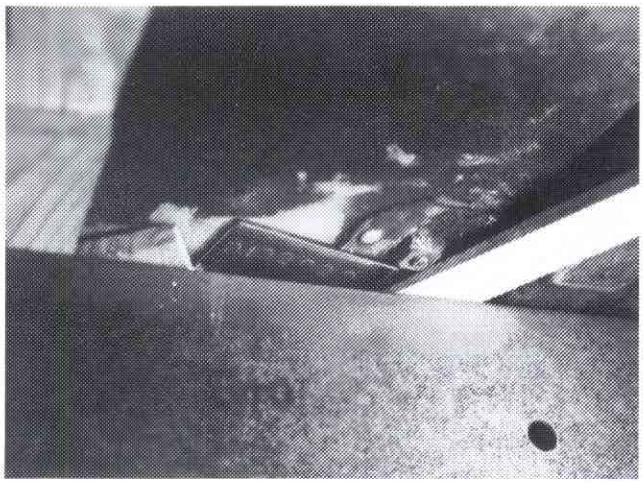
FRAME VIN FOLLOW-UP

As a follow-up to the article I wrote for SACE Vol. 4, Number 2, Page 7, I would like to show the members that not only can you find your frame VIN, but you can also photograph it with a littie Work, Light, Mirror, Position, Action, and Camera. The number S105055 image is reversed due to the reflection in the mirror, but it is readable and makes a pretty picture.



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GAS TANK DOOR ADJUSTMENT

By Tony Catalano

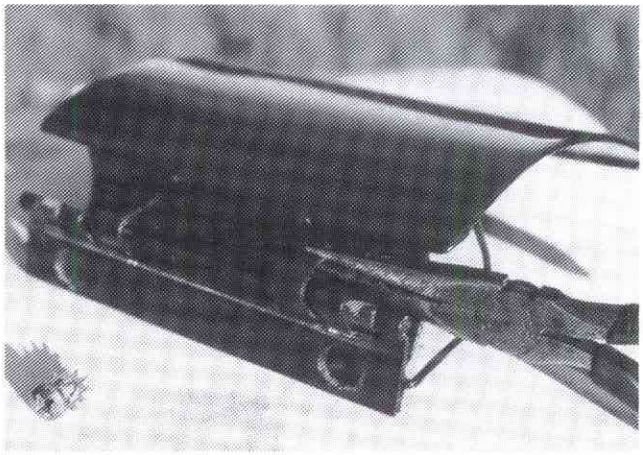
Before I put a fresh paint job on my car I hadn't really paid a great deal of attention to the fit of the gas tank door. After my car was painted and reassembled I felt that the gas tank door did not operate exactly the way I wanted it to.

The door is attached by two phillips head screws. The screw holes in the door do not allow for a great deal of vertical or horizontal movement, for position adjustment, and this is o.k. The door will align pretty well square in the opening.

What I found was that when the door was in the open position it did not leave a comfortable margin between the upper front corner of the door and the body. When flipping the door up and allowing it to spring into the open position unassisted it would hit the body. Something that a nice paint job doesn't need.

The problem is having the door open too wide. The solution is to adjust the door so that it will not open quite so wide.

This adjustment is accomplished by the bending of two tangs located at the top of the door. The tangs will restrict the door from opening too wide. While the door is detached from the car simply bend the two tangs down a small degree and refit the door to the car body. Try this a few times until you find the position that you want.



Picture your Corvette here? Send me your photo, not you, your car!

TREASURER'S REPORT

BY LUCY BADENHOOP

It seems that we have confused some of our members who are stalwart collectors of this magazine. Mea Culpa. We did it by skipping numbers 4-3 and 4-4 for volumes of Straight Talk.

We skipped the two numbers in order to have the volume numbers -1, -2, -3, -4 line up with the membership year. 1991 is our fifth year of operation, so Straight Talk will be numbered 5-1, 5-2, 5-3, and 5-4.

As this issue goes to press, I am madly packing up club materials and UPSing them to Illinois for the national convention. We'll be using our SACE Technical guide for the first time to inspect the show cars.

If you want to order a copy of Vol. I General and Vol. II Mechanical ($25 for both including postage), send a check to SACE, P.O. Box 2288, North Highlands, CA 95660.

Another part of getting ready for the convention is doing some maintenance on my 1958 F.I. so I can drive it on Route 66. It seems every blessed gasket has decided to start leaking in the last month or two. My garage floor has so many puddles the new next door neighbor thought I was house breaking a pet.

The only one that caused me undue trouble was the fuel pump. I've never removed the pump before, but it looked so deceptively simple: just remove two lines and a few bolts, right? Not quite.

Only two little oversights made this a messy and complicated operation. First, remember that the rear line comes from the gas tank. If you disconnect it, gas runs all over. If you are under the car, gas runs all over you too. Next time have a plug or clamp under there with you.

Second, the seemingly useless bolt on the front corner of the engine block adjacent to the fuel pump has a secret purpose. If you know the secret, you take it out and replace it with a longer one. This will hold the push rod inplace when you remove the fuel pump.

If you don't know the secret of the useless bolt, you ignor it and let the push rod fall down. Then when you put the pump back on and snug up the bolts, you bend the rod. Half-inch steel rods are not something easily straightened with a vise, hammer, and other rudimentary tools, but it can be done.

I can hardly wait to try the differential seal. Additional torque on the nuts seems to have eliminated the leak for right now. However, its time is near — perhaps AFTER this trip to the SACE national in Illinois.

1958 RESTORATION

I am currently restoring a 1958 Corvette. It is a January car with a right hand hood support. This area caused me a lot of problems as there was little information on the subject. On page 243 of Noland Adams excellent book I learned that the change from right to left hand took place somewhere between the 4435th and the 4820th car. The reason for the change however was unknown.

With the help of the new N.C.R.S. 1958-60 judging manual, I think I have pieced together a probable answer. On page 43 of the manual it states "water pump pulley on early 1958 engines (generally those with right hand hood supports) has a stepped taper (like 57)." "Early 1958 models (generally those with right hand hood supports) use a 1957 crankshaft pulley #3742991."

I believe that, at the start of 1958 production, G.M. used these 1957 pulleys, with the generator mounted on the right hand side. There were problems with fan belt clearance, as evidenced by the "hand rewored 1957 style" right hand motor mount (page 42 N.C.R.S. manual). These mounts look as if somebody took a ball peen hammer to them.

This clearance problem made it necessary to use different pulleys (#3724816 & 3756328), to move the fan belt about ¾ inch forward. In order to align the generator pulley with the others, it was necessary to move the generator ahead. This was accomplished by adding part #3755555, the parallelogram shaped piece between the exhaust manifold and the generator bracket. This moved the generator ¾ inch forward, but also 1 inch higher, causing interference with the hood support. This made it necessary to move the hood support to the left side.

If a person has a right hand hood support car, and tries to use the 1958 style pulleys and part #3755555 as stated in much of the literature available, he will find that the hood won't close.

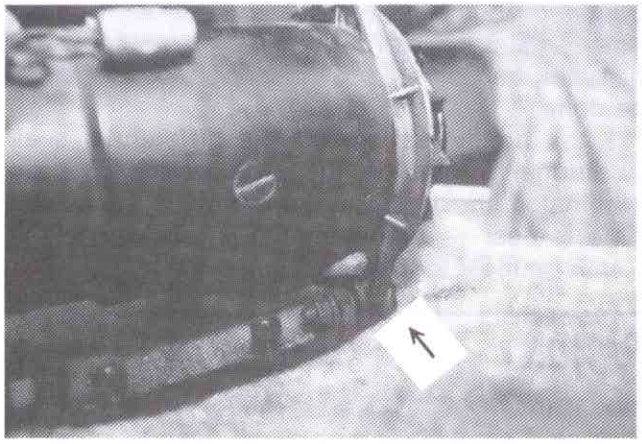
I hope this information may be of help to anyone with one of those cars.

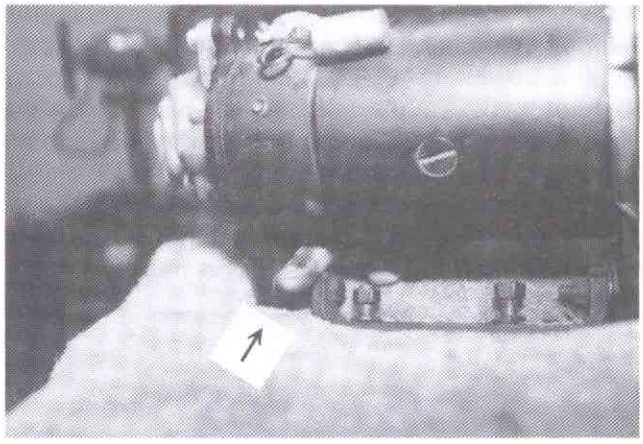
Dave Lawson
(416) 267-5573

GENERATORS 1955-61

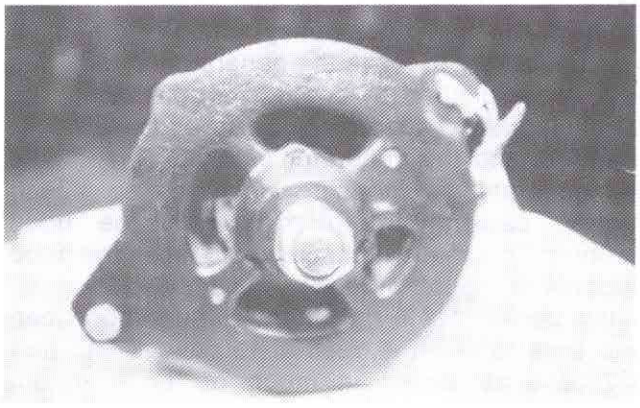
Many owners know how to read the part number and dates, but don't know how to tell the difference between a Corvette and a car generator. I well try to help you to know the difference by using your finger as a tool. First a car having power steering, 1955-61 uses a generator that can be used on a Corvette by removing the rear pump and replacing it with a tack drive assembly. Also many cars used the same belt pulley as Vette if it also had two fours or F.I. Reading the rivetted tag is no guarantee because that can be replaced easily. Only the 1955 and early 1956 two hole exhaust and Hi-po big bearing (rear) generators are not included, because they used a cast iron front and rear support (no rubber mounts). First all Vettes and cars used aluminum on the front plate and the rear was cast iron. A visual appearance of a Vette front plate had no fins but many cars did have fins (see pictures). By using your finger between the generator body and the rear or front plate (Vette) you can not pass your finger between them, but on the car you can pass your finger between the generator body and plate. Many times I have surprised owners with this information, finding a car generator on their Vette, so realizing they only go by the tag I thought I would bring this to your attention, (as I know only Corvette uses these plates). Note, the front plate on a car has a part number cast into it #1941168 but the Vette has no number! Note the rear plate is being reproed by Red Roadster (213) 54-Vette, (California) because today bearings are a sealed unit needing no oiling, the oil hole is not drilled all the way through, other than that I find no real difference between them. Now if you ever wondered why a generator was high or low at one end, you know why (because they may have a mix of car and Vette support plates). That is why you see many generators selling without the rear TACK drive assembly (CAR). Judging some day will pick up on this information, so I would start correcting yours now.

—Editor Roy



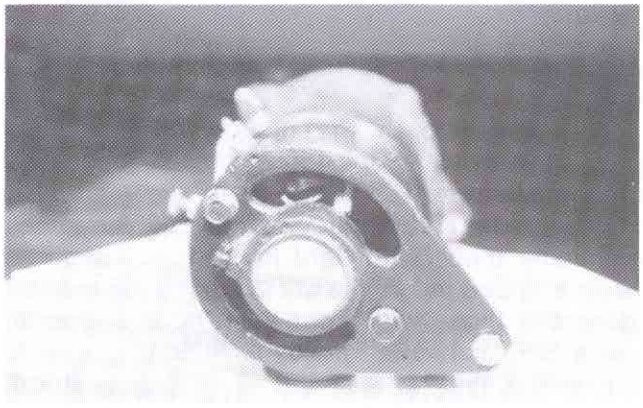


Finger passes under front plate and rear on car generators.



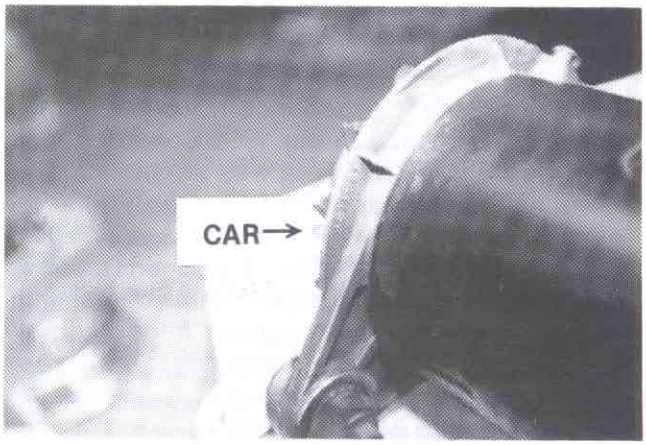
Big bearing (front).

Cast-iron

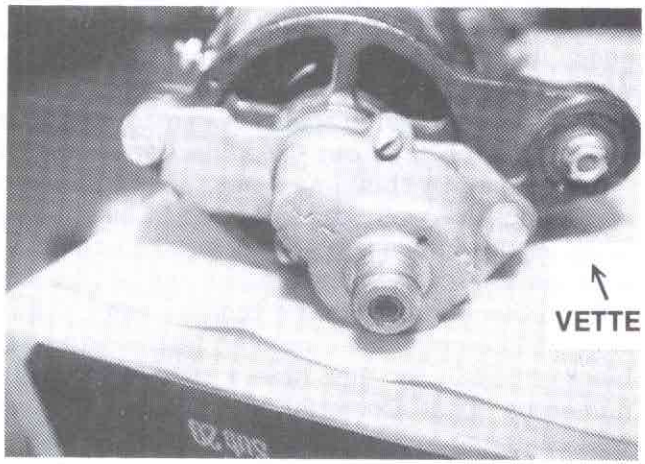


Big bearing (rear).

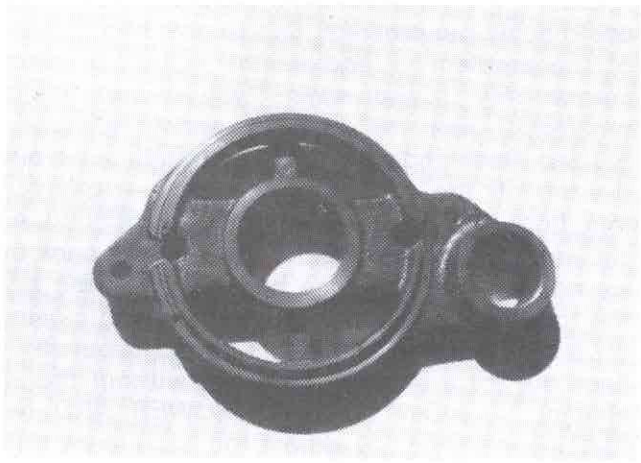
Cast-iron



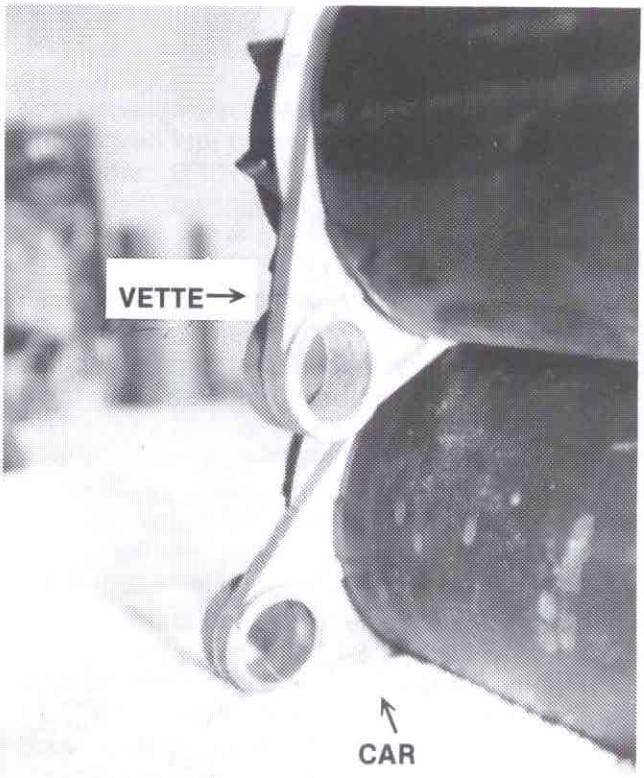
Uses part #1941168 cast into its plate, which Corvette doesn't. Also has fins on plate.



Back of Vette generator shows tach drive and rear plate.



Rear generator plate for Vette only is reproed by Red Roadster.



Finger passes under car plate, but would not pass under Vette plate.

YEAR	STARTER	GEN.	VOLT. REG.
1956		1102043	1119001
1957	1107664	1102043	1119001
1958	1107664	1102043 1102059 (290 HP)	1119001 (30A) 1119002 (30A)
1959	1107664	1102043 1102059 FI to 3100 1102173 FI from 3100	1119001 1119002
1960	1107664	1102043 Tac Dr. 1102173 FI	1119001 1119002
1961	1107889	1102043 Tac Dr. 1102173 FI	1119001 1119002
1962	1107233 Stick 1107242 Auto	1102174 (250 & 300 HP) 1102268 (340 & 360 HP)	1119002 1119002

Gen.	(Front) Drive Plate	(Rear) Comutator Plate
1102043	Aluminum	Cast
1102059	Cast	Cast
1102268	Cast	Cast (same as 2173)
1102173	Cast	Cast (same as 2268)
1102174	Aluminum	Cast

Compiled with the help of the Red Rooster!

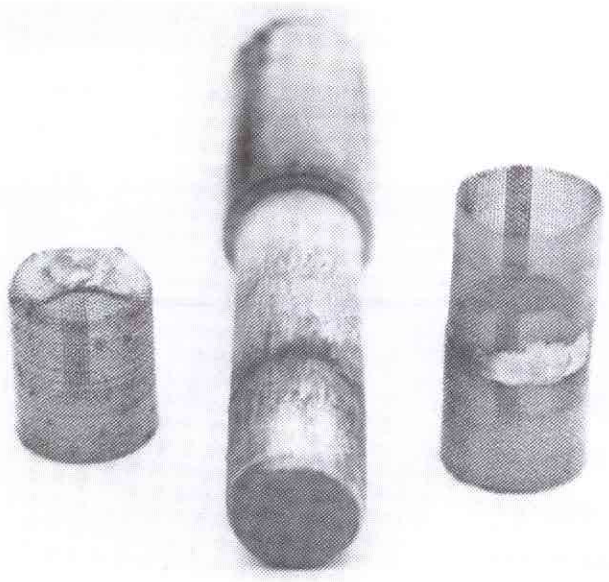
WCFB Fuel Inlet Strainer

BY JIM FRAKES

The inlet strainer is located by removing the strainer well nut which is located just beyond the fuel inlet fitting of the Carter WCFB carburetor. The strainer well nut is easily spotted; it's the big one on the top rear that takes a ¾" box wrench to remove.

The strainer is a tightly woven brass wire mesh tube, open at both ends. After many unsuccessful attempts locate a replacement strainer, I decided to duplicate it. The closest fuel strainer for a WCFB that I could locate was available from THE CARBURETOR SHOP, 1457 PHILADELPHIA #24, ONTARIO, CA 91761. 5 strainers and several miscellaneous springs cost me $5.00. Strainer part #30-63 is apparently applicable to Carter models W-1, WA-1. This strainer is the correct diameter, however its length is too short and one end is folded closed. By using two strainers, cut apart and soldered together, an acceptable strainer can be made for the WCFB.

I turned down about a 2" length of ½__ wood dowel to .400" diameter; this allowed the strainer to tightly slide over it. The open end of the strainer was taped to the dowel to prevent its rotating and then I carefully cut around the circumference of the strainer approximately ½" from the open end using a #11 X-ACTO blade. The dowel served as a mandrel. The second strainer was slid over the dowel, butted against the first and the two were lead soldered along the butted seam with a small soldering gun. Lastly, in order to make an open tube, the assembly was cut .890° from the open end. I washed off all traces of soldering flux with lacquer thinner.



Standard #30-63 strainer on the left, duplicated WCFB strainer on the right.

ENGINE FLAT—LOTS OF BLACK SMOKE

By Marlowe Jorgenson

I think my recent experience troubleshooting a lack of performance in our 1958 Corvette means I'm a true enthusiast. This was an invitation I'm sure many of you have experienced.

We purchased our 1958 a couple of years ago — knowing at the time that it had an incorrect engine. This past winter after months of research i located the correct engine, heads, intake manifold, etc. The work really began as I spent many days and long hours installing the new engine. Then the BIG LET DOWN — I took the car for a test run — engine flat — lots of black smoke. So I assumed it was a carburetion problem. Oh well more $ for the purchase of a rebuilt 2669S, WCFB from Bob Kunz. Six weeks later OH BOY a parcel from UPS the new curburetor. I eagerly replace the old WCFB with the new one — sure this would solve the problem then back out for a test run — engine flat — lots of black smoke. I guess this means it's not the curburetor — NOW WHAT? Back under the hood — I changed: timing, distributor, coil, timing again I even readjusted the valves — each time out - engine flat — lots of black smoke. By this time I was really frustrated and thought — well I guess I need to take it to a shop. So downtown I go — they put the engine on a scope and everything checked out — but I'm told the secondary jets are running lean — this was really confusing — running lean kicking out black smoke? By this time I had talked with numerous local Corvette enthusiasts, and we were all trying to figure out the problem. A sort of Corvette problem hotline, with my problem being the topic of discussion on trips to local swap meets or get togethers. I really appreciated all the help and we just kept trying different things.

Finally, a mechanic friend came by to see if he could solve the problem. Out to give him a demo of the problem — engine flat — lots of black smoke. My friend says "you've got major problems" just the kind of encouragement I needed. Back under the hood — this time we pull the top off the carburetor to check — gaskets, jets, float level, etc. — everything looks good. As we were putting the REPRO Air Cleaner back on we noticed the clearance between the base and the top piece seemed to be compressed closing off the air supply. Could this be our problem — back out for a test run this time without the air cleaner — WOW LOTS OF POWER AND NO SMOKE — it seemed almost too good to be true. Problem solved. We suspect it could be the design of the REPRO air cleaners — that for some reason they can be tightened to the point of collapsing the unit closing off the air supply. Maybe my experience will save one of you time and frustration. Check that REPRO air cleaner.

QUESTIONS & ANSWERS

SUPPLIED BY DALE PEARSON

Q. Wanting to appreciate my investment, I am restoring for certification. What parts are allowed when originals are not available? How do you tell an original and what's better — a poor condition original or perfect reproduction?

A. Anything is allowed. The value in points associated with it is a judgment call and that is the functions of the judges. The first task is to determine TO WHICH STANDARDS YOU ARE RESTORING THE CAR, NCC, NCRS, AND NCCB are but three sanctioning bodies for the judging of restored Corvettes. You should note that most all judging is done by MATRIX systems. It is generally recognized that Mr. Keith Kibbe, who is a founding father of the National Corvette Restorers Society, was one of the first to propose the Matrix System. Basically, a system of raw points are awarded in each of several areas to be examined (motor, interior, exterior, etc.) after which normalized scores are awarded (based on 100 points).

The Bloomington National Corvette Certification Board, N.C.C.B. defines the judging standard as having a Corvette EXACTLY as it was when leaving the St. Louis (Flint & Bowling Green) factory. A good example is the frame paint. A high gloss imron polished frame would be a asset in NCCC (National Council of Corvette Clubs) judging as it would be, say, at Pebble Beach Concours of Elegance. NOT so with NCRS or NCCB. Asphalt base cheap semi-glossy frame paint with A.O. SMITH stencil, body shim lumber crayon marks, job lot numbers, quality control marks, etc, set an NCRS or NCCB judge aglow because that's the way it was when the car was new and those are the standards. Five clear coats of finish paint will fetch a higher price at Cooper Jarrett Auctions, but will cost a bundle at Bloomington. The NCRS is generally a bit more tolerant of over-restoration than is NCCB, and for that I personally am grateful since most of the cars I judge are over restored.

I think that original parts are more desirable than reproduction or reissue replacement parts unless the condition is impossible, and here we are talking NCCB standards. This is a judgment call. If you think your combined total will be higher with a perfect reissue, then go for it. As far as what's allowed, in an example of lacking a window sticker one of the past Bloomington entrants wrote one up by hand on a plain paper and it was allowed and scored points. Better than nothing.

The part of the question about how you know if you are getting an original part from a vendor? HO, HO, HO . . . Welcome to the Corvette hobby. All I can say is STUDY, LEARN, ASK, READ, BECOME EXPERT, GO TO SWAP MEETS, AND GET FASTENERED (read, bolt, screw, whatever) RIGHT OUT OF EVERY DIME YOU CAN BEG, BORROW, or STEAL. The swap meets provide the most efficient place I know of to learn parts, but, my gosh, the tuition is high! KNOW WHO YOU ARE DEALING WITH. THE VAST MAJORITY OF VENDORS ARE TRUSTWORTHY PEOPLE OF QUALITY . . . BUT, also some swap meets attract the greatest collection of thieves, liars and cut-throats in the land (just like a horse auction). Recently I came home after a swap meet, my checking account looking like Hiroshima the day after, to bolt on my 3269S rebuilt carburetor and discovered it didn't work! Inside were parts from several different models, plugged up passages, etc. To repair it (the date was good), I had to study quite a bit. My knowledge is much more complete as a result. I was deliberately swindled out of $475 for an incorrectly colored, supposedly rebuilt carburetor, but it worked out well. This is the ONLY attitude to have if you are to stay in the hobby. I like to think of the mythical "COLLEGE OF SWAP MEET KNOWLEDGE" (on the shores of Lake Wobegone). You get a good education, but the tuition is high. I teach there! Professor Dale Pearman, U.P.S., C.O.D.!

I've earned those two degrees (UPS & COD) through being fastenered countless times. Send cash through the mail and wait for the NOS widget to come. HO, HO, Fastenered! Pay cash only C.O.D. open the box, get a real BRICK, supposed to be a curburetor . . . $350 call U.P.S., sorry! "That's between you and your Hong Kong supplier." Fastenered! NOS means RUSTY, DAMAGED, JUNK to some people.

Koo Idea

At this writing, The Brassworks Flow Kooler water pumps cost between $59 and $69, are all brand-new, and carry a lifetime warranty. They provide a 30-percent cooling improvement and, when used in conjunction with the recommended Robertshaw high-flow thermostat, they increase flow from 68 to 100 gallons per minute!

By Marlan Davis

THE BRASSWORKS' HIGH-PERFORMANCE WATER PUMP CAN KEEP YOUR HOT CAR COOL

With summer's heat rapidly bearing down upon us, it's about time to get out the old swimsuit and sunscreen. It's also time to make sure our engines are equally protected against overheating. One area of engine cooling-system performance often overlooked is water pump efficiency. An oversize radiator core is no guarantee that your hot rod engine will cool efficiently if the water pump isn't up to snuff.

Unfortunately, water pumps are not what they were 20 years ago. Back in the musclecar era, engines such as the small- and big-block Chevy used efficient, cast-iron water pump impellers. Today's "modern" sheetmetal impeller looks like an alternator fan, and it is unable to provide the flow or water pressure through the block equal to that of the early cast-iron impeller. Unless a high flow of water is forced through the block and heads, vapor pockets and steam bubbles will develop in the coolant solution due to the heat generated by the heads' exhaust ports. The result is cavitation, inefficient cooling, and engine ping. Most rebuilt and new service replacement pumps for the old applications now come with the sheetmetal impeller. Chevy's high-buck aluminum Bow-Tie pumps (part No. 14011012) still have cast-iron impellers; you can also buy separately a ¾-inch shaft iron impeller (Moroso No. 63530, which can be reamed to fit ¾-inch shafts) and have it pressed onto the pump in place of the sheetmetal unit.

The Flow Kooler "secret" is this unique disc pop-riveted onto the back of the impeller. On this small-block Chevy pump, the disc is 3⅛ inches wide x ⅛ inch thick. It reduces engine operating temperature by 15 to 30 degrees.

But there's an easier way. The Brassworks has introduced brand-new, lifetime-warranty water pumps. Known as the Flow Kooler series, they are modified by pop-riveting a metal disc to the back of the late-model sheetmetal impeller. By enclosing one side of the open areas around the impeller, the disc increases the late impeller's efficiency to equal that of the early cast-iron design, thereby upping pump volume by as much as 30 percent. According to the manufacturer, water circulation pressure within the block at 3500 rpm is also increased from 1 psi to 7 psi. Together, the volume and pressure increases help eliminate steam pockets that tend to accumulate in the water jacket's corners.

Back in the '60s, Chevy used an efficient cast-iron water pump impeller. Today, only GM's aluminum Bow-Tie pumps (like this small-block pump we photographed at Competition Chevrolet) have the good impeller.

Most late-model water pumps have this cheap cookie-cutter impeller that works about as well as a water wheel without a sideboard. If your impeller looks like this, you could really benefit from The Brassworks' unit.

Applications to fit most big- and small-block Chevy long and short water pumps are available from The Brassworks, including special chromed and aluminum versions. But Chevys aren't the only engines suffering from poorly designed impellers—the same impeller design flaw is present on many other makes, and The Brassworks' disc fix works for "the other guys' " offerings, too! Flow Kooler pumps are available for most Ford, Mopar, Pontiac, AMC, and Jeep V8 engines. Olds and Pontiac aren't covered because the factory designed the pumps correctly to begin with, and they're already as good as they can be.

Once water pump efficiency has been maximized, The Brassworks recommends upgrading the thermostat to a Robertshaw high-flow unit. Naturally, the radiator, cooling fan, and overall air circulation through the core and engine compartment should also be optimized to achieve maximum cooling efficiency. A properly designed cooling system will keep your engine from getting burned. And that'll keep your temperature from rising! ■

SOURCES

The Brassworks
Dept. HR
3523 S. Higuera St. #E
San Luis Obispo, CA 93401
(805) 544-6841

Competition Chevrolet
Dept. HR
18600 Devonshire St.
Northridge, CA 91324
(818) 360-1011

Moroso Performance Products, Inc.
Dept. HR
80 Carter Dr.
Guilford, CT 06437
(203) 453-6571

SACE LOGO ITEMS

The items below are available for sale. Send U.S. funds to:

SACE
c/o George & Dickie Marra
13239 Elderberry Lane
Grass Valley, CA 95945

(916) 273-8016 Pacific

$12.50 T-shirt (XL-L-M-S)

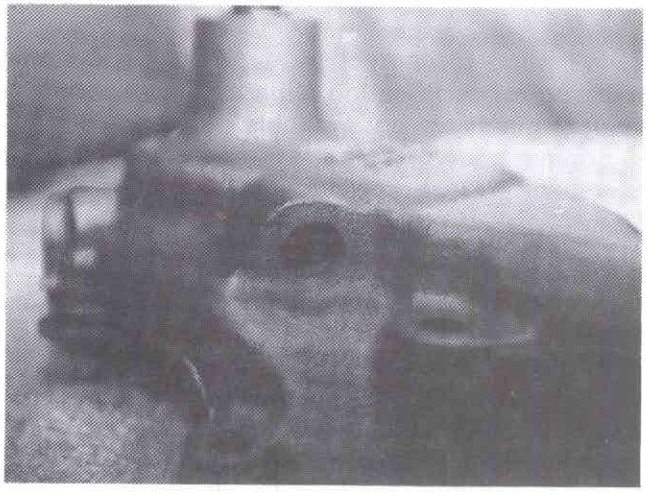
$ 3.00 Jacket Patch

$ 3.00 Hat Pin

$1.00 NEW WINDOW STICKER

PRICES INCLUDE POSTAGE.

WATER PUMPS 911 = 493 = 609



The 911 was used on 1955-56 Corvette, what I mean to do, is show you how you can tell a correct part besides checking the number #911 = the water outlet for the heater is a 3/8 pipe thread, the top area has no boss for a added water outlet that later pumps do, the rear plate is a flat steel one using flat slot screws, also the front neck where the shaft comes out you will find one hole at the top and two holes at the bottom. Comments = 1955 and early 1956 used the same heater unit, they also used a heater shut-off brass valve in line on the heater hose, the intakes water inlet were also a 3/8 pipe thread (you may often see a 1957 intake on a 1956 that is using a reducer installed to make its 1/2 inlet down to 3/8).

The 493 was on 1957-60 Corvette. #1 the water outlet for the heater is now a 1/2 pipe thread, the top area has a boss for a added water outlet that later pumps will use in 1961-62. The rear plate is also a flat steel, and you will still see three holes at the front area.

The 609 was used on 1961-62 Corvette. #1 the water outlet for the heater is a 1/2 pipe thread, the top area now has an added 1/2 pipe outlet, the rear plate is a thin steel using hex-head bolts, and you will only find one hole at the front (bottom) area.

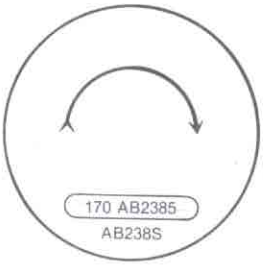
It is important to know that a replacement pump being used on an early Corvette may cause a heating problem because the pump impeller inside has more blades added to decrease water flow in the system, which in turn does not flow the water in the radiator correctly to cool the water. I hope this will help owners understand more about there pumps.

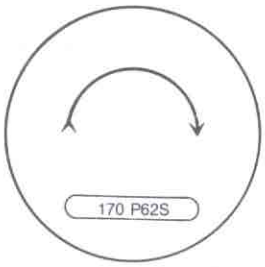
—Editor Roy

CHOKE COVER 1955-56-57 CARTER CLIMATIC CONTROL W.C.F.B.

What direction does your arrow point?

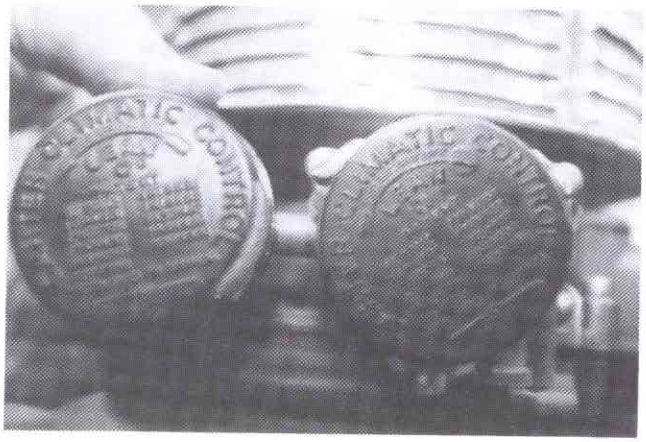
OFF AN ORIGINAL
1956





CARTER CLIMATIC CONTROL COVERS

This may not seem much to some people, but I thought it could be of some interest. The black cover used on 4BC and two 4BC has an arrow that tells which way to turn the cover to lean the carb, choke. But there were covers that had the arrow pointing to the left instead of right. Carter made carbs that were different in their choke arrangement. So you may want to check yours out before your friends read this article. Also the covers were marked telling the temperature of the spring tension and the part number. %170 is your temperature corresponding with your thermostat of %180 or better. I looked up various model numbers that are used on Vettes. 1955 first design 372s = 55 second design 457s = 1956 first design 2366 = 1956 second design 499s = 1957-58 503s,ad-433s,ab-433s = 1959-61 585s,ab-610s these are only one 4BC. 1956-61 are 442s,ab2385, these are two 4BC.



"CHICKEN COOP" CORVETTE

Michael Hunt captured a "very special" 1956 RPO model Corvette from underneath bird droppings on an Illinois farm. This "CHICKEN COOP" Corvette, as it is known, was equipped with Halibrand knock-off wheels, large REAR FENDER side air scoops ducting air to finned brake drums, finned drums up front with small METAL air scoops. DUAL rear shocks, heavy duty springs, and quick steering adapter.

In the spring Sebring race held on March 24, 1956, three factory "works" cars comprised a team under the leadership of John Fitch. These cars were equipped exactly as was the "Chicken Coop" Corvette. The three "works" car were entered in several competitive events afterwards including hill climbs which were so popular at the time.

By July of 1957, Chevrolet had introduced the Fuel Injected Air Box; 4-speed, 283 cu. in. 283 hp RPO 581 competition car and the remaining four unused side scoop SR-1 cars were sold to Doane Chevrolet in Dundee, Illinois. Two of these Corvettes are unaccounted for as of this writing and the other two are in the hands of Jummy Blakely and Frank Buck. The two SR-2 Corvettes were special G.M. development creations and were not intended at the time for private ownership. The three Sebring racers were a "one shot only" effort. The side scoop SR-1's were supposed to have been mass produced although only four were actually made, and this model would have been the "flag bearing" competitor for Chevrolet had it not been for the superior performance of the Air Box F.I. cars.

The 1957 Assembly Instruction Manual (AIM), indicates the introduction of RPO 581 on November 26, 1956, coincident with the production of 1957 serial number 1100 or so. Evidently only seven or so RPO 581s were produced until the release of ROP 684 on AIM March 25, 1957 which would approximately equate with 1957 serial number 2900. RPO 581 was dropped at this time.

RPO 581 — COMPETITION PACKAGE (1956-57)
ONLY SEVEN WERE MADE

1. Five leaf heavy duty rear leaf springs.
2. Short heavy duty front coil springs.
3. Quick steering adapter.
4. Finned brake drums front and rear, (GM 3745534) with foldedover (toward the center) fins as viewed from the outside (same casting number as used in RPO 687 but different style).
5. Ceramic — metallic segmented linings, 2½ inch front, 2 inch rear.
6. No modification to the rear frame member holding the upper shock mounts.
7. Brake backing plates vented with small mesh screens; removable covers.
8. Special heat resistant brake shoe return and hold down springs, pins and retainers.
9. Heavy duty shock absorbers front and rear.
10. Small metal air scoops attached to the backing plates.
11. Probably 15 x 5½ wide wheels.
12. 21 or 24 GALLON GAS TANK!

Thanks to Mike Hunt — Research Project 1956/1957, "The Curtain Is Lifting," *Vette Views Magazine* March 1990, Volume 18, Number 8, page 104. Also thanks to Ray Masciarella, "1957 Corvette RPO 581," *Restorer Magazine, N.C.R.S.*, Volume 16, Number 3.

Ray Masciarella has written in the N.C.R.S. "Restorer" magazine with new evidence that R.P.O. 581 was NEVER PRODUCED! (Volume 16, Number 4.) He states that the 24 gallon tank did not appear from the factory in 1956-57 but was dealer installed. Ray now believes that these performance cars were built by G.M. as C.O.P.O. More research needs to be done. (5-14-90).

AC OIL FILTER 1956-62

RIGHT STUFF!

A full-flow oil filter unit #5574538 assembly was offered by AC spark plug division of G.M. under this part number you received an assembly including the long silk-screened canister, replaceable filter, and the #5573842 aluminum oil bypass assembly with the two "A" bolts. Also the long canister bolt has the "M" logo on its head. Red Roadster Restorations (California) (213) 548-3883 has these units new in stock and if you would like on call him. They come in the original box.

An original oil canister assembly new in box. Notice original filter blue AC.

CAR TUNES

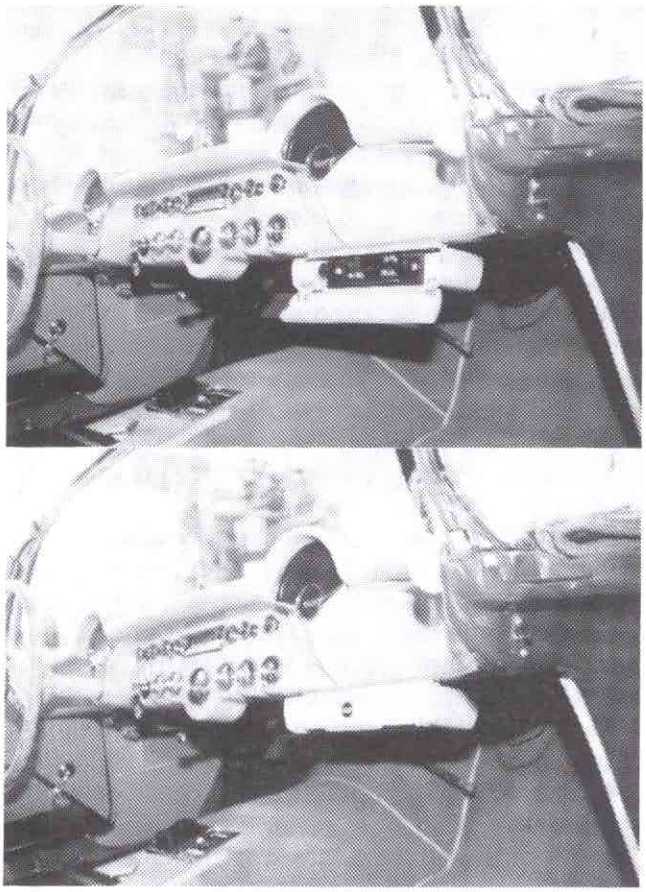
By George F. Marra #174

Anyone with a Straight Axle can listen to Paul Harvey on their A.M. wonderbar radio. Paul's O.K. but what about Hard Rock or just some head banging Rock? Maybe even your favorite cassette tapes.

I have seen alot of AM-FM cassette units installed in the dashes, under the dashes even in the glove box. They are all fine if you can't see them, but they are pretty hard to conceal. I wanted modern "Car Tunes" in my 1956 and didn't want to convert my original wonderbar over to modern.

The challenge was on. Modern "Car Tunes" with the original look. I found an original 1956 tissue dispenser at a swap meet and had the idea to conceal an AM-FM cassette inside of it. It worked like a charm and have had many complements about it. One of the most rewarding was from Noland Adams. Everything looks original. I drilled out the rivets that hold the front of the tissue dispenser to the sides and got some small hinges and mounted them so the front opens down. I mounted it under the dash beneath the speaker grill on the passenger side. When it is closed it looks like the original accessory tissue dispenser.

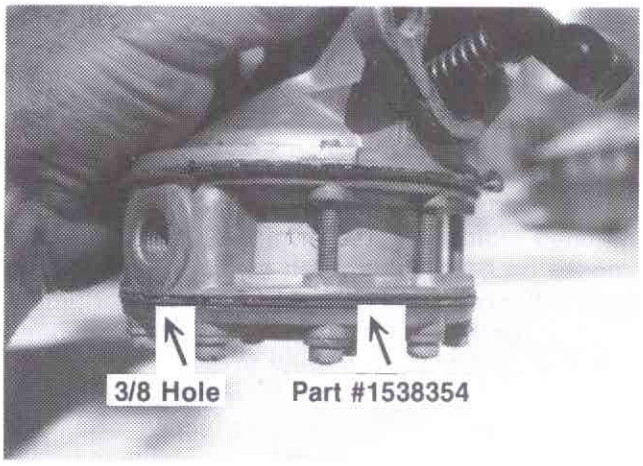
I now have great modern "Car Tunes" with the original look.

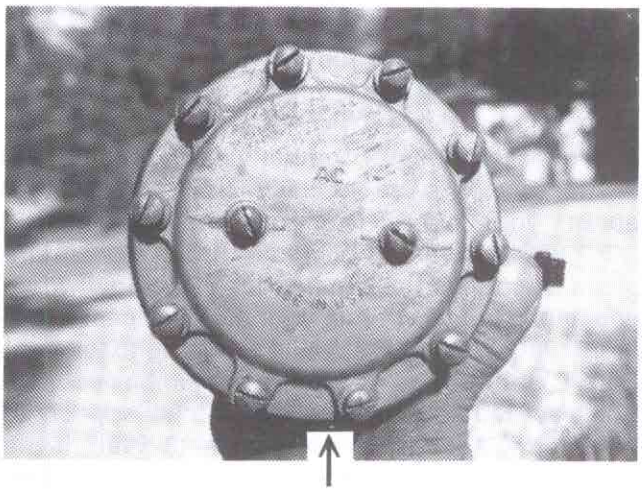


4346 FUEL PUMP

There were three different pumps using the long bolt fuel pump, but only the Vette used a 3/8" fuel line for in and out. There are Vettes using the other two, but are using and adapter to bring the hole size to meet the 3/8" gas line. The Corvette original center section carries a casted part number of 1538354. You may see these on other pumps, but the 4346 will be changed on the flange area. I have a pump 4673 that has the 1538354 number in the center section. Also all Corvette pumps contain "AC" cast into the top and bottom areas. Volume 1, Number 3, I wrote about a kit that Holley makes #12-856 that can be used to rebuild your pumps. Keep in mind that if a pump does not carry the stamped number in the center section, it's not a Corvette center section! Having the 3/8 size hole for inlet and outlet.

—Editor





AC logo on bottom

G.M. suggested that the option be used for competition and advised warming up the brakes before using them? With what, a torch? A word of WARNING, RPO 684 is NOT FOR THE STREET . . . (unless on your ex-wife's car).

There is a reproduction quick steering adapter being made out there somewhere by someone who needs immediate attention by his optometrist and high school geometry teacher. NOT EVEN CLOSE . . . doesn't look like the right thing . . . absolute suicide if you try to use it. Take a peek at a real one here today or look in Corvette Service Operations Chasis, April 1960 reprint 1/86, page 30 for a good picture. The original uses 4-wheel drive pick-up U-clamp and has tapered machined holes for tie rod ends. Lack of castle nuts is a tipoff of a REPRO.

RPO 686 — METALLIC BRAKES

1. Sintered, segmented metallic linings, 2 inch front and 1-3/4 inch rear.
2. Stock drums — special smooth lapped finish.
3. High temp pull back and holddown springs.
4. Wheel cylinders — front and rear, 1960 shoes riveted.
5. 1-3/16 inch x 1 inch, 1961-62; 1961 shoes bonded.
6. 1-1/8 inch x 1 inch, 1960; 1962 shoes bonded.

RPO 687 — HEAVY DUTY BRAKES AND STEERING

In 1960 the heavy duty brakes and suspension was discontinued in favor of heavy duty brakes and steering. 300 lb. and 115 lb. springs along with 1 inch shocks (non-spiraled)* were used on all standard production cars RPO 687** used a special heavy duty shock. A rear stabilizer bar was added to all cars and the pre-load was changed on the front stabilizer bar. Thus, all Corvettes enjoyed a much better handling package and smoother ride than the obsolete RPO 684. Many of us used this standard suspension unaltered for road racing. (Just add brakes and steering adapter.) The drums were composite (cast iron with steel centers) and bore the same CASTING number, as opposed to part number for both front and rear applications although they were machined differently (for different lining widths front and rear). Two part numbers differentiated front from rear. The front center offset was greater than rear and had a lip along the outer circumference. Casting numbers were 3745534. The fins did not "wrap-over" as seen from the front and were distinctly different from the ROP 684 version. The quick steer changed the overall ratio from 21.2 to 16.3 to 1.

1. Quick steering adapter.
2. Finned drums 3745534.
3. Segmented, sintered iron linings 2-1/2 inch on front, 1-3/4 inch rear.
4. High temp holddown springs and pull back springs.
   a. Secondary return 50 lb., black
   b. Primary return 40 lb., pink
   c. Large diameter holddown cup
   d. Small diameter holddown cup
   e. 1/4 inch holddown pin
   f. Holddown spring
   g. Thin guide plate
5. Special backing plates vented with coarse screen and having provision for covers for street use.
6. Elephant ears front air scoops for competition when covers are removed from backing plates. White 5-ply rubberish fabric, actually greyish. See samples here.
7. Metal rear air scoops to bolt on in place of cover on rear backing plates.
8. 24 vane fans inside each brake drum to assist in air circulation.
9. Each drum lap finished 400 grit very smooth as in RPO 686.
10. Welded on spacer omitted from rear backing plate to rear pin anchor.
11. A few secrets that I shall not reveal so as to discourage the fabrication of RPO 687 cars. Sorry!
12. Wheel cylinders — 1-1/8 inch — 7/8 inch rear.
13. Stock — 1-3/16 inch x 1 inch.
14. 61 shoes riveted; 62 shoes bonded — 2-1/2 inch x 1-3/4 inch.
15. H.D. shocks.
16. Air ducts.

It should be pointed out that those who "went racing" in the 60s usually opted for some over-the-counter "goodies" from G.M. parts. The rear sway bar was removed and a second sway bar was added to the front on the bottom of the frame. It was necessary to remove the exhaust crossover to do it. G.M. sold a kit. Also, heavy duty shocks** were available over the counter as was a double pulley (never used on 62 production cars). The 0.8 inch stock front sway bar was used unchanged in addition to the auxiliary kit bar, and most racers used the earlier heavy duty springs while bushing everything (links and shacklers) with hand-made aluminum. The ride on these cars was like a skateboard, but that's what it took to hurl a straight axle at a corner.

*Maybe fronts were spiraled if purchased over-the-counter.

**5543738 and 739 (front and rear).

The cone shaped rubber bumper shown in the assembly manual and intended to limit rear spring travel or wind up under acceleration was never used in production NOR was it available over the parts counter. HELP, PLEASE . . . Anyone disagreeing, please see me. This bumper rerquired that a special plate be welded to the frame for mounting. Mike Ernst has reported finding only one possible original installation on a 1962 RPO car.

1956 CORVETTE VALVE LIFTERS

Thanks for sending the December 1990 and March 1991 issues of Straight Talk that I didn't get with my membership. They're great.

As we discussed during our phone conversation, I too am the owner of a 1956 VIN #3214 with 2-4's and Automatic. I am looking for a replacement hood that isn't cut up. If you know of one please pass it on.

I've enclosed copies of my Corvette Servicing Guide on the valve lifters for a 1956. As you can see they were mechanical only in 1956 on both the single carburetor and "2-4's.

Note that on Page 14-5 the chart shows two valve lash clearances, .008 and .018 for intake and exhaust for the standard cam and .012 and .018 intake and exhaust for the high lift cam that came with the 2-4's.

Only in 1957 did both hydraulic and mechanical become available and that depended on the engine selected.

If I can help in any other way to either yourself or to S.A.C.E. please give me a ring.

George Vaka
Member No. 729
2643 Kiska Ave.
Hacienda Heights, CA 91745
Home (818) 330-4976
Work (213) 945-2477

YEAR	HORSE-POWER	BORE X STROKE	DISPL.	COMP. RATIO	LIFTERS	CARBURE-TION	TRANSMISSION
1955	195	$3^{3}/_{4}$ x 3	265	9.25:1	Mech.	WCFB	3-Sp.—P.G.
1956	210 Std.	$3^{3}/_{4}$ x 3	265	9.25:1	Mech.	WCFB	3-Sp.—P.G.
	225	$3^{3}/_{4}$ x 3	265	9.25:1	Mech.	2 WCFB	3-Sp.—P.G.
1957	220 Std.	$3^{7}/_{8}$ x 3	283	9.5:1	Hyd.	WCFB	3-Sp.—P.G.
	245	$3^{7}/_{8}$ x 3	283	9.5:1	Hyd.	2 WCFB	3-Sp.—P.G.
	250	$3^{7}/_{8}$ x 3	283	9.5:1	Hyd.	Fuel Inj.	3-Sp.—P.G.
	270	$3^{7}/_{8}$ x 3	283	9.5:1	Mech.	2 WCFB	3-Sp.
	283	$3^{7}/_{8}$ x 3	283	10.5:1	Mech.	Fuel Inj.	3-Sp.
1958-59	230 Std.	$3^{7}/_{8}$ x 3	283	9.5:1	Hyd.	WCFB	3-Sp.—4-Sp.—P.G.
	245	$3^{7}/_{8}$ x 3	283	9.5:1	Hyd.	2 WCFB	3-Sp.—4-Sp.—P.G.
	270	$3^{7}/_{8}$ x 3	283	9.5:1	Mech.	2 WCFB	3-Sp.—4-Sp.
	250	$3^{7}/_{8}$ x 3	283	9.5:1	Hyd.	Fuel Inj.	3-Sp.—4-Sp.—P.G.
	290	$3^{7}/_{8}$ x 3	283	10.5:1	Mech.	Fuel Inj.	3-Sp.—4-Sp.
1960-61	230 Std.	$3^{7}/_{8}$ x 3	283	9.5:1	Hyd.	WCFB	3-Sp.—4-Sp.—P.G.
	245	$3^{7}/_{8}$ x 3	283	9.5:1	Hyd.	2 WCFB	3-Sp.—4-Sp.—P.G.
	270	$3^{7}/_{8}$ x 3	283	9.5:1	Mech.	2 WCFB	3-Sp.—4-Sp.
	275	$3^{7}/_{8}$ x 3	283	11.0:1	Hyd.	Fuel Inj.	3-Sp.—4-Sp.
	315	$3^{7}/_{8}$ x 3	283	11.0:1	Mech.	Fuel Inj.	3-Sp.—4-Sp.
1962	250	4 x $3^{1}/_{4}$	327	10.5:1	Hyd.	WCFB	3-Sp.—4-Sp.—P.G.
	300	4 x $3^{1}/_{4}$	327	10.5:1	Hyd.	AFB	3-Sp.—4-Sp.—P.G.
	340	4 x $3^{1}/_{4}$	327	11.25:1	Mech.	AFB	3-Sp.—4-Sp.
	360	4 x $3^{1}/_{4}$	327	11.25:1	Mech.	Fuel Inj.	3-Sp.—4-Sp.

MAINTENANCE AND ADJUSTMENTS

Engine maintenance and adjustments consist of lubrication and tune-up procedures performed at regular intervals to provide proper performance, reliability and long engine life.

LUBRICATION

Engine lubrication information and charts have been included in Section O of this manual.

TUNE-UP

Engine tune-up is periodic test, diagnosis, and corrective procedures necessary to maintain the economy, power, and performance designed into any internal combustion engine.

The recommended tune-up interval is approximately 5000 miles. This interval may be shortened considerably when the vehicle is used primarily under extreme operating conditions (such as racing) requiring "fine tuning."

The Corvette V-8 engine and the tune-up procedures are similar to the passenger car V-8 engine of the same year.

Remove radio shielding over ignition wiring, then refer to the 1961 Passenger Car Shop Manual (Section 7) and the following Specifications Chart for Corvette engine tune-up.

NOTE: When replacing the shielding, make sure the shielding does not interfere with the accelerator linkage causing linkage to bind or hang-up. This is a frequent cause of engine not reaching full throttle or not returning to idle.

TUNE-UP SPECIFICATIONS

YEAR	ENGINE (Horsepower)	CARB.	COMPRESSION PRESSURE (Note 1)	SPARK PLUGS		IGNITION DISTRIBUTOR					TIMING		R.P.M. IDLE SPEED		VALVE LASH		FUEL PUMP PRESS.		AIR CLEANER	FAN BELT TENSION
				Make & No.	Gap	Type	Cam Angle	Point Gap	Arm Spring Tension	Condenser	Deg. BTDC	Firing Order	Sync. Trans.	(Note 3) P.G. (in Drive)	Intake	Exhaust	Min.	Max.		
55	195 (Std.)																			
56	210 (Std.)	Single WCFB	160 Lbs. 20# Var.	AC-C43 or AC-43.5 Opt.	.035	Dual Point	29° Ea. 34 ± 1 Total	.018 (New) .015 (Used)	19-23 Ounces	.18-.25 Mfd.	4°	1—8—4—3—6—5—7—2	475	425	.008 Hot	.016 Hot	4	5	Wire Mesh (Note 5)	See (Note 9)
56	225	Dual WCFB	*	*	*	*	*	*	*	*	4°		600	600	*	*	3.5	4.5	*	*
57	220 (Std.)	Single WCFB	*	*	*	*	*	*	*	*	4°		475	425	Hyd. (Note 4)	Hyd. (Note 4)	*	*	*	*
57	245	Dual WCFB	*	*	*	*	*	*	*	*	12°		475	450	*	*	*	*	*	*
57	250	F.I.	*	*	*	*	*	*	*	*	12°-14°		475	450	*	*	*	*	*	*
57	270	Dual WCFB	*	*	*	*	*	*	*	*	12°		700	—	.012 Hot	.018 Hot	*	*	*	*
57	283	F.I.	*	*	*	*	*	*	*	*	4°-8°		700	—	*	*	*	*	*	*
58-59	230 (Std.)	Single WCFB	*	See Note 2	*	Single	28°-32°	.019 (New) .016 (Used)	*	*	4°		475	450	Hyd. (Note 4)	Hyd. (Note 4)	5.25	6.5	*	*
58-59	245	Dual WCFB	*	*	*	Single	28°-32°	*	*	*	4°		475	450	*	*	*	*	*	*
58-59	250	F.I.	*	*	*	Dual	29° Ea. 34 ± 1 Total	.018 (New) .015 (Used)	*	*	4°		550	500	*	*	*	*	Paper (Note 6)	*
58-59	270	Dual WCFB	*	*	*	Dual	*	*	*	*	7°		800	—	.012 Hot	.018 Hot	*	*	Wire Mesh (Note 5)	*
58-59	290	F.I.	*	*	*	Dual	*	*	*	*	14°		800	—	.012 Hot	.018 Hot	*	*	Paper (Note 6)	*
60-61	230 (Std.)	Single WCFB	*	*	*	Single	28°-32°	.019 (New) .016 (Used)	*	*	4°		475	450	Hyd. (Note 4)	Hyd. (Note 4)	*	*	See Note 7	*
60-61	245	Dual WCFB	*	*	*	Single	*	*	*	*	12°		475	450	*	*	*	*	*	*
60-61	270	Dual WCFB	*	*	*	Dual	29° Ea. 34 ± 1 Total	.018 (New) .015 (Used)	*	*	12°		800	—	.008 Hot	.018 Hot	*	*	*	*
60-61	275	F.I.	*	*	*	Dual	*	*	*	*	8°		550	—	Hyd. (Note 4)	Hyd. (Note 4)	*	*	Paper (Note 6)	*
60-61	315	F.I.	*	*	*	Dual	*	*	*	*	18°		800	—	.008 Hot	.018 Hot	*	*	*	*
62	250 (Std.)	Single WCFB	*	*	*	Single	28°-32°	.019 (New) .016 (Used)	*	*	4°		475	450	Hyd. (Note 4)	Hyd. (Note 4)	*	*	Polyure-thane (Note 8)	*
62	300	Single AFB	*	*	*	*	*	*	*	*	8°		475	450	*	*	*	*	*	*
62	340	Single AFB	*	*	*	Dual	29° Ea. 34 ± 1 Total	.018 (New) .015 (Used)	*	*	10°		650	—	.008 Hot	.018 Hot	*	*	*	*
62	360	F.I.	*	*	*	*	*	*	*	*	10°		800	—	*	*	*	*	*	*

IS THAT MISTAKE FACTORY ORIGINAL?

From time to time we hear about some of the unusual things that may have occurred on the Corvette assembly line in St. Louis. Technology seemed fairly High-Tech in the early sixties, with men landing on the moon, etc., but compared to today's technology at the Corvette plant in Bowling Green, it was pretty much an anything can happen situation back in Ole' St. Louie.

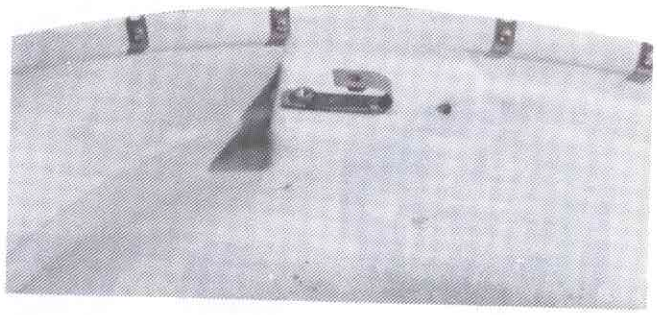
What is illustrated in this picture was not something that was crudely done, but was a simple example of a "Do What You Gotta Do" situation. A moving assembly line of Corvettes is not going to stop for just any old nut or bolt. Certain improvisations of car parts on the earlier Corvettes, which may not have been visible on the showroom floor, could have possibly been bent, twisted, striped, or maybe even left off. Twenty or thirty years later leaving these noticeable factory original mistakes as it was could be the difference in a TOP FLIGHT or BLOOMINGTON GOLD. These abnormalities can sometimes play havoc with judges and restorations. The example as illustrated however, does not comply with the above because it was the unseen, unknown, and only your friendly assembly plant worker knew for sure.

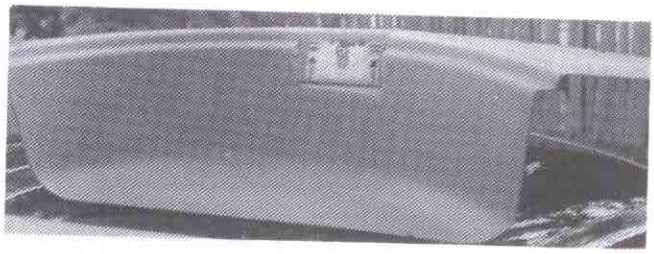
This little bit of factory ingenuity was discovered in 1988 when I was dismantling my 1960 Corvette for restoration. This bent bracket is on the hidden inside rear section of the spare tire well. The bracket with two weld nuts is to bolt tighten the adjustable receiver latch for the trunk lid lock and latching mechanism. The reason for the weld nuts was because if there had been free nuts and lock washers, and the bolts were loosened to far, they would fall down in the tire well cavity which would then require taking off the tire board, taking out the spare tire, and removing the 9 screws which secure the fiberglas rear tire well section. A simple little item but a real life saver.

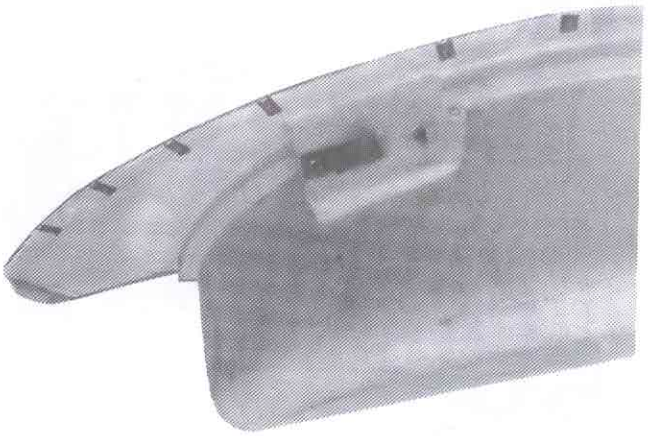
Now, why was the bracket bent back? Striped threads on the one nut? NO. The brackets were predrilled and the nuts were welded on directly over the holes? ALMOST. The right nut was welded off center of the hole. The plant worker could not get the bolt to thread so . . . you guessed it, he bent the bracket back and used a regular nut and lock washer. I remember when first unbolting the adjustment plate and heard a clink-clink of the one nut and lock washer falling helplessly into no mans land. If I had only been trying to adjust the latch I would have been up the proverbial creek.

The goal throughout the whole restoration was to build the car back as original as possible, so . . . yes I left the Original Factory Mistake. This past week, almost three years later, I repainted the trunk area, wasn't rushed, so I got a wild hair and did a horrible thing. I FIXED the bracket. However, several pictures were taken for posterity.

—David Harrington







SAE

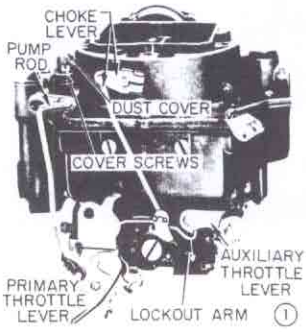
STRAIGHT AXLE
CORVETTE ENTHUSIAST
1953-1962

OVERHAULING A CARTER WCFB CARBURETOR

APPLICATION: Optional equipment on many high-performance engines.

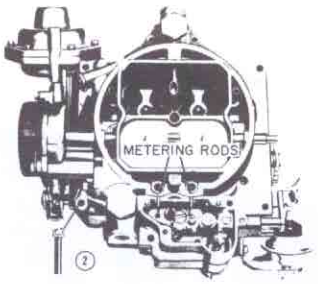
DISASSEMBLING

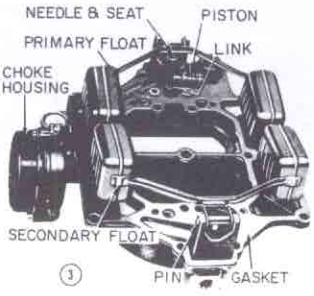
① Place the carburetor on a repair stand to protect the throttle valves from damage. Remove the pump connector rod and the choke lever connector rod. Remove the two screws that hold the metering rod cover to the air horn and lift off the cover.



② Unhook and remove the metering rods. Remove the 16 screws holding the bowl cover to the main body. Six of them can be found around the inside of the air horn, 9 around the flange and 1 within the pump countershaft enclosure. Note the position of the single 1" screw in the thick boss at the corner of the air horn casting for reassembly purposes. Lift the air horn assembly straight up from the main body to avoid bending the parts hanging under it.

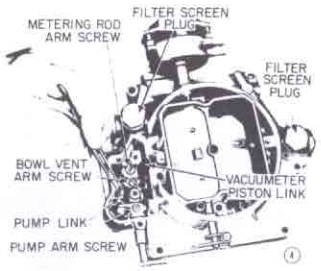
③ Lay the air horn in an inverted position and remove the primary float fulcrum pin and the float. Do the same for the secondary side. Be careful to keep the primary and secondary parts separated as they are not interchangeable. Remove the two inlet needle valves and their seats. Rotate the vacuumeter piston 90° and lift it off its link.

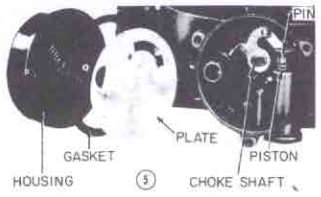


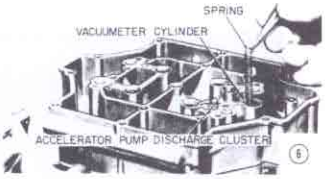


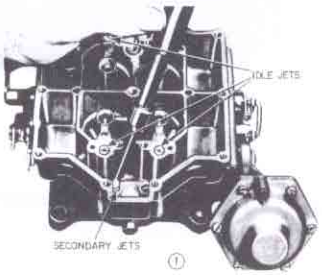
④ Invert the air horn and remove the hairpin clip from the pump connector link, and then remove the link. Slide the accelerator pump plunger assembly out from under the air horn. Loosen the metering rod arm screw, and then disengage the vacuumeter piston link from the metering rod arm. Withdraw the link. Remove the screws that attach the bowl vent and the accelerator pump arms. Withdraw the shaft and lift out the metering rod, the bowl vent cap, and the accelerator pump arms. Loosen and remove the primary and secondary filter screen plugs and screens.

⑤ To disassemble the automatic choke, remove the three screws and retainers holding the thermostatic coil housing, and lift off the housing. Remove the plate. Unscrew the two choke valve retaining screws and lift out the choke valve. Rotate the choke shaft enough to withdraw the choke piston from its cylinder and pull the shaft and piston assembly from the air horn. Remove the three screws holding the choke piston housing to the air horn and lift off the housing.









⑥ Remove the main metering jets from both the primary and secondary sides of the carburetor. *CAUTION: These jets are not interchangeable.* Remove the four idle jets which are interchangeable.

⑦ Invert the carburetor and remove the throttle-body-to-main-body attaching screws and separate the castings. Generally, it is not advisable to disassemble the throttle body because of the difficulty of reestablishing the close relationship between the idle parts and the throttle valves.

CLEANING AND INSPECTING

Clean all parts in carburetor cleaner. Follow with a solvent bath and blow dry. Diaphragms and parts containing leather should be cleaned only in solvent—never in carburetor cleaner. Blow compressed air through all passageways and jets to make sure that they are open.

Move the throttle shafts back and forth to check for wear. If the shafts appear to be excessively loose, it is best to replace the entire assembly. However, new parts are available for service. Be sure to mark each throttle plate so that it can be returned to its proper position if you decide to replace the shafts.

Inspect the main body, air horn, and accelerator pump discharge cluster gasket surfaces for cracks and burrs which might cause leaking.

If the carburetor secondary control valves are operated by a diaphragm unit, it can be checked by opening the secondary valves and holding your finger over the vacuum passage hole. If the diaphragm is airtight, the throttle valves will remain open.

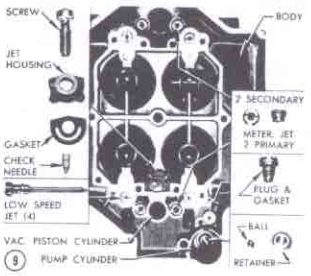
Shake the floats to check for leaks. Replace any float with liquid in it. Check the float arm needle contacting surface and replace the float if this surface is grooved.

Check the idle adjusting needles; replace any that has a groove in its tapered section.

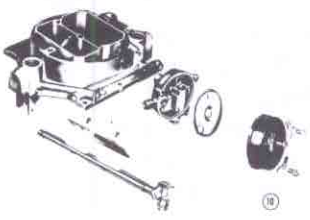
A carburetor kit is generally purchased for each carburetor overhaul. It contains new parts to replace those which wear the most, plus a complete set of gaskets. Each kit also contains two matched sets of fuel inlet valves and seats which should be replaced each time the carburetor is taken apart; otherwise, leaking may result. Keep each fuel inlet valve with its seat because they are matched. The primary and secondary sets are not interchangeable.

ASSEMBLING

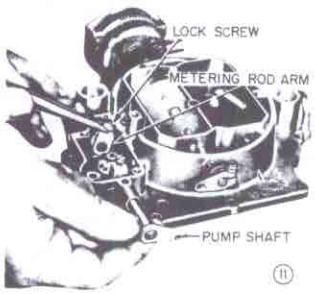
⑨ Place the main body upside down on the bench and install a new gasket. Lower the throttle body onto the main body with the fuel level sight screws on the same side as the velocity valve counterweight. Turn the carburetor right side up and install the accelerator check needle, gasket, and jet housing. Secure them to the body with the screw. Install the four low-speed jets (interchangeable), two secondary metering jets, two primary metering jets (not interchangeable—the primary jets have the larger holes), plug and gasket, accelerator pump ball and retainer, and the vacuumeter piston spring. Before proceeding further, it is good practice to test the accelerator pump circuit. Pour clean gasoline into the bowl to a depth of ½". Install the accelerator pump plunger and push it up and down several times. A clear, straight stream of fuel should squirt from each jet if the system is operating properly. Empty the carburetor body and remove the accelerator pump plunger after the test.



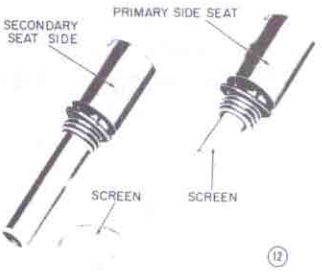
⑩ To assemble the automatic choke, place a new gasket on the rear of the choke housing, and then install the housing in position on the air horn. Secure it with three screws. Slide the choke piston pin through the choke piston link, and then slide the assembly into the air horn. Twist the lever to assist the piston in entering the cylinder. Insert the choke valve with the numbered side up and install new screws to hold it in place. Check the choke valve to see that it operates without binding. Install the plate and cover. Adjust the cover so that the index marks line up.

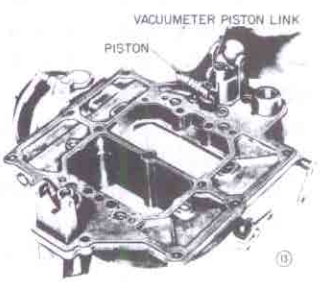


⑪ Slide the accelerator pump shaft and lever into the air horn just enough to allow for the installation of the accelerator pump arm, which should be positioned with the lever portion facing away from the pump shaft. Then push the shaft in until it protrudes from the support boss and install the metering rod arm, with the lifter portion facing the vacuumeter piston link slot. Install the vent cap arm and screw. Slide the vacuumeter piston link down into the slot in the air horn, with the lifter lip facing away from the pump shaft. Engage the lifter portion with the slot in the link. Be sure that the metering rod tension spring coil is centered in the hole at the top of the link. Tighten the clamp screw.



⑫ Invert the air horn and install the primary and secondary float needle and seat assemblies. *CAUTION: They are not interchangeable.*





The throttle shaft wears on one side at each bearing surface (black arrows). This causes misalignment of the throttle plates and air leaks which upset carburetion during idle, a critical period of engine operation.

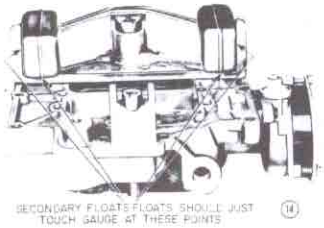
Overhauling a WCFB Carburetor

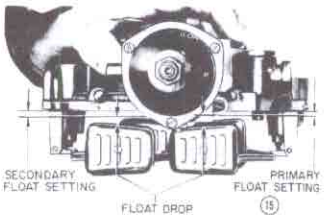
⑫ Install the vacuumeter piston, the float needles, floats, and fulcrum pins. Be sure to use the correct needle in each seat. The two float adjustments that must be made are *float level* and *float drop*. (See Appendix for specifications.)

⑬ *To make the float level adjustment,* place a new gasket on the air horn and use a gauge to set the floats to the correct height. Both floats should just clear the horizontal part of the gauge; bend the float arm as required. With the notched end of the gauge held against the air horn, the floats should just touch the vertical uprights of the gauge. The new resilient float valve seat requires a different float setting than that given in the Carter Specification table. Reduce the float setting 1/32" for models with the new seats. When setting the float level, the weight of the needle should be the only pressure against the seat. *CAUTION: Be careful to keep the float lip from pressing against the needle when making the adjustment.*

⑭ *To make the float drop adjustment,* hold the air horn assembly upright and measure the distance from the casting to the center of the float. The float drop should be as specified.

⑮ Assemble the accelerator plunger and insert it into the air horn opening. Install the accelerator pump connector link in the outer hole (long stroke)





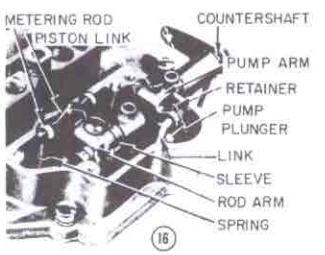
of the pump lever. Carefully lower the assembled air horn onto the main body, guiding the accelerator pump plunger into its well. Install the air horn attaching screws and tighten them securely. Install the metering rods being careful to engage them in the loops on the metering rod spring. Install the pump connector rod and the choke lever connector rod.

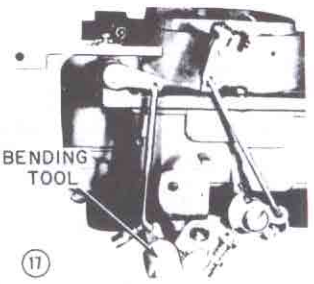
Bench Adjustments (These adjustments must be made in the order given below. See Appendix for specifications)

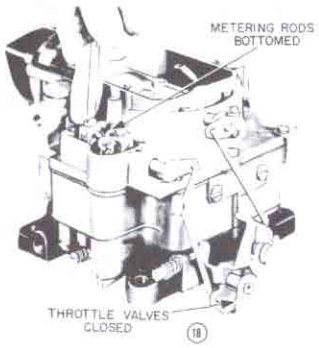
⑰ *To make the accelerator pump adjustment,* back off the idle speed adjusting screw until the primary throttle valves are fully seated in their bores. *CAUTION: Make sure that the fast idle adjusting screw is off the fast idle cam.* Hold a straightedge across the top of the dust cover boss. The flat surface on top of the pump arm must be parallel with the straightedge. To adjust, bend the pump connector rod as shown.

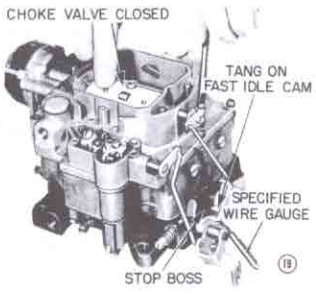
⑱ *To make the metering rod adjustment,* loosen the setscrew in the metering rod arm enough to obtain a slight bind on the pump shaft. Lift the lever slightly. Holding the primary throttle valves tightly closed, depress the metering rod link until the metering rods bottom. Then tighten the setscrew securely.

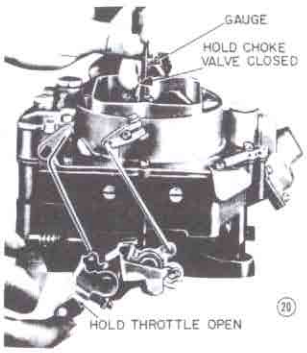
⑲ *To make the choke rod adjustment,* loosen the choke lever clamp screw. Insert the specified







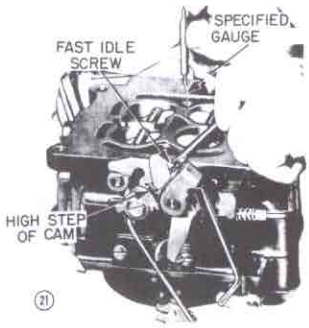


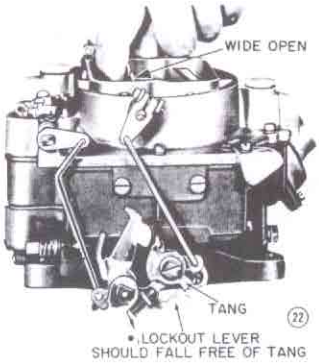


gauge between the tang on the fast idle cam and the boss on the throttle body casting. Holding the choke tightly closed, tighten the clamp screw.

⑳ *To make the choke unloader adjustment,* open the throttle wide. Insert the specified gauge between the upper edge of the choke valve and the inner dividing wall of the air horn. Bend the unloader tang until a slight drag is felt when the gauge is withdrawn.

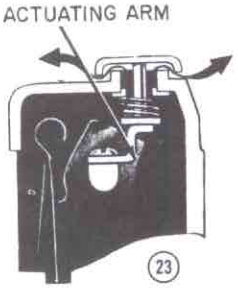
㉑ *To make the fast idle adjustment,* insert the specified gauge between the primary throttle valve and the bore. Move the choke valve to the fully closed position and adjust the fast idle screw to give a slight drag on the gauge when the screw is resting on the high step of the fast idle cam.





㉒ *To make the velocity valve lock-out adjustment,* hold the choke valve in the closed position; the edge of the hook on the lock-out arm should contact the velocity valve shaft lever to make maximum contact. Bend the lock-out arm until the proper contact is obtained. Now, slowly open the choke valve. The velocity valves should unlock a few degrees before the choke valve reaches the wide-open position. Bend the tang on the fast idle cam, (the one that raises and lowers the lock-out arm) until the correct release is obtained.

㉓ *To make the bowl vent cap adjustment,* install the metering rod dust cover. Close the throttle valve tightly and the bowl vent cap should lift 1/16". Bend the actuating arm to obtain the correct lift.



FOR SALE

PARTS FOR SALE OR WANTED ADVERTISEMENTS ARE FREE TO ALL MEMBERS

FOR SALE . . . Heater shut-off valves, CI generator pulleys, master cyl brass block, 53 main fuel line drain valve, repro carb tags w/inspection marks, no dates, side curtain bag twist locks, Original spark plug boots on new wires, fuel pumps, large AC fuel filter, transmission hole plugs (metal and rubber), speedo cable & gear, NORS 076 vacuum advance, washer bottles/pumps/brackets, horn relays, headlight switches, lighter elements w/brown knobs, oil filler cap, oil dipstick & tube, voltage regulator, 53 starter, deck lid top female latch, driver's door opener, choke cable & chrome bracket, brake handle, coil bracket, intake manifold sleeves, generator fan, park light housings w/U brackets, valve cover oval washers, generator rear plates w/bushings, defroster divider, radio knob bezels, 55 air cleaner wing nut, frame brake line clips, 55 V-8 front engine mount brace, exhaust hanger set. NO JUNK! Restored, replated, repainted, or new. Reasonable prices. Troy Pyles, (206) 698-2836.

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FOR SALE . . . "The Mongoose" 53-62 rebound strap riveting tool. Correct mushrooming of O.E.M. type truss-head semi-tubular steel rivets, body on or off. "The finishing touch" for your suspension restoration. $155.00 (M.O., U.S. funds), includes tool, 25 rivets, instructions, shipping. "Important you specify EXACT strap thickness." Additional rivets $10.00 per 25. Bert Levesque, #767, 1722 10th Avenue, New Westminister, B.C. V3M 3J4, Canada (604) 525-5895.

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FOR SALE . . . 1959 Corvette 7 grand tach $300; 1957 Corvette original 3742991 pulley $80; 1 set 1956-62 new repro soft top rubber around door windows, 6 pieces, 3 per side $55; window weather stripping; engine pulley. George Marra #174. (916) 273-8016.

FOR SALE . . . or trade 1957-61, 2-4 intake #3739653. Removed from running auto. 7-Fin-LoScript valve cover set, #3726086; 1955-56-57 Dist. Call Frans at (916) 268-1776.

FOR SALE . . . 1956 hubcaps, late 1956 intake, front carb with air cleaner, 1956 power top (works), 1953-57 hood latches-male, 1958-60 left rear bumper, 1960 WCFB carb, T81 horn relays, volt regulators (000-001-002) hi performance generators 174-268-043, seat belt buckles & webbing, some N.O.S., assorted bolts UR-TR-WB-WBIC. 1 N.O.S. non D.O.T. Goodyear 6:70-15 blackwall never mounted. Need 002KI volt reg and 1962 posi dated K1. Contact Bill, (209) 584-7839.

SACE TECHNICAL PANEL

Technical advisors have three duties: (1) answer questions from the general membership regarding problems they are experiencing with their car; (2) record the questions and answers and transmit them to the Straight Talk editor for publication; and (3) provide assistance in the preparation of a technical guide book.

Every request for assistance will require the requestor and the advisor to jointly complete the form. The advisor will send it to the Straight Talk editor.

Any member wishing to make use of this service may contact the advisors listed. If you write, please use the form and include a stamped, self-addressed envelope. if you phone, have the information ready for the top half of the form before you call.

Be considerate of the time zone differences, and place your call so it is received between 8:00 and 9:00 P.M. for the advisor. If you want the advisor to call you back, be prepared to accept the collect toll. Technical Advisors are:

Steve Solokoff (53-55)
4524 Baltimore Avenue
Philadelphia, PA 19143
(215) 382-6366

Mike McCagh (53-55)
1715 Frederick Street
Cumberland, MD 21502
(301) 777-0089

Dwight Farmer (58-60)
5232 Foxboro Landing
Virginia Beach, VA 23464
(804) 495-0154

Jim Lockwood (58-60)
P.O. Box 691
Mountain View, CA 94042
(408) 723-2775

Brooks Cooper (61-62)
12647 Fantasia Drive
Herndon, VA 22070
(703) 471-5776

Joe Calcagno (61-62)
P.O. Box 1080
Soquel, CA 95073
(408) 475-4442

Ron Smith (56-57)
1582 Surrey Drive
Santa Rosa, CA 95401
(707) 579-1341

Ken Kavalchek (56-57)
6966 Boneta Road
Medina, OH 44256
(216) 336-9455

David Bartush (56-57)
6560 Red Maple Lane
Birmingham, MI 48010
(313) 642-3522

Jeff Reed (56-57)
239 W. Main Street
Mesa, AZ 85201
(602) 461-3229

Joe Trybulec (56-57)
470 Albert Drive
Florissant, MO 63031
(314) 831-7841

Larry Richter (All Years)
P.O. Box 328
Coos Bay, OR 97420
(503) 269-1427
SACE Chief Instructor

Bill Eldridge (58-60)
561 Olele Pt. Road
Port Ludlow, WA 98365
(206) 437-2120

Roy Braatz-SACE Editor
14521 Bears End Drive
Nevada City, CA 95959
(916) 265-5947

Chip Werstein (61-62)
23317 Schoenborn St.
West Hills, CA 91304
(818) 883-5766

WANTED . . . I am trying to locate original owner of 1962 Corvette VIN #3206. Car was originally black with black inside, 340 HP, 4 spd and 4:56 posi; last seen it was medium metallic blue with fawn beige 1961 seats and may have been drag raced with light weight seats by someone in the Navy. It was purchased in the San Francisco area about 1970 by Corky Frisella who was possibly the 2nd owner. Any help will be greatly appeciated. Contact Bill Verboon, (209) 584-7839.

WANTED . . . Early 56 Title and VIN tag below #200. 57-59 RPO rear finned drums. 56-57 clock and tach. 56-62 rear inner hdtp trim. 56 pwr top wiring harness for pattern. Roger Brower #179, (503) 620-4918.

WANTED . . . 57 parts car, can be very rough, or frame and tub only, will consider all, also any 57 parts, please help. Harald Lamberts #788, (515) 986-3381 Ia.

WANTED . . . 56-62 lower seat separator chrome (short pieces below glove box) especially R.H. side. Harry Canci, (916) 436-2561.

WANTED . . . 88-91 Corvette engine complete or 350 HO engine. Harry Canci, (916) 436-2561.

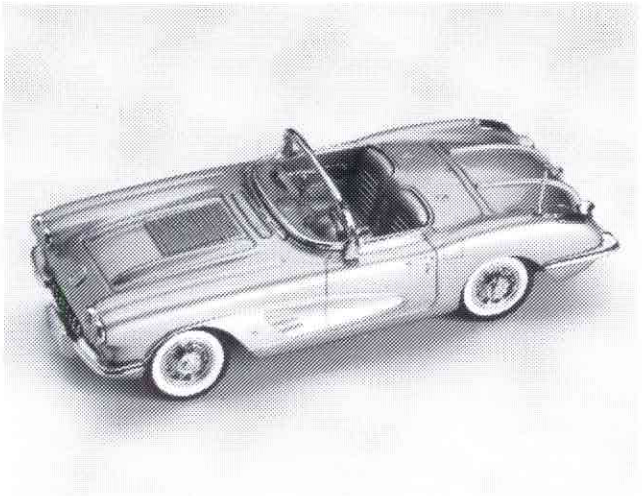
WANTED . . . 1954 Side Curtains, Steering Wheel, Horn Ring. Box 645, Amarillo TX 79105.

WANTED . . . 1955 Corvette air cleaner. For sale or trade, 1953-1955 plasticon hardtop. Stan Edmunds, 6550 Ready Road,, South Rockwoods, Mich. 48179, (313) 379-3546 after 5 p.m. E.S.T.

WANTED . . . 1954 PARTS . . . One large and one small CI intake/exhaust manifold clamp, AC 850778 radiator cap, chrome shift lever, 2 wire, brown button courtesy light switches, clips on end of door opener rod, carb tag marked "C 4 7", Horns w/brackets, distributor condenser, wiper arms & motor drum, rebuildable battery, vacuum advance, three hole spark plug wire separators, engine side cover clips that hold vacuum line, transmission band adjuster metal cap, blue plastic Powerglide tag, used wire harnesses. Tony Pyles, (206) 698-2836.

WANTED . . . CORVETTE . . . Straight axle Corvette. Please, strong #2 condition, or better, top flight ideal. Cash waiting, or excellent trades (Mid-Year Vette Coupe, Turbo-Look Porsche Cabriolet, Mercedes 560 Coupe, Cobra 427 SOHC). Lawrence Dodd, 8801 Bluebonnet Road, Baton Rouge, LA 70810. Phone (504) 769-2900.

S.A.C.E. 5TH ANNUAL NATIONAL CONVENTION 1961 CORVETTE LIMITED EDITION PROMOTIONAL MODEL



PART TIME HOBBIES, INC. is proposing to do a model 1961 Corvette S.A.C.E. in an exclusive version, in limited edition form. It would commemorate our 5th Annual National Convention, June 24-26, 1991. This would also serve as a great honor for the 1961's 30th Anniversary!

The special model would be built as follows:
EXTERIOR: Ermine White
INTERIOR: Red
COVE: Sateen Silver
VERSION: Top-Up Convertible / Black
BASEPLATE: Serialized
BOX LABEL: Special label with S.A.C.E. logo, event information, and 1961 Anniversary noted.
QANTITY: 100 minimum, maximum to be determined by the number of orders received by 8/1/91. No exceptions!
MADE BY: MINIMARQUE "43" of England
COST: $174.95 each, $3.95 for UPS (USA only)
*Illinois residents add 7% sales tax $12.25 each.
SCALE: 1/43rd, metal, weighs about 14 oz.

Please contact: George Wm. Pekarik, phone (708) 969-1847.

KUDOS FROM CANADA

I enjoy receiving "Straight Talk" and find the articles to be very interesting and informative.

Please keep up the good work.

Graham Finley
232 Green Road
Stoney Creek, Ontario
Canada L8E 2A5

LOGOS! LOGOS! LOGOS!

Logos! Should you care about logos and why? Some companys do have a license from G.M. to reproduce their logo, but most do not because of the cost. This can be very important to you when buying or selling a part. When I sell a dirty, greasy and sometimes a worn but rebuildable part I most usually have to go into a long explanation as to why they should buy this part over a clean shiny repro part. I'll try in this story to explain what I tell owners. First, most every part on a Vette will have either a date, logo or part number on it. We all know the importance of numbers when it comes to engines, numbers play a big part on many pieces and engine accessories, dates are also used on many parts, but logos are not well known at this time, so here are some to think about.

#1. Rubber hoses, like heater and vacuum hoses had a number of ribs made into them, some two and three or four, some smooth skinned. This was there form of logo to let G.M know at a glance which company supplied that part.

#2. You may have noticed that on most engine parts like the heads, manifolds, intake, water pumps and so on, the letters, G.M. 12, G.M. 3, etc. are cast into the part. The reason is so that if the company had a large number of (say bad water pumps) they know which group is the problem if all carry G.M. 3, that group was casted in 3. So a recall would be on the group of parts made in casting number 3.

#3. T.R., WP1C, L,R,M, various bolts carried markings which is the manufactures logo telling the company which supplier made that part for G.M. Also most parts carry a logo too, to let the company know who supplied that part.

Now back to my story about selling parts. Years ago I tried to sell front vertical bumpers at a swap meet that needed chroming and was told by a buyer that he could buy new repros for $70 and why buy mine at $50 that needed to be rechromed. After explaining to him that the repros didn't have the logo which said built in USA which only the original had was the reason he should buy mine. (Well) he said so what, the judging doesn't judge that anyway, and I said but down the road they will, to shorten this story he didn't buy them, he saved $20.00 AND WHEN the judging manual came out they did (now) judge the USA logo and now his front bumpers cost $170. By the way, they were 1957s. Some of the repro parts that I know that do have logos, carb linkage, transmission linkage, frame parts, bumpers, weatherstripping, wheel covers, brackets, clips, radiator shroud, hood hinges, male-female hood locks, are some parts I can think of, many more you may know. So if someone knows logos and is pointing that out to you at a swap meet you should think twice about that part.

—Editor

RIGHT STUFF!

SOFT TOP ASSEMBLY 1956-60

I had a good friend buy a repro assembly for his 1958 Corvette and he asked if I would look it over for him. He was told that it was the right assembly for his year Corvette 1958. The first thing I checked for was how the side rails were attached to the header assembly (area above the door windows). I told him that it was a mid-1959 to 1960 top assembly and not a 1958. The 1956 to early 1959 used a two piece affair where the second design used a one piece part from mid-1959 to 1962. This is an example of a person not knowing the difference because he is not a member of a Corvette club where other members would guide him on buying parts. I could not make him understand that the party selling him the part is misinformed as to what part goes on what year Corvette and that is a common problem with suppliers. It would save people money and problems if they would join a good club like SACE or NCRS, or at least ask a person owning a Corvette of there year. The 1956 to early 1959 was first design #3762541 and the second design was for mid-1959 to 1960 #3763592.

If you receive a part you think is wrong for your Corvette, please let me know so that I can pass it on to other owners so that they will not make the same mistake. I had a chance to meet Ernie Coffman of Coffman's Corvette that also makes a soft top assembly, and I'm here to tell you that his top assemblys are right on the money. He knows the difference between years whether a power top assembly or not. You need a 1958 power top assembly (which is the same as 1957) then you get it right down to the power top stud r/s, also the support plates have the locking grooves where it mounts to the body plate that are grooved that he also makes. Above the door windows the assembly is a two piece that I spoke of. To put it in a nut shell, if I were to see an original next to his I would not know or tell the difference. He is so confident of his work that he has loaned me one of his assemblys for show and tell to take to our meets, which I will definitely show off his fine product. His number is 1-800-545-4478. Other great examples of the RIGHT STUFF will be printed in coming articles for those members that need to know where to buy a correct part.

—Editor

F.I. ONE-PIECE GASKET UP-DATE

Volume 3, Number 3, 1990. The article I wrote about concerning the 1957 to 1959 F.I. Corvettes gasket, caused Gary Hodges to sell out of his supplied stock, when before he could only sell those owners that trusted his word about them. (He now has more on hand.) While I was in Bloomington last year, I came across an original gasket that was used but in good condition and I noticed that it had a logo in the center area. (FDF). Which company supplied G.M. I don't know, if someone knows please let me know.

—Editor

RIGHT STUFF!

COMPUTER WIRING DIAGRAMS

I recently reviewed a software program from Technical Output Products on my computer and was amazed at the program they made concerning Electric Animation. You see the various component, like the starter, generator, gauges and so on. All the wires are color coded and at any time you can copy the screen and use it to wire your Corvette correctly. It was a great help to me and I highly recommend it to anyone that is wiring their Corvette. Call (817) 430-4339 or write, Technical Output Products, P.O. Box 292188, Lewisville, TX 75029-2188.

—Editor

RATED A-1 PRODUCT BY SACE EDITOR

1991 SACE WESTERN REGIONAL CONVENTION

August 22-24, 1991

Name _____ Spouse/Companion _____

Non-member Guests _____

Address _____

City _____ State _____ Zip _____ Phone _____

Membership Number _____

Year Corvette you are bringing _____ To be judged? ☐ Yes ☐ No

☐ Yes, reserve me parking space for my trailer. Rig size _____

Complete VIN# if car is to be judged _____

Convention—per family ..... _____ @ $30.00 = _____

Sweatshirts ☐ Small ☐ Medium ☐ Large ☐ X-Large ..... _____ @ $16.00 = _____

Inspection of Corvette ..... _____ @ $25.00 = _____

Barbecue—Thursday, August 22 ..... _____ @ $ 8.00 = _____

Lunch—Friday, August 23 (non-inspectors/tabulators only) ..... _____ @ $ 8.00 = _____

Salmon Barbecue Dinner—Friday, August 23 ..... _____ @ $15.00 = _____

Picnic lunch on beach—Saturday, August 24 ..... _____ @ $ 8.00 = _____

Awards Dinner—Saturday, August 24

Adult ..... _____ @ $25.00 = _____

Under 12 ..... _____ @ $12.50 = _____

Total = _____

HOLD HARMLESS AGREEMENT

I agree to insure my vehicle and property against loss, damage, and liability and to provide proof of such insurance to SACE. I agree to assume the risk of any and all damages or injury and to indemnify and hold harmless SACE, its Officers, Directors, Agents, Employees and Chapters for any acts of omissions which may result in the theft, damage or destruction of my property or injury to me or to others occurring during or as a consequence of this meet. Incomplete forms will be returned. YOU MUST BRING YOUR INSURANCE POLICY OR VALID CERTIFICATE OF IN-FORCE LIABILITY INSURANCE.

Signature _____ Date _____

Auto insured with _____

Policy Number _____ Expires _____

Send this completed form and payment to:
Larry Richter, Chairman
1991 SACE Western Regional Convention
P.O. Box 328
Coos Bay, Oregon 97420

For more information, call:
(503) 269-1427
(503) 269-1815