



# Checkpoints

VIRGINIA MOTOR SPORT CLUB

VOLUME VII

NUMBER 3

MARCH 1972

## CURRENT EVENTS

- MARCH 16 8:00 p.m. VMSC monthly meeting. Back room, Hickory Hearth Restaurant, Holiday Inn North.
- MARCH 26 VMSC 8th Annual Azalea 8-Hour Rallye. OD's Bill Britton and Lewis Parsley. ". . . a 200 mile TSD event with a little bit of everything in it . . ." Pre-registration only. Cost: \$12.00 (includes dinner); if you register after the 22nd, however, cost is \$15.00. Send check to Lewis Parsley, 6793 Dartmouth Ave. Richmond VA 23226. Starts at A&P parking lot, corner of Rt 360 and Laburnum Ave. Check in time 7:45 a.m., FCO 8:01. For information call Bill Britton (703) 358-8025 or Lewis Parsley (703) 285-4301.
- APRIL 15 VMSC Diminutive Daytona Autocross at Jarrell's Truck Stop at Doswell exit on I-95, north of Ashland. 10 car heats. MWCSCC classes. Registration 9:00 a.m., first heat 10:00 a.m. Cost \$3.00 members any club, \$4.50 non-members. OD's Dick Hager and David McCall. Note: this is before the April meeting.
- APRIL 20 8:00 p.m. VMSC monthly meeting, Hickory Hearth Restaurant, etc.
- APRIL 23 VMSC Tyro '72 Rallye. OD's Bill Edwards and David Glenn. "A rallye for everything that's new: new watches, new people, new Xerons. . . ." TSD approximately 100 miles, starts at A&P parking lot, Rt 360 and Laburnum Ave. Registration 9:30 a.m., FCO 10:01 a.m. Cost \$3.00 members any club, \$4.50 non-members. For information call Bill Edwards 266-2642.

## Mutterings

Announcement: our technical columnist, Gene Atkinson, is opening a new business: Atkinson Automotive. It is located on Route 301 North across from the Virginia Inn. He promises to treat club members right, (and this month he is paying almost half the cost of this paper because of his ad) so go patronize him. The station is not open yet due to weather, Henrico County, and a few other inclemencies, but it will be ready for business during the next week or so.

Good News and Bad News - The good news is that Castleberry has decided that two years worth of OD'ing the Diminutive Daytona is enough and has been ably replaced as co-OD by yours truly. The bad news is that the long awaited first appearance of the editor's two-stroke autocross car will once again be postponed due to a lack of the folding green stuff. Anybody want to buy half a SAAB?

Please note a schedule change - the Old Dominion Rallye will be held on October 14-15 instead of October 7-8.

We are currently engaged in updating our membership and mailing lists. Everyone (including non-member subscribers) please fill out the enclosed card and mail it back to us, or give it to us at the meeting. Please be sure to do this promptly so that you will be listed in the new membership directory and mailing list.

Anyone interested in flagging for an SCCA race at Danville or Summit Point, call Tom VanAuken, 320-3700.

Better late than never category: there is a lonely gold dangle earring, with two small blue stones, at Dickie and Carol Hatch's. It's been there since the party after the Awards Banquet. If you have one just like it at home, call Carol.

Pleasant surprise of the month. I was trying to figure out whom to pick on this month for a rallye article and here comes Chuck Hoelzel with a free and unsolicited statement. This I like. It's much better for someone to write an article because he has something to say than to write one because I have asked him to. I am certain that with the characters that are in this club, somebody has to feel strongly one way or the other about any event. If you do have something to say, write it down. Better articles come out of the heat of the moment than come out of a three week later "Well, let's see; was that milage trap on 620, or was it 608?"

Concerning the late rallye, let me say this about that. You hear a lot of mumbling and gripes from this club, but the point is that people came out, ran, worked, and helped each other out of ditches. It could have been quite simple, for instance, for everyone to have left us sitting beside the road. I have later heard faint rumblings that people who get themselves into holes ought to get themselves out, but at the time, help was there when we needed it.

Dick's flight of fancy this month has a very small basis in fact; I did ride around in a patrol car for a shift on a Friday night. This is part of the Department's public relations campaign. It is quite effective in making you see just what it is that the police do and the hassle that they have to put up with. Quite an experience. I recommend it to everyone.

# CRANKSHAFT JOURNAL

The following two-month article on OIL was requested by our fuzzy-faced editor, who thinks OIL should not remain just a four-letter word !

Crude oil is found in pools in underground areas all over the world, but some of the natural storage tanks are full of impurities like sulphur, nitrogen, and oxygen, which a refinery must remove by superheating the crude through an involved process, which costs lots of \$\$\$.

The more popular resources contain mostly hydrogen and/or carbon, requiring less fractionization and less expense, thereby giving oil companies better profit for less work. You can therefore see why Pennsylvania GRADE crude is on great demand for automotive applications, due to the lack of impurities, and the ease of processing necessary. Note that GRADE is important, as most of the oil bearing that nomenclature does Not come from the Keystone state, as a certain advertisement would have you believe !

Batch distillation is utilized to remove more volatile fractions from crude, in stages depending upon intended use and further refining. In the US, oil is piped from a central refinery area to distribution points along a route sometimes thousands of miles long. There are only about 3 major transmissions of oil in this country, which reveals that many brands of gasoline and oil products share those same pipelines ! This is perfectly legitimate and effective, as vacuum capsules separate the liquids in transit, with no mingling of contents therein.

Once the crude arrives at the designated spot, the local refinery begins to treat the product for distribution to the local market, adding Viscosity Index Improvers, Anti-Foaming ingredients, Detergents, Friction Reducers, and Corrosion Inhibitors, according to price structure, type, and retail outlets for the finished product. At this point the difference between Companies and geography are important, as Oil in Maine is different from that used in Alabama, etc., due to weather requirements and equipment demands. (remember our previous cold-weather article? ) No combination of additives can "make" quality oil if the original base is of poor quality, such as is found in the gummy asphalt-type used by some smaller companies. Unless you are buying oil in bulk or in almost unmarked containers ther is little danger of finding this on the local market.

Next month we will discuss the actual additives and their values, along with the uses and applications for same. The NEW API and SAE classifications will also be described.

*Gene Atkinson*

## THE MIND-BENDER IN RETROSPECT

As I sit at my desk on a beautiful blue-sky, sunny Monday morning, it is impossible not to think about yesterday's rally.

It is saddening to see or know anyone who has an accident on a rally; compounded when one of the principals is the rallymaster; and even worse when he wanted to call it off before it started.

I am truly sorry that our friends had the troubles they did. I'm even sorry about Peaseley taking a shot from a malicious four by four.

With respect to the conception and organization of the rally, I liked what I saw -- multiple priorities and priorities within priorities. It was genuinely mind-bending, if not mind paralyzing. However, trouble arose when errors of spelling and syntax were not caught and corrected. The more complex things become, the more proofreading becomes an ABSOLUTE necessity.

There were instructions and definitions which seemed ambiguous to us. The generals were wordy and obtuse, which did not help matters. Upcoming rallymasters take note: plagiarism from other generals is no crime and may well be construed as a compliment.

Now, on to the road and weather conditions. When the weather is ugly, the rallymaster finds out who his true friends are. The control personnel performed admirably in distressing circumstances, above and beyond the call of duty. Thank you all for your trouble and good humor.

There seem to be divergent views as to whether the rally should have been postponed or called off. I can only speak to this from the standpoint of one who learned to drive in an area where snow, drifts, mud and ice are the usual things in winter. It should be no surprise that I am a member of the press-on-regardless school. The rallymasters' "quit point" has always occurred before mine (at least with respect to cancellations).

Most of us learned to drive in the rinky-dink Drivers' Ed courses in high school. The post-graduate course is up to each of us and we either learn fast or become statistics. Each must learn a) his car and its handling characteristics, b) his own limits and c) the requirements for safely travelling over less than ideal roads. These things must be learned so well as to be practically instinctive. None can blame someone else nor can we expect someone else to make up for our deficiencies.

A driver who is afraid of the road conditions is a dangerous person because he is unpredictable and poses an ever present threat to my safety as well as to his. A driver who is unaware and untutored is a threat mainly to himself because he is soon off the road.

What it comes to is this: Each of us had the option of competing or not as he sees fit. If anyone cannot handle the driving conditions he should back off or go home. Meanwhile, don't complain to me about calling it off. When I've had enough, I'll back off with or without your advice or consent. I expect the same of my co-competitors.

**THE MIND-BENDER RALLYE**  
**FEBRUARY 20, 1972**

POSITION	CAR#	DRIVER/NAVIGATOR	CAR	CHECKPOINT SCORES							
				1	2	3	4	5	6	7	8
* 1	(13)	19 Greenwood/Greenwood	Porsche	1	t/o	t/o	600	0	81	t/o	t/o
2	(25)	13 Sharp/Sharp	Renault	2	t/o	t/o	78	600	600	t/o	t/o
2	(28)	23 Raacs/Eckstein	-----	2	t/o	t/o	277	68	16	t/o	t/o
4	(38)	21 Grosbier/Wolff	MGB	3	t/o	t/o	60	34	23	t/o	t/o
* 5	(48)	29 Whitehead/Edwards	Datsun	6	t/o	t/o	107	69	600	t/o	t/o
6	(53)	16 Wagner/Wagner	Porsche	11	t/o	t/o	600	600	600	t/o	t/o
* 6	(53)	31 Petini/Petini	Volvo	11	t/o	t/o	158	167	600	t/o	t/o
8	(63)	12 Wilson/Wilson	Saab	16	t/o	t/o	600	0	141	t/o	t/o
* 9	(10)	20 Westbrook/Westbrook	Datsun	21	t/o	t/o	600	0	64	t/o	t/o
10	(25)	30 Muller/Stornowski	-----	27	t/o	t/o	600	0	300	t/o	t/o
* 11	(30)	2 James/James	Porsche	41	t/o	t/o	600	600	600	t/o	t/o
* 12	(73)	10 Koelzel/Koelzel	Porsche	49	t/o	t/o	81	600	0	t/o	t/o
* 13	(40)	3 Zalis/DeBardleben	Datsun	56	t/o	t/o	241	600	0	t/o	t/o
* 14	(50)	17 Harbright/Harbright	Peugeot	69	t/o	t/o	600	600	600	t/o	t/o
15	(60)	15 Vogeleer/Frasher	-----	75	t/o	t/o	600	600	600	t/o	t/o
* 16	(70)	5 Glenn/Edwards	Triumph	79	t/o	t/o	600	0	300	t/o	t/o
* 17	(88)	22 VanAuken/VanAuken	Datsun	111	t/o	t/o	600	0	600	t/o	t/o
18	(93)	14 Farr/Farr	Datsun	120	t/o	t/o	600	0	141	t/o	t/o
* 19	(80)	7 Wells/Wells	Porsche	129	t/o	t/o	100	600	0	t/o	t/o
* 20	(90)	8 Jones/Williams	Camaro	135	t/o	t/o	600	600	600	t/o	t/o
* 21	(100)	6 Dickinson/Powell	VW	151	t/o	t/o	235	300	300	t/o	t/o
* 22	(110)	26 Mason/Mason	Dodge	227	t/o	t/o	295	600	600	t/o	t/o
* 23	(120)	4 McCall/McCall	Saab	300	t/o	t/o	300	600	600	t/o	t/o
23	(120)	33 Brydon/Brydon	-----	300	t/o	t/o	600	0	600	t/o	t/o
23	(120)	25 Donithan/Donithan	Camaro	300	t/o	t/o	600	600	600	t/o	t/o
* 24	(108)	1 Peasley/Hatch	Porsche	600	t/o	t/o	52	19	600	t/o	t/o
24	(130)	24 Mottley/Ross	-----	600	t/o	t/o	600	600	600	t/o	t/o
* 24	(130)	28 Richards/Richards	Vega	600	t/o	t/o	600	600	600	t/o	t/o
* 24	(130)	27 Koontz/Koontz	Camaro	600	t/o	t/o	63	600	600	t/o	t/o
24	(130)	32 Jacob/Holliday	-----	600	t/o	t/o	600	600	600	t/o	t/o
*		18 May/May	Corvette	dnf							
		9 Loeper/Loeper	F1W	dnf							
		11 Oborta/Oborta	Datsun	dnf							

\* WISC Member

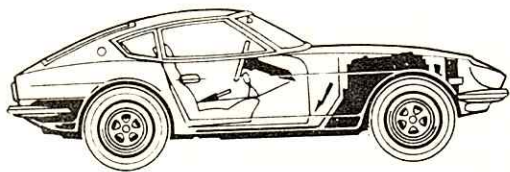
--Resulting from the bad weather, causing the closing of two controls (2 & 7), and the accident going to control 3; the competition committee ruled that not all cars were equally affected and thus the scoring for this rally would be based entirely on Control # 1.--

## BOULEVARD IMPORT

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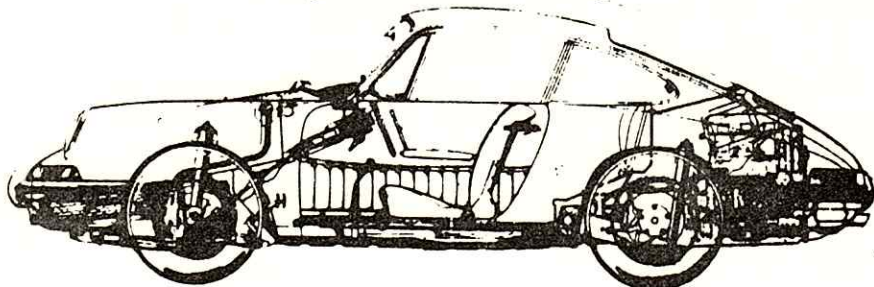
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# Porsche 911

### Part III: The SAAB Suspension

Setting up the chassis on a SAAB is probably the simplest step in the Autocross-preparing process. The first goal is to lower the car, the second, to stiffen it in just the proper manner. It is an old maxim of autocrossers that the non-drive wheels should be stiff and the drive wheels floppy. This is quite easily accomplished at the same time that you are lowering the car.

The first thing you must do is to find someone who has just recently acquired a water bed. Water bed salesmen don't usually take regular beds in on trade, so chances are the person will still have his old bed and be wondering how to dispose of it. You don't want the whole thing however, just four springs from the mattress. The reason for getting them in this manner is that anyone who would buy a water bed probably kept his bed springs good and limber. Press two of the springs into each other, forming one double spring; do the same with the other pair; you now have your new front springs for the SAAB, exactly the right height and stiffness.

The next step is to dismantle the front shocks, draining out all of the old oil. This is replaced by a solution which is difficult to get, but which works ideally. This solution can be obtained only when the York River just north of Williamsburg is at the height of the annual spring flooding, and an oil tanker has leaked out in the Chesapeake Bay, spreading a skim on top of the water. (This is admittedly hard to manage, and how you supply the tanker is your own business.) This suspension of salt water, fresh water, mud and clam crap is the perfect viscosity for your purposes; the oil just keeps everything lubricated.

The rear suspension is even simpler. You want the axle stiff, so what you do is remove the springs and shocks and weld the rear axle solidly to the belly pan.

You now have a car that has flexible drive wheels and a stiff non-drive axle and is  $1\frac{1}{4}$ " off the ground.

Another maxim of autocrossers is that all else being equal, the car with the widest tires wins. It is difficult to apply this rule to a SAAB. The standard wheel is 15"x4"; the only other wheel in the world which you can get for the car is the SAAB competition wheel which is all of 15"x4 $\frac{1}{2}$ ". Of all the Mag manufacturers in this country, not one makes a wheel for the SAAB. You have to get the rubber on the ground, however, so another solution must be sought. Through much diligent research the answer has been found. Replace the brake drums -- deceptively simple, what? Of course the only other drum which fits is off of a 1951 American LaFrance pumper, and nobody makes wheels for that either, but don't be discouraged, you'll only need one set. They're stamped out of  $\frac{1}{2}$ " steel and aren't likely to break. Aside from their rarity, another minor problem is their size. 21"x7". But, since the car is going to run modified anyway, a little sheet metal work won't hurt anything; after all, you need hardly any clearance in the rear.

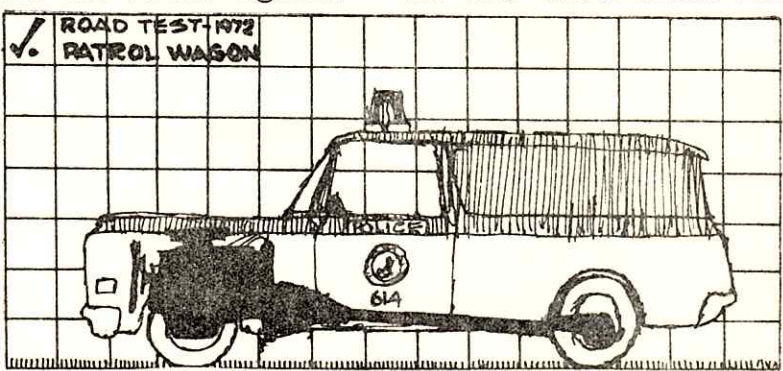
Now you ask, where do I get 21x7 casings whereon to recap an autocross compound and who can do it?

Next month Part IV: Lower the center of gravity.

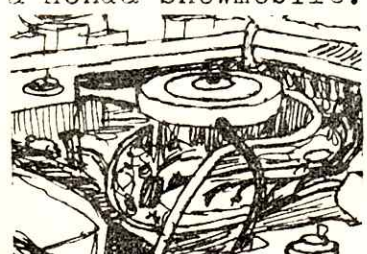


# 1972 PATROL WAGON

Now, you wouldn't consider Checkpoints a Major automotive publication, would you? Neither did General Motors. You see, Dave got a bright idea: Checkpoints Road Tests. You know, so he could get a free car to do with as he pleased and then write about it. To make a long story longer, GM didn't agree, so the Irish in McCall flared up and in no uncertain terms he told GM what he thought of them. (Wilto, you would've been proud.) Since Dave is not Ralph Nader, GM didn't let him get away with it. They turned the letter over to the FBI, who in turn charged Dave with sending obscene material through the mail, interstate transportation of a no-no and embarrassing a corporate executive. Naturally, Kathi asked questions when Efram Zimbalist, Jr. showed up with a warrant for R. David. "What do you want him for?" "Sending matter of an obscene nature through the United States Postal Service." "Is Dick hiding dirty words in the backgrounds of his cartoons again?" He was then escorted to the awaiting police vehicle, only to discover that it was a brand new wagon, just received that day. Not being one to pass up the chance of a lifetime, Dave jotted notes all the way to the lock-up. He found that it would seat 8, with moderate comfort, not counting the 2 patrolmen. He attempted to get another opinion on the ride from his companion, an old wino, but all he could get from him was something about having a "quarder fura boddle a bread". He also noticed that the asphalt pavers played havoc with directional stability, as did taking the curve around the monuments on Monument Avenue; he definitely recommends Konis on this type of vehicle, as well as seat belts for all rearward passengers. In all, Dave counted some 27 defects, ranging from exhaust fumes from the wino to an unbuttoned pocket on the arresting officers jacket. By the way, all that happened was Dave had his mailbox revoked and forced to take a years subscription to the Media General Financial Weekly. At any rate, he certainly deserves congratulations on some heads-up reporting; we look forward to his next road test on a Honda snowmobile.



ROAD TEST 1972 PATROL WAGON		CALCULATED DATA	
PRICE	SERVICE	Lb/whp	25.2
List price..... \$6729.00	Oil Change... 6000	Mph/1000rpm	50.3
Price as tested..... 30.00	Filter Change... 6000	L/whp	17.9
Price as tested includes postage due, cost of court, and 1 pair of blue jeans ripped on rivet in back.	Change lube... none	A/cia	3.9
	Warranty..... 12/12000	Fbi/Cia	7.8
		Pou/Mio	76.1
IMPORTER		ARREST RECORD	
Mackintosh Toy Empire, Inc. Oilville, Virginia 23409			
ENGINE		<p>1965: 5</p> <p>1967: 10</p> <p>1968: 35 (See note)</p> <p>1969: 10</p> <p>1971: 45</p> <p>Dashed line indicates one I couldn't erase</p>	
Type..... pica			
Bore x Stroke, in..... 90.0 x 74.9			
Displacement..... 454			
Compression ratio..... 10:1			
Bhp @rpm net..... 107@2300			
Equivalent mph..... 170			
Torque @rpm..... 196@1500			
Equivalent mph..... 190			
Fuel requirement..... 5			
cost of every tax dollar			
Arrests, %			
Winos..... 57			
Radical leftists..... 13			
Innocent bystanders..... 20			
Unaccounted for..... 7			
Miscellaneous bests..... 3			
	100		
ACCOMMODATION			
Seating capacity..... 2+8			
Seat width..... 63/144			
Head room..... 48 in.			



Dick Jones told us an interesting story and it is too irresistible to hold on to. We call it

Stop horsing around

Dick and another fledgling rallyist, Anne Williams, were out on a Sunday afternoon practicing their navigational skills by following a set of instructions from an old VMSC rally. They promptly got lost trying to find the odo check. Anyway, it seems that there were in this same land a group of Mustang Club members out on a rally of their own. Dick first realized this when he saw two pony-cars bearing rapidly down upon him from the other direction with their lights on. Being a friendly sort, Dick waved. You could see the little lights flash over their heads as they spotted the shield on the front of his car. "That's a VMSC member -- he's got to know where he's going! So, a couple of corners later Dick looked back and there they were, trying to crowd each other out of the way, in order to get the closest so as not to lose him. I suppose Dick and Anne should have stopped and straightened them out but they were too busy laughing, and besides they still hadn't found the odo check. A couple of miles later, they spotted two more Mustangs sitting beside the road with maps and clipboards spread out all over their hoods. The two cars behind our friends quickly dove in and joined the herd. The last thing Dick saw as he rounded the next turn was what looked to be dozens of Mustangers jumping in and out of cars, waving their maps, and shouting imprecations at the world.

NEW MEMBERS

Gordon Wayne Lawhorn  
Rt 5 Box 119,  
Mechanicsville VA  
746-0816      Audi 100 LS

Richard and Maria Hard  
2000 Riverside Drive #72  
Richmond VA  
231-0121      '70 Jaguar

Tom and Nancy VanAuken  
6839 Shawnee Road  
Richmond VA  
320-3700      '64 Lotus Elan

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Checkpoints is the monthly publication of Virginia Motor Sport Club, Inc. It is mailed free to members; subscriptions to non-members are \$1.50 yearly. President, John T. Chehaske, 7504 Woodley Road, Richmond VA. Editors, David and Kathi McCall. Send all contributions to 3427 Stuart Ave Richmond VA, 23221, or call 353-7184. Deadline for material is the first of each month.



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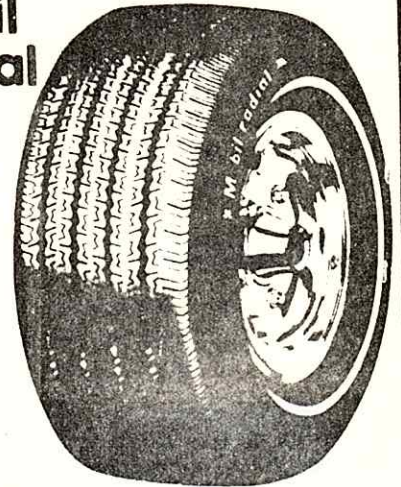
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F78-14	2.52	56.95
G78-14	2.69	60.95
H78-14	2.93	64.95
*J78-14	2.95	68.95
F78-15	2.58	57.95
G78-15	2.78	61.95
H78-15	3.01	65.95
*J78-15	3.01	69.95
*900-15	2.90	73.95
*L78-15	3.16	77.95

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HR70-14	3.31	84.95
GR70-15	3.07	81.95
HR70-15	3.38	85.95
JR70-15	3.52	89.95
LR70-15	3.64	97.95



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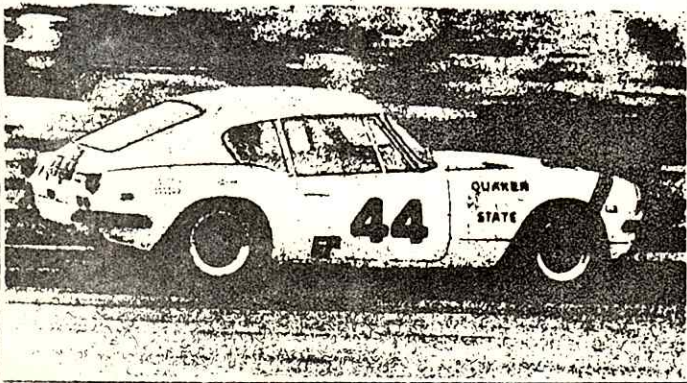
(Maybe it's the big six-cylinder engine. Or the rack and pinion steering. Or any of a number of things.)

Could be, a car that does this well for drivers on a track could do well for you on the street.

At any rate, it's easily worth a trip to our showrooms to find out



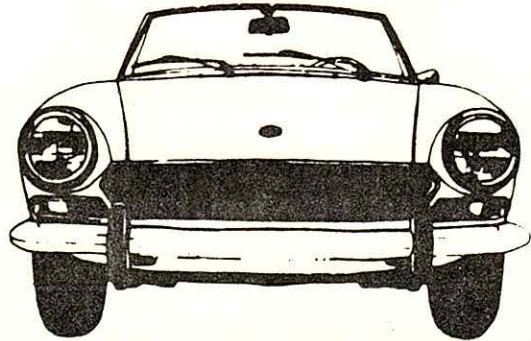
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# Fiat 124 Sport Spider

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