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BULLETIN

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1965

The Holiday Season is over, Valentines have appeared in the drugstores, and tentative race schedules are being discussed in the magazines. The feeling of guilty relief with which we parked our cars last fall is giving way to an eagerness to be up and at it again. It's perhaps a little early for the sound of wrenches to be heard throughout the land, but not a bit too early to start thinking about them.

What are you going to do to your Vee before the season opens, if anything? Many will dust it off, change the oil, check the tires and decide they're good for one more race, and start looking for a place to practice. Others, who are out for first at any cost will go the route, down to magnafluxing the bolts.

I don't want this to get monotonous, but if you took your engine out of a wreck, and changed the oil and plugs and went racing, and intend this spring to give it a treat by taking it to your VW dealer for a standard tuneup, don't expect to take your car to the ARRC. On the other hand, if, like a lot of us, you are just racing for fun, you can go that route and have as big a ball as anyone.

But you can't have it both ways. Just one more RPM than your competitor, in a twenty minute race, will put you about 35 feet out in front. One more MPH will give you a lead of nearly half a mile.

Are you setting your valves by the book? VW is interested in performance, too, but even more in maintaining their reputation, so they specify a valve setting that is absolutely safe. Setting them closer opens them sooner, raises them a few thousandths higher, and closes them later. How close? Let your conscience be your guide. If they burn, they're too close. But if you don't have a little gambler in you, you wouldn't be racing.

Are you running a vacuum distributor? You may get an argument on this, but it is generally considered that the old style centrifugal-advance type is superior for racing. You can get one for less than \$10.00 at most any wrecking yard.

Same with Carburetors. The old style 'CI is better than the 28PICT, and can be further improved by replacing the removable jeturi with a 24mm one. The fixed venturi the 28PICT is 22.5mm. (More on carbs in later issue.)

There are a lot more of these "little lugs", which we will take up from time to time, but if you haven't done at least these a bit worry about the competition cheating. They don't have to.

EMPI, of Riverside, California, has signed with Autodynamics as their West Coast distributor, and, to show they are serious, will campaign a "Veeva" in the Pacific Division this season.

SPEED WEEK?

The Vee news from Nassau, which shook the Vee world more than a little, wasn't who won, but who didn't. (by the way, who did?)

I think I now have the straight dope from two of those "reliable sources". At least I'm going to take a chance, and if there is anything I've got wrong, I'll be glad to correct it.

It seems that Lou Kerr was disqualified for an oversize intake manifold, Ray Caldwell for shims under the valve springs, Tony Belcher for oversize cylinders and pistons, and Mike Rothschild for a "shaved" crankcase. (Dan Gurney, in a "stock" VW sedan, had EMPI heads and milled cylinders.)

That's the story. Now for a couple of stories within the story. A friendly VW mechanic tells me that VW has issued some 3mm oversize manifolds. One of my "sources" tells me that at least one of the other Vees at Nassau had one. A letter to Volkswagen of America got me the answer that "to their knowledge" there is only one size. That's the best I can do on that one for you, for now, but I'll get a better answer if I have to go to Wolfsburg. (If the oversize ones are standard replacements, are they legal?)

I am informed that Ray Caldwell has all his engines set up by an independent tuning outfit. (He builds Autodynamics, in case you didn't know). It seems that this outfit overzealously tried to improve on his personal car for Nassau by shimming a couple of valve springs to bring them up to standard height. I am told Ray was as surprised as anyone when they showed up at teardown. Inasmuch as the only effect of stiffer valve springs is to prevent "floating", which sets in at speeds higher than a VW will turn, it seems highly unlikely that they were used in a deliberate attempt to cheat. For the same reason, it is an infraction that probably won't turn up very often.

Mike Rothschild's "shaved" (no details) crankcase was also explained as one of those coincidences, where no one knew it had been altered.

There was no explanation given for Tony Belcher's oversize jugs. However VW does sell "rebuilt" with overbored cylinders, so watch it--it could happen to you.

Did you notice I haven't mentioned Bruce McLaren? He stayed honest and came in third. Is there a moral there?

If there was anyone else in the race, I haven't heard of them. These are the names that made the news. Could be a moral there, too, somewhere.

Regardless of the uniformity of the Vees, to quote Ray Caldwell---"Better prepared--- not necessarily more expensively prepared--- and better driven cars go faster. Formula Vee was never meant to compensate for ineptness". Amen!

IT'S WHAT'S UP FRONT

Before taking your car out this season, even if it's a new one, be sure your front end is ready. As mentioned in the first issue of the Bulletin, my experience is with a '63 Formcar, but a lot of this will apply to other cars, too.

The more recent Formcars, and many of the other makes have the VW front suspension attached by U-bolts, with small tack welds to prevent it shifting in case the U-bolts loosen. The older Formcars, and perhaps other makes, are attached by bolted brackets that are welded solidly to the suspension tubes. Very soundly built, except---

It just happens that the weld on the outside of the tubes coincides with the inner bushings for the torsion arms, inside the tubes. If, while the welding was in progress, you wondered what was causing all the acrid smoke inside the tubes, it was the bushings, which are of nylon, burning. Unless they were removed before welding or replaced afterward, they probably need replacing now, as the burning loosens them in their seats. They are likely to slide farther into the tube to the point where they no longer support the inner end of the torsion arm. When this happens you get camber in the front end that VW never dreamed of. I've seen it happen.

The best way to check is to remove the torsion arms, insert a length of broomstick against the bushing, and tap a few times with a hammer. If it moves easily you need a new set. This is a job for a VW dealer, as they must be reamed to size after they are installed. If they are still tight in the tube, check for play in the torsion arm. You may need a new set anyhow.

Now that you've got the front end apart, check your sway bar. While checking our car for other damage after a short-cut across a corner that bent a spindle, we discovered that the squares on the ends of the sway bar were not in line. When one end of the bar was put in a vise and the other end twisted with a wrench, in order to bring them back in line, we found that less than 45 degrees of twist would give it a permanent set. It is possible, when taking short-cuts, to twist this bar about 90 degrees, and if it won't spring back to it's original condition you'll get more weight on one front wheel than on the other, causing some tricky handling in the corners. Try yours. If it doesn't come back it's no good anyhow.

We made a new one of Maxell steel, 5/8" diameter instead of the original 1/2". The extra stiffness didn't hurt a thing. If you decide you need a new one take the job to a good machine shop, where they will know how to heat treat it after welding, or to a good old-fashioned blacksmith who can hammer it out of one piece. Don't rely on your neighbor who got a mail order welder for Xmas, or you could end up with the front wheels going in different directions. (To be continued. This is a Bulletin, not a book, you know)

IT'S CATCHING!

You wonder if FV is contagious?-----
"Dear Sir: We are interested in establishing Formula Vee Racing in this country. We have seen some regulations governing this type of motor racing and wonder whether there have been any amendments.

It would be appreciated if you could let us have some copies of the latest regulations, and let us know whether there are any plans available. It is not feasible, due to import restrictions, etc., to import from America, but it would be quite easy to arrange for some to be built here. Yours, D. P. Clapham, Secy., The Sports Car Club of South Africa. (There have also been half a dozen individual queries from there. don)

BOUND TO HAPPEN

With eight (at the last count) manufacturers now in the field, competition among them, as well as among the drivers, is showing up.

Competition Components announces the introduction of the Beach Mark 5B for 1965, replacing the Mark 5. Changes are not specified.

Autodynamics for 1965 has longer trailing arms, a hinged rear section, and a more rigid frame.

Formcar is "redesigning somewhat. It won't go a dam bit faster, but will look different". The new body will fit the old frames--a nice touch for those who want to update at low cost. Detroit, please note.

Canada and the U.S. have agreed to drop the tariffs on autos and parts. This should encourage Vee enthusiasts in Canada and Vee manufacturers in this country.

The Aspen (Colo.) Sports Car Club is seriously considering an All-Formula-Vee three-hour enduro on Memorial Day weekend. They have a 1.1 mile track with a 2000' straight, asphalt paved. They plan to stage elimination heats, with a final three hour race for the top twenty. They hope to have prize money and possibly appearance money. If you are interested and want more information, write them care of Robert Barnard, Aspen, Colo. Do it right away, so they can plan.

Bernard Grundl's letter drew numerous replies, all of which were in line with a policy of moderation but no modification. His opinion of Vee owners didn't get any support either. In fact, Bernard, you have several invitations to find a Class which is more to your liking. Unnecessary protests were disapproved, but even more so were the type of people who make some protesting necessary. George Smith--"It goes against my grain to have to be eternally vigilant against the unscrupulous small minority who must win regardless." Harriet Gittings--"Protests I know nothing about in this area. I agree on any part which carries a VW number etc." up to a point, but the 1500 sedan could be very well snuck in there." Eric Harris says--"I (one line short! how did that happen? don)

come to race, not to protest". He suggests requiring a favorable vote from the other Vee owners concerned before a protest could be honored. How about it?

The gold-plated hub-cap, though, goes to Whit Tharin this month. I'd like to print all of it, but, like Mr. Grundl's, it is two full pages, and had to be cut considerably.

"Enclosed find my application and \$10.00. I wasn't going to join because I'm trying to sell my car and quit, but I am too devoted to Formula Vee to let Mr. Grundl's letter go unassailed. Now I'm going to speak MY ten bucks worth.

I suppose I'm a newcomer compared to Mr. Grundl--I've had my Vee 1½ years and have 18 events in it--but I've yet to see a carefully prepared Vee have any mechanical problems that could be blamed on lack of lubrication or oil cooling. I've seen them blow--"I was holding it down to 5600 in third...", but you get the idea. My own experience? After seven events in 1963 I made a winter overhaul, replacing rings, rod and main bearings along with a valve grind. Only the rod bearings showed any sign of wear. In 1964, after five events, I replaced the rod bearings. They really didn't need it. And that has been it for the season. The oil pressure is still at the top, compression is still over 125# and it goes as well as ever. Economical? Name me a driver in any other class who spent less than \$250 on engine, plugs, tires, and gas, COMBINED. My car holds the Vee records at VIR, Savannah, Cumberland, Chimney Rock, and tied at Greenwood, but I give you my solemn oath it is completely, entirely, and literally legal. The engine is completely stock (1962) except for balancing and fly-wheel chopping. I'm even running the stock distributor and carburetor that came on it. I did spend \$5 for a dyno tune-up, but what a surprise that was. Go spend your own \$5 and find out.

My mechanical experience prior to building the Vee consisted of overhauling one Ronson cigarette lighter and one Seth Thomas clock. My only help was a near-by 15-year-old whose father had an empty shed and a drop-cord I wouldn't have known how to cheat if I'd wanted to, but I've been around since and have seen some lusus! My driving experience consisted of a Driver's school and one race in a '59 Porsche Normal. Man,

I learned in that Vee! My secret? I'm a Chemical Engineer. I have studied PHYSICS. Racing is applied physics. Ergo, I recommend that all Vee drivers study physics.

I have some other items to refute Mr. Grundl's petty points:

My clutch is completely sedan, and has never slipped. There are 18 events on it, and it had 25000 miles on it in the sedan I took it out of. So I say NUTS to that bleat.

I have been protested three times, torn down completely once, and never even snagged on the smallest technicality. I have never protested anyone, though I tried to once.

If the 100 series engines are the same as the 200 series why get a 200? Innocent or otherwise, it's all there in the book for anyone who can read.

The rule Mr. Grundl advocates would permit a shred operator to produce a compression ratio of about 9:1.

I'll concede Mr. Grundl's point that "racing is supposed to improve the breed", but not that F Vee needs improving. There are 17 other classes in which Mr. Grundl can help to improve the breed if he has enough money to stand the pace. If you even think about ways to make your Vee faster than the other guy's you are guilty of a moral sin against the concept of Formula Vee. There are 17 other classes which have been ruined by this kind of thinking. Let's don't let it happen to us. As long as this Class stays what it was intended to be, anyone can run in it.

I have been asked how I happened to lose the National Championship to Ray Caldwell. The answer is simple--he is a better and a more consistent driver than I am. He turned out to be the driver I thought I was. He had a well prepared car that was fast, it's true, but he still outdrove me and everybody else in sight. It is no discredit to be second to Ray Caldwell, my nomination for Mr. Vee of 1964.

One more thought for Mr. Grundl--I don't think our rules should be considered "stepping stones for the protestors" as much as "stumbling blocks for the molestors".

Honestly yours, Whit Tharin
Rt. 1, Box 149, Allendale, S.C.

Somehow, I can't seem to hope that Whit can sell his car. We need more like him. don



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