



VEE LINE

NUMBER 60

SEPTEMBER 1969

DIRECTOR'S CORNER

Well, this is the month you joined FVI for – Ballot Month! Each year, after all the thousands of check marks have been counted, I vow that next year's ballot will have a maximum of three questions, with a space for voting "Yes" only for all three. But it never seems to work out that way.

I hope I've learned by experience. Last year's ballot had only a few ambiguous questions, and I hope that this one will have even less. Wherever possible, the "question" is in the form of a positive statement, rather than a question, to avoid "Have you quit beating your wife" situations, but it is *not* an indication of how you should vote. Call them the way you see them!

In the past, because they presumably would become Vee owners and thus had a stake in the future of the class, Associates were allowed to vote on these questions, too. However this practice was viewed in some quarters as invalidating the entire ballot, so this year only bona-fide Vee owners will be sent the ballot. (If you're an Associate, and happen to get one by mistake, burn it, bury it, or otherwise destroy it, but *don't* return it!) Also, you will find no "proxy" provision, requesting the Director to vote for you in order to avoid any charges that the votes were all cast by the Director because the Vee owners themselves didn't know enough about it to have opinions of their own.

One more little item—the number of FVI votes, compared to the total number of Vee owners, has been an excuse for some disparagement of our balloting procedure in the past. Last year 417 ballots (58%) were returned. This year, eliminating the Associates, the percentage will have to be considerably higher in order to get the same numerical count. So, please make sure that YOUR vote is counted! If everyone else does, too, we'll top last year's figure with strictly nothing but Vee-owner votes. Let's DO it!

The deadline for counting ballots will be October 16. With the mailing date somewhat indefinite, due to whims of printers, mail carriers, etc., this may not give you much time to return your ballot, but honestly, now, how much time do you really need? How about doing it right NOW?

INFLATION RAISES ITS UGLY HEAD

Kids, I hate like heck to bring this up, but you've heard about inflation, haven't you? Well, I'm going to ask you to do your share to help it along by increasing the dues for FVI.

As you old-timers will remember, the dues were originally \$10.00 a year. Then, in 1965, they were reduced to \$5.00. (At that time VWoA had "absolutely no connection with racing," so their generous Contributory Membership could not be publicly acknowledged.) Since that time, however, there have been some changes. Postage rates have been increased by 20% (and are due to go up again), the costs of printing, emblems, typewriters, address plates, etc., have gone up comparably, most of VWoA's support of Formula Vee is being channeled into more visible programs—and my Administrative Assistant says a title isn't enough—if she's going to have to continue to do office work, there are places where she can get paid for it.

Good Administrative Assistants who can also cook, take care of the yard, sew on buttons, and clean up after cats are hard to find, so I'm requesting an increase in the dues to \$7.50 a year, for both classes of members. I've promised her a raise to 50 cents an hour if it is passed. Is FVI worth that much to you?

**The VEE LINE of
FORMULA VEE INTERNATIONAL**

Don Cheesman, Director
1347 Fairmont Ave.
East Wenatchee, Wash. 98801

OUTSTANDING

As in the past, the Volkswagen distributor for Northern California, Northern Nevada and Utah—the Reynold C. Johnson Co.—is the top supporter for Formula Vee in its area. In addition to contributing to the support program for all National races, they also provide support money in the amount of \$25.00, to each of the first ten Vee drivers in each of the Regionals held in their territory. On top of that, at the end of the season the driver getting the most Regional points will receive \$150 in cash and an impressive trophy.

The Reynold C. Johnson Co. is the *only* VW distributor to report any support on the Regional level.

UNCLASSIFIED ADS

(In case there are some of you who didn't know, these ads are free to members, or non-members, as long as they are non-commercial and pertain to Formula Vee. There are other publications with more circulation, but you can't beat those rates!)

FOR SALE: Beach Mk5C. Konis, Goodyears, Zink Engine (2 races) trailer, spare engine and other parts. \$2400. Dan Whalen, No. 7 11th Ave., Rochester, Minn. 55901 (507) 288-6188.

FOR SALE: (To FVI members only.) All back issues of the VeeLine. 25 cents each, postpaid. FVI, 1347 Eastmont, East Wenatchee, Wash. 98801.

WANTED: Used Vees, for listing in this ad section.

MEMBERS' SOAPBOX

Dear Don—The use of free exhaust systems is a step in the right direction, but doesn't it seem absurd to force us to stuff all that pipe within three inches of the end of the rear of the body section? This not only offends my sense of the aesthetics, but it causes heat build-up around the engine and transmission, and renders access for repairs more difficult. . . .

Equally absurd, I think, is the overall length limitation, which may prevent, in some designs, the use of a rear nerf bar and megaphone exhaust system. The wheelbase limitation would appear to be an adequate control of the functional length of the car without limitation on the length of the body or other components. . . .

Gus Skarakis, Carmichael, Calif.

Long noses look sexier, all right (on race cars, that is) but are you sure you'd want another foot of nose while you were in the middle of a pack of four or five cars going into the first turn? Or that you'd still have it on the next straight? The way Vees are presently being driven, there's sometimes not enough room for the bodies we have now. For the protection of other drivers, at least, would you agree that they should be unreenforced, or be of breakaway construction or something?

Dear Don—I hope to see a few things on the ballot: (1) Use of oil filters (inside the body); (2) Leaves in the front torsion tube may be bent, cut, or removed to achieve the desired front end height; (3) Crankshaft journals may be turned to .010 or .020 undersize. This must be a VW practice, as they sell the bearings, and the undersizes are listed in their tech booklets. The deck height and stroke are already listed, so I don't see anyone using this to cheat.

I'm *against* nerf-bars, for the reason mentioned in the July VeeLine, and so are most of the other drivers I have talked to. Of all the bad accidents I have seen (turn overs) nerf-bars would have done no good. If you put them on the ballot, why not leave it up to the discretion of each owner driver whether or not he wants to use them?

Jeff Carlin, Merritt Island, Fla.

I think that "blueprinting," if made specifically legal, would include grinding to VW undersizes. However, Sec. 5.10h does specify "... bearings of same type and size as standard VW."

Dear Don—I want to propose a few changes in the Vee rules for the questionnaire:

(1) In Sec. 5.3 add, "Removal of one torsion bar and any alteration to the other." As you know, and have pointed out, most of the Vees are doing something to the "other" bar, and it

(Continued on Page 2)

MEMBERS' SOAPBOX

might as well be made legal. (2) In Sec. 5.2 eliminate the "Body width at firewall." As you know, many designs pay only token attention to this and we might as well recognize the fact. Best solution, I think, is to allow the builder to make the body as narrow as he wants to at the front, as long as he covers the engine as required in 5.9. There's no sense in requiring him to stick a little projection on each side to get the 34" width. (3) Eliminate 5.7 entirely. It is ridiculous! There are a hundred ways of "ballasting" being used in every race on cars that happen to be underweight otherwise. What are we supposed to do if a well-designed car comes up slightly underweight—junk it? (4) Allow the crankshaft to be reground to standard VW undersizes. VW manuals say to do it. It seems silly to throw an otherwise good crankshaft away.

Harvey Templeton, Winchester, Tenn.

I think I'm with you, Harvey, even on the "width" bit. (Though I haven't figured out how to slim Petunia down by a possible six inches.) As for ballasting, why do you think Petunia is wearing a standard size battery, in a very adequate battery box? Because I overdid the weight-paring a couple of years ago—that's why. There's no "ballast" anywhere, though.

(The first part of Erik Anderson's letter—a series of rules proposals—was printed in last month's VeeLine, but there wasn't space for the rest of it, so here it is.)

...All these suggestions are for 1970. Why not start talking about 1971 and 1972? We here in the Northeast are beginning to be pinched for good used parts. Therefore, why not a formula update in 1971? At this time make the 1500cc engine, the ball-joint front end, and the double U-jointed rear end the basis for the class? In other words, base it on the 1970 Type 1 (Beetle) Volkswagen. What would that do to the Vees already in existence? The engine change is really easily enough made, and one should be able to get a buck for his 1200 from the local dune buggy builder. The front end won't need to be changed, as the present one should still be competitive. The rules would have to permit any VW wheels. The split half-shaft rear-end could present a problem.

The disadvantage to such a change is that aside from the transmission problem, everybody will have to buy a new engine. This could be more than offset by the increased parts availability. However, by federal law, replacement parts will be available for '65 VW's till at least 1975—maybe we should freeze the components. The only way to change the class that will please all the present Vee owners is to start a new class and then let the old one die a natural death. This might meet some resistance by the SCCA. In order to get such a class off the ground, several cars would have to be campaigned as "B's" and reward for "Vee" placement in the "B" races would have to be provided by an outside group, such as FVI. But does the membership think a new class is a good idea, and is FVI in a position to coordinate the assault necessary to add another SCCA racing class?

In conclusion, I feel that a rule change is justified if (1) the real cost is low, (2) the straight line performance is improved and (3) the rules are more clear because of the change. You are probably wondering why I

limited performance improvements to straight line improvements. By so doing, the Vee class becomes more of a driver class. That is, the faster we can get them going in the straights, the greater the need for slowing for a corner, and this is where the driver shows up. If, as is the case in many courses, turns can be negotiated flat out, it becomes a question of who is stronger flat out.

As to the mystery of the Northeast Vees, three things contribute to their speed. (1) Dynos. The top ten drivers all have fairly ready access to dynos. (2) Winter. You've got to be inside, so you might as well be working on your car. (3) Competition. There are so many other Vees that you have to try harder to stand out.

Erik Anderson, Geneseo, N.Y.

(Last May, Grant Reynolds was appointed as a committee of one to report on "What Makes The Eastern Vees So Fast?" Here are his findings.)

Dear Don—While Eastern Vees have been faster than others for the past two years, and Southeastern ones had primacy before that, I have a feeling that ARRC time will show a certain amount of catching up; but for what it's worth, I'll set out a few of my observations on what makes Eastern Vees fast.

First, there are more drivers in NEDIV, so the law of averages suggests that there will be a few more good ones. Second, the engines are strong. This is the primary reason for SEDIV's original prominence, in my view; Ed Zink learned how to put a strong engine together sooner. Now there are others.

Why are the engines strong? Ed Zink's discussion in a recent VeeLine told most of it—select the right parts, put them together right, and dyno-tube on an engine dyno. Nosing around turns up the following list, doubtless not complete, of the "right" parts: cam-bearing crankcase, an "old" cam drive gear (??don) the right cam (the one with the "C" marking on the cam and the "D" on the box—don) "blue grade" pistons and mini-finned barrels, '65 heads, transporter distributor, 28PCI carburetor and 16-blade fan. Put it all together correctly and sling it on a dyno. After three yours it should pump out over 47 brake horsepower, using a correction factor in the neighborhood of 1.06. Valve settings, timing, and jetting are always worked out on the dyno—not left to chance or rule of thumb. Jetting is usually in the range of 190/200 main and 240/260 air corrector, with a 25/26mm venturi.

If it's all done right, the brakes don't drag, the transmission is set up correctly and filled with thin oil, and the straight is long enough, such an engine will pull 5500/5600 rpm in fourth, with sedan ring and pinion. Some engines are reported to pull as high as 5800, but I take that with a grain of salt. They will do it in third, if necessary, but shift points tend to be much lower. Power peak, by the way, is anywhere from 4500 to 5000.

There are a lot of tales going around about the value of 2—into—1 exhaust systems, one story claiming 3bhp gain for a certain 4—1 system. I doubt that the people who have tried have bothered to publicize the straight scoop, whatever it may be. I know of one authentic test only, in which a 2—1 system showed no gain over the Zink four—pipe system, and a 4—1 gained ¾ of a horsepower without any changing of the tuning settings.

The unfortunate aspect of these engines is that they put slightly less stress on the driver's ability, particularly on long courses, and they are expensive. Few such engines are home-built, obviously.

This leads to my next point—how should Formula Vee be changed? I say "how should" rather than "should?" because change is inevitable sometime. The SCCA Board of Governors is not immune to commercial pressure, such as from VW, and our primary components are four years out of date. The day of shortage of key components may not be far off—for example, the transporter third gear is no longer available. Accordingly I make the following proposal, and would like to see it on the ballot this Fall.

1. As of January 1, 1971, Formula Vee will allow either the 1200 engine, prepared under current rules, or the 1500 engine, as fitted to the Beetle.

2. 1500 engines may use ONLY those parts, by part number set out in the rules, certified by VW to be in use in standard production engines on that date, except that fuel injection will not be permitted.

3. Engines may be polished to stated dimensions and balanced. No other changes. Heads may NOT be cc'd.

4. Swing axles and drum brakes will continue to be used, but the ball-joint front suspension will be permitted.

5. 4½—inch VW rims will be permitted. The point of these suggestions is to provide more power at less cost. The engine rules would look like the Formula Ford rules, which they should have, all along. It may cut down on the professional engine builders' business for a while, but it provides the most graceful transition for Formula Vee that I can devise. WARNING: If we fight all change, we may find modified 1600's thrust willy—nilly upon us. The retention of swing axles and drum brakes is intended to assure that current chassis will not be outmoded at the same time as the engines. It might be desirable to set a date for introduction of the double U—joint transmission, but it shouldn't be before 1973. At this point there aren't very many such transmissions in the junk yards.

Grant C. Reynolds, Potomac, Md.

Grant, that's a fine report! Not encouraging, exactly, for those of us without dynos out in the garage, but at least your information includes no veiled implication of cheating or mysterious special components available only to a select few, which is somewhat novel. As to your suggestions for revising Formula Vee, I've taken the liberty of expressing my opinion of both Erik Anderson's and your proposals below. There are a couple of questions on the ballot relative to a new class, but at this time we're primarily interested in the rules for 1970, as I am sure the SCCA officials are, also. If there is enough interest in a new class to warrant it, we'll have a special ballot for it in time for the Competition Board's Spring meeting, at which they should have more time to consider rules for 1971 and beyond. OK?

I imagine that someday Formula Vee will be changed to something more powerful and spectacular; but right off the bat, let's be frank and admit that that is the basic reason behind most of the agitation for a change. When the 1200 Beetle was dropped in the U.S. four years ago (it's still being made and

MEMBERS' SOAPBOX

sold everywhere else in the world), it was the signal for those who wanted more power and speed to start clamoring for a change on the ground that parts were getting hard to find. They've been hard to find—for some Vees—ever since, though I've yet to hear of anyone having any particular difficulty in keeping a '61 Beetle in operation. Sure, it's impossible to buy a new "B" cam, or a new crankcase without replaceable cam bearings, or a new "A" head, or plain (non-ribbed) brake drums; but there is still a complete stock of parts for the 1200VW, and the VW organization won't even hazard a guess as to how many years it will be before they are phased out. The '65 Beetle is only five years old, remember—do you really believe that parts for it are hard to find? Do you really think the Volkswagen organization considers a five-year old car "obsolete?" Is it your contention that the majority of the 1200 Beetles have not only been junked, but that the junk has all been gloomed already by dune buggy and Vee builders? If you think used 1200 engines are hard to find, just shop around for a 1500! They're not only in greater demand for dune buggies—they're also the perfect replacement for a 1200 Beetle engine which needs a complete overhaul.

Incidentally, parts for the '47 25BHP engine are still available, not because of any federal law, but because the VW organization considers it good business to maintain its reputation for providing parts for the older models. Contrary to the often-repeated myth, there is NO law compelling a manufacturer to provide parts for any specific length of time. Those who stay in business consider it good business to do so, and those who go belly-up can't do it—law or no law. So, no law.

OK, so we should change Formula Vee for more speed ("straight line performance"). It was before either of you started in FV, but perhaps you heard about the races for 1500cc "Vees" at Freeport (Bahamas) in December of '67, and at Sebring a few months later. I may get some argument on this, as I have in the past, but I still say that no one can offer actual statistical proof to show that the 1500's were faster than the 1200's by more than 5 mph. Sure, I've heard about so—and—so "lapping all the 1200's" in some special race, or being clocked at so—many miles an hour on some course, but a 1500 "Vee," prepared to the 1200 rules, simply is not much faster. Using the standard VW gearing, the only way it could be faster would be to wind out more rpms, and they just won't do it. They give more acceleration coming out of a corner, and, of course they do have some advantage on a straight, too, but it's not enough to justify the establishment of a new class—additional or replacement.

SO—you people who want to quit fooling around and start going FAST in a Vee, and think you could do it by going to the 1500cc engine, had better start thinking in terms of modification, as well. Limited by rules as specific as the present ones, perhaps, but modification, nevertheless. Dual carburetion, along with a "free" cam and higher compression ratio, might make a significant improvement. Considering the average life of Vee bearings, however, perhaps a roller crank should be permitted also to take care of the increased rpm's. This isn't a proposal—it's just a little food for thought.

Certainly such items would cost more money, but those who are advocating a new class evidently aren't too concerned about the cost, anyhow. The fact that a switch to the current rear axle would require an entirely new frame and suspension design seems to be of no consequence. I haven't checked it out, but it has been mentioned that the "new" front suspension isn't interchangeable, either, with the "old" style. In other words, those who say we should "update" Formula Vee are talking about an entirely new car—a different car—not a modification of present cars, but deletion of them.

As I mentioned in connection with the "IMS A Meeting" (July VeeLine), I'm not opposed to the formation of a new VW-based Formula-type racing class. In fact, I'd welcome it! You expressed my position precisely, Erik—"The only way to change the class that will please all the present Vee owners is to start a new class and then let the old one die a natural death." All I ask is, make it definitely a new class—much faster and more spectacular, and call it something other than "Formula Vee." As to whether or not FVI is in a position to "coordinate the assault necessary to add another SCCA class," the answer should be forthcoming on the ballot count. As for myself, outside of doing what I can to help those who want out of Formula Vee to get out, I want nothing else to do with such a class. I'll stick to Formula Vee. And I'll probably be obsolete before it is!

Dear Don—Have you considered preparing a booklet/manual comprising all your vast (or half vast) knowledge on the subject of "How To Prepare a VW Engine for Formula Vee?" There is actually a great need for a single comprehensive source of information on this subject. Several of these items have been described in various VeeLines, but being scattered throughout all the many issues diminishes their usefulness considerably, plus often there wasn't enough space to cover the subject adequately.

I'd like you to consider adding the following items on the ballot. First, I'd like to see Sec. 5.9 read: "No ducting of any sort shall be fastened to the carburetor." It is my impression that this is the intent of this rule, but its current wording necessitates Mickey Mouse arrangements for air ducting to the cooling fan, an item for which I can see no need for restrictions. I'm also in favor of the 1000 lb. car-plus-driver weight rule, while retaining the current 825 lb. minimum car weight. I'd also like to see anti-nerf bars permitted but not mandatory. Also, why is the exhaust pipe terminating point restricted to the narrow band of 1" to 3" behind the rear bodywork? If a guy wants to end his pipes at the rear axle, or run 6" stacks, why not? How about "not more than 3" behind the rearmost part of the body?"

Another item which probably has nothing to do with rule changes, but would be most helpful, is making some kind of arrangement with VWoA to announce officially when a part used on the Vees has been discontinued, and give the number of the new replacement part, so everyone would be aware of the situation and efforts could be made to legalize the part, if necessary.

Switching subjects again, what do you think of the longer rear axle locating arms used on the newer Vees? Are they worth the

effort to convert? And where did you get the aluminum pieces used in Petunia's weight reduction efforts?

Sam Wood, Richland, Wash.

Thanks for the compliment, Sam, (I think) but there are several reasons, mostly financial, for not printing a booklet. Probably no one who has a complete set of VeeLines would buy it, and no one who hasn't bought a set would buy a booklet, either. So who else would? Aside from that, a booklet with a title like that should tell just about all there is to know about the subject, and I still have a lot to learn.

On your rule proposal, I certainly agree that there's no excuse for forbidding attachment of fan air ducting—or carburetor, either, for that matter—to the engine. It doesn't prevent any ducting—it just makes it more difficult. I was told once that the intent, which is certainly laudable, was to prevent the ducting of air from the fan to the carburetor—supercharging. I've never seen it tried, but I'm sure I could accomplish even that and still stay within the letter of the rule. How about, "Any air ducting may be utilized which does not provide communication between the cooling fan and the carburetor?" Nearly all cars have some means ("ducting") for providing cool air to the carburetor throat without direct attachment to the carburetor itself, and it does help. If the rule (again) isn't changed to make direct connection legal, take a good look at Petunia next time you meet her. Her ram-tube is loosely attached to the engine cover and lifts off with it. Unquestionably legal, although it certainly was more difficult than tightening a hose clamp around the carburetor neck.

On the exhaust pipes, we struggled for hours to get our "free" pipes the desired length, and still end up within the legal limits, but if the rest of you can get the rule changed, go ahead—just so they don't stick out behind far enough to be dangerous to other drivers. As you suggested, Sam—"not more than 3" behind the rearmost part of the body?"

Joe Hoppen, of VWoA, has been doing some work on the part numbers, as you suggested. The recent announcement that the ribbed brake drums are legal was one such instance.

As I've mentioned before, in my opinion, the length of the radius arms has very little, if any, effect on the rear geometry if the camber is set in the neighborhood of neutral. With the 5 or 8, or even more, degrees of camber we used to use, there was a definite change in toe-in, but at neutral camber an inch or two or three of spring movement will cause such a slight change that it is not detectable. Longer arms certainly look sexier—we were tempted to lengthen Petunia's, just for the esthetic effect, but resisted the temptation on grounds of weight increase we couldn't afford.

Some of our aluminum was scrounged, some of it was bought from the local junk dealer, some of it from a sheet-metal shop, and the aluminum steering wheel shaft, of 6061-T6 hard tempered aluminum (I believe that's the designation—my books aren't unpacket yet) was ordered for us by a machine shop.

MORE MEMBERS' SOAPBOX

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MEMBERS' SOAPBOX

Dear Don—On the subject of rule changes, I definitely believe that a simple nerf bar would be very beneficial. Also the suggestion of increasing the wheelbase to 86" would probably help the tall fellows quite a bit. While we are on the subject, I see no reason to hold the overall length to 127". I see no reason why the Vees have to run with such a stubby looking nose. Why not give them a chance to look like a Formula F—(sorry) even if they aren't? I don't see where even a 140" limit on overall length would hurt.

Also, I see no reason not to permit the mounting of the intake manifold on the back side of the engine, with the carburetor mounted in the same position as it would be in front. Think how much easier it would be to reach in case of fire, or if you desired to make a minor adjustment.

Keep up the good work, and keep us posted on IMSA. And have you heard what the rules at Daytona will be this year?

George Wessel, Ft. Wayne, Ind.

As I've mentioned before, I can't think of any way that anyone could reassemble stock VW parts in other than stock configuration which would make any improvement in performance, or would cost anything to copy if it did. Can you? But if you're going to try to be specific, you've got to do better than that on the way the carburetor is to be turned. Do you mean the way it would be turned if the engine had not been turned around, or the way it would be if it had not been turned around after the engine had been turned around?

Dear Don—I would like to have two questions added on the ballot: minimum tire compound hardness and addition of an oil filter. As for tires, winners in the South race on Goodyear gumballs. They usually start the feature race on new tires (the first 1/32 is faster, they say) which is understandable, as they only last from a half hour to an hour of race time, depending on the track. Normal compound Goodyears and Firestones go 4 to 5 race weekends, but they aren't as fast. So, if you want to be a winner, what do you use? Gumballs that cost about \$150 a set for one weekend of racing! The Firestone Indy 114 compound will last a season on most cars and

Goodyear certainly has a comparable compound, so why don't we all use the same tire compound? This would put more emphasis on driver ability, rather than on car preparation—or tire buying power. (It seems that I have read that somewhere before, like in the opening paragraph of SCCA Formula Vee rules.) Enforcement would be considerably easier than most Vee rules, as durameters are neither expensive nor difficult to use.

Engine failures in Formula Vee are certainly not rare, and although VW parts are relatively cheap, a filter would reduce the replacement parts needed. A bearing failure adds metal particles to the oil, which is circulated throughout the engine, damaging many other parts and necessitating replacement of oil cooler and push rod tubes, as they can not be cleaned adequately.

Another thing—cleaning the oil passages is almost impossible without removing the end plugs. It should be permitted to replace these with threaded plugs.

A rule allowing modification of the oil system, including tapping of oil passage holes for threaded plugs, use of a filter, and use of a substitute cooler would allow those interested to protect their investment, and I don't believe it would effect performance to any degree or open areas for expensive cheating.

David Webb, Clearwater, Fla.

Dave, you have a good point there on tires. There was a lot of flap about the "gumballs" almost two years ago, to the point where it appeared that there might be overwhelming sentiment to outlaw racing tires entirely. Then they seemingly disappeared from the scene (Goodyear leaked that they had only made one batch of them, and they couldn't understand what had happened to make them so soft, but it wouldn't happen again.) Now apparently they have "slipped" on another batch. Can you give any details—like how can you tell one when you see one? Can you just buy them, by asking for "gumballs," or do you have to know someone in order to get a set?

Dear Don—I have just begun an attempt to assemble a Formcar from the basic pieces I was fortunate enough to obtain for a total outlay of about \$250. This includes a '63

Formcar chassis and body panels, and a running '61 VW.

I believe I know how the basic car goes together, but anticipate some trouble with the detail work. Any help you could give me would be much appreciated.

Gregory Wernisch, Milwaukee, Wisc. 53207

Anyone have an old Formcar assembly book that's not needed any longer? How about passing it on? There's quite a bit of dope on Formcars in back issues of the Vee-Line, Greg, but it's mostly things to do after you have the car finished—the first time.

Don—I am an active member, and I recommend that for the next vote: (1) the carburetor or venturi be allowed to be removed completely, (2) that any number of torsion bars be permitted to be "broken."

Neither modification requires any great skill or cunning, or costs any money, and both enhance the performance and handling of the car.

Dan Kaljian, Marblehead, Mass.

Dear Don—Sec. 5.5 in the rules permits "any jets or VW venturi." Is the venturi which J.C. Whitney stocks legal?

Chuck Cunningham, Coats, N.C.

Don't worry about it, Chuck. First, there is no "VW venturi." The one on the VW is a "Solex." Second, if you're going to fool around with venturis, normal practice is to bore out a standard venturi (obtainable in a maximum size of 24mm) to about 26mm, which doesn't leave much meat—not enough to show the brand name, or lack of it. If you're going to do it, it's just as easy to bore out a 21.5mm "Volkswagen" venturi as a larger one from J.C. Whitney, and vice versa.

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**OK, YOU'VE READ
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