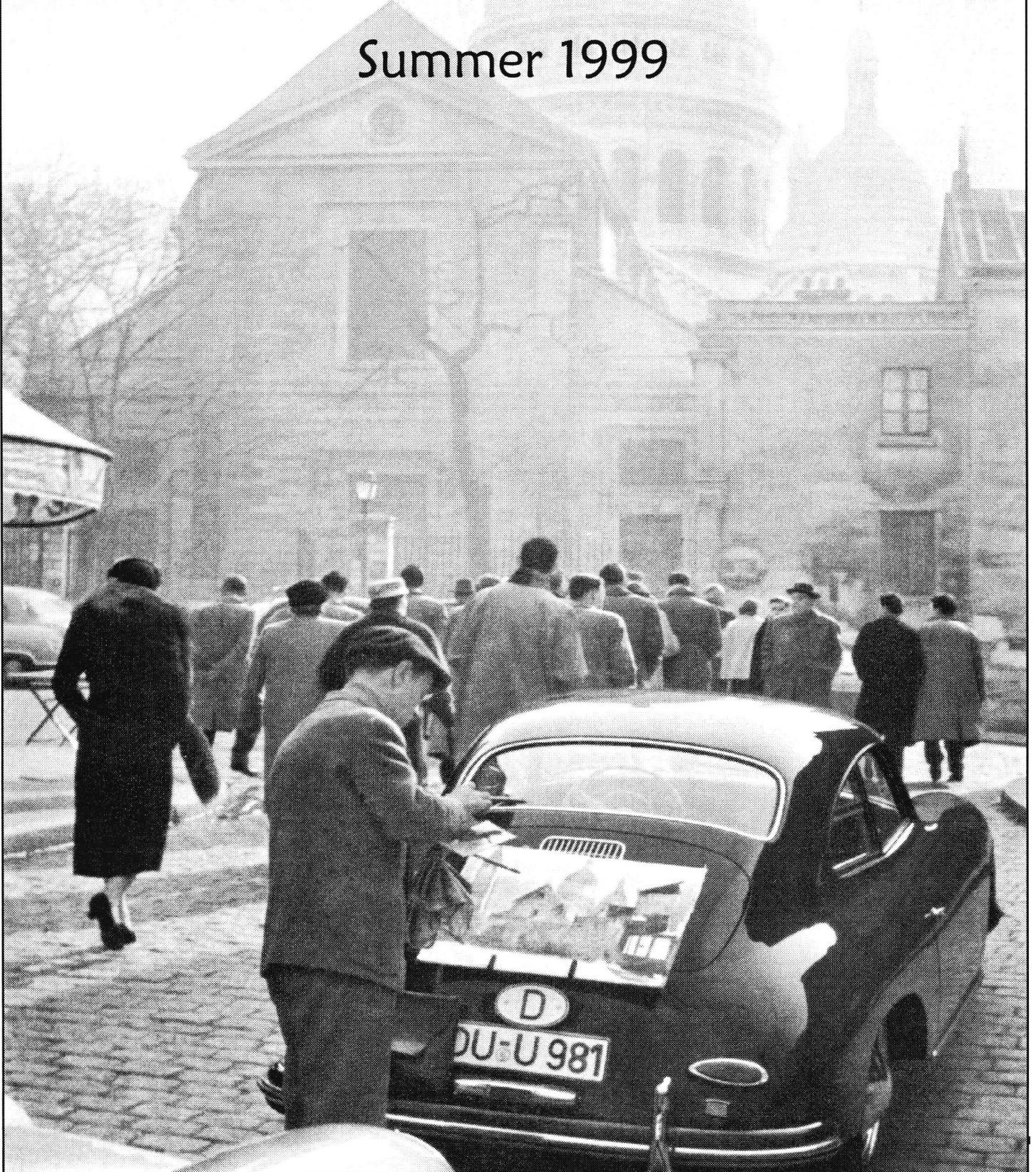


356 Motor Cities Gruppe

AUSPUFF ROAR

Summer 1999



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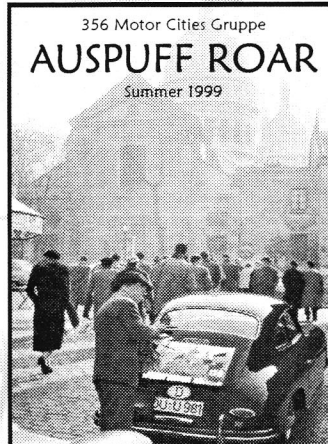


Photo From Liebe Zu Ihm. The caption reads:
“Necessity is the mother of invention. The enthusiastic painter returning to the Montremartre in Paris after a long absence, will quickly improvise an easel and go to work. And the Parisians smile sympathetically.”

The Auspuff Roar is the official publication of the Motor Cities Gruppe and is published quarterly. Membership dues for the Motor Cities Gruppe is \$10 per year due at the first of each year. Advertising rates per issue in the Auspuff Roar are as follows: Business card size—\$10, Quarter page—\$25, Half page—\$40, Full page—\$65. Please send membership dues to Barbara Skirmants 27244 Ryan Rd, Warren, MI 48092. Please send any materials to be published or advertising copy to: Sebastian Gaeta 4070 Brookview Court, Ann Arbor, MI 48108

This is a vertical advertisement for Stuart Tool Service Inc. A large, stylized wrench is the central graphic, with the company name 'STUART TOOL SERVICE INC.' written along its length. To the left of the wrench, there are logos for 'P-D Black & Decker', 'K-D TOOLS make tough jobs easy', 'VISE-GRIP', and 'S-K TOOLS'. To the right, there is a 'PROTO' logo and a 'Chicago Pneumatic AIR TOOLS' logo. Text on the wrench also includes 'WAREHOUSE DISTRIBUTORS OF HAND AND POWER TOOLS' and 'ESTABLISHED 1923'. At the bottom, it lists 'NEIL GOLDBERG MEMBER - SMR/PCA', the phone number '248-588-TOOL', and the address '1208 E. Maple Rd. Troy, Michigan 48083'.

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PRESIDENT'S LETTER

By Dick Beecher

Finally, it's Porsche driving time! Spring arrived early for Diane and me. We headed south on February 15th and didn't come home until April. What a great way to spend those months - in the sun, rather than the gray of Michigan. During our six weeks away, we had sunshine every day except one which occurred while traveling through Alabama on our way south. We were, however, ready to come home as we missed family and friends and I was suffering from Porsche withdrawal.

We would have liked to have the Cabriolet with us. The roads in the area of central Florida where we stayed were smooth and construction free with some curves and hills. Driving in Florida always raises the issue of the many Senior Citizen drivers moving slowly with their left turn signals on and generally doing dumb things. When we entered Michigan on the way home, we experienced our first major traffic tie up on US 23. Drivers that refuse to recognize merging and lane closing signs for miles caused

the back up. They try to merge at the last opportunity. When trying to merge on to 69 in Flint we were blocked by drivers that felt some need to keep us from the normal traffic flow. The GM truck plant traffic at shift change on 69 was a study in aggressive, frantic, lane changing, cutting off, brake-slamming, tailgating, high speed driving. Most of this driving was in trucks and SUV's. My comment was "welcome to Michigan". Give me the slow drivers with the left turn signals on - at least we can drive without endangering our lives. I guess I am now officially a Senior Citizen driver.

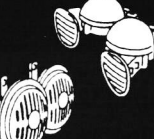
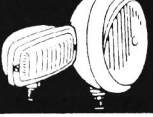
In the last issue of Auspuff, Sebastian made an apologetic confession regarding the purchase of a 911. I must also come clean. During the winter, an ad in Panorama led me to a Guards Red 911 SC that I couldn't resist. We only do this so we can save our 356's for special occasions. These 911s are daily drivers, right?

We look forward to some great summer events. Denny Denyers' Spring Mystery Tour, a nice drive with a great dinner stop at the end and Barb's Barbecue at Mid-Ohio on June 26th. The Meadow Brook Car Club committee is planning to have a special parking area and possibly a lunch with a tent in the area where we had our 356 Holiday event at the Meadow Brook Concours d'Elegance. The committee has already mailed each Gruppe member all of the info in May. It's worthwhile to purchase the tickets for the historic races and the concours from the mailing as it includes preferred parking for the events.

Please note the events as well as our regular Gruppe meetings on your calendars. WE hope for better attendance at our Gruppe meetings at the Brass Pointe.

Look forward to seeing all of you.

Dick Beecher

Zum Starten Ihre erste Kraft — die BOSCH-Batterie		BOSCH- Signale — tonangebend im Verkehr		Porsche-Fahrer fahren gut mit BOSCH Vom zündenden Funken der BOSCH-Zündkerze angefangen bis zur klaren Sicht, für die der BOSCH - Scheibenspüler immer sorgt, machen BOSCH-Erzeugnisse Ihre Fahrt sicherer und bequemer. Verlangen Sie deshalb immer BOSCH-Erzeugnisse.
	BOSCH- Scheinwerfer — wegweisend bei Nacht u. Nebel		BOSCH- Scheibenspüler — im Nu klare Sicht	
BOSCH-Zündkerzen — geballte Zündkraft für jeden Motor				 BOSCH ein Beitrag zum modernen Verkehr

Joint event with the Ohio Tub Fanatics and the Motor Cities Gruppe On Ferry Porsche's Birthday September 19th, 1999

Come and join a Registry sponsored "drive your car" day to celebrate Dr. Ferry Porsche Birthday. The "Tub Fanatics" group will arrive at the Toledo Amtrack Station around 12:00 Noon after a scenic cruise along Lake Erie's North Shore. Their tour will start in Richfield, Ohio at 9:00 A.M. Please call Thom Kearnes at 330-659-7244 if you would like to start the day with the "Fanatics". The Motor Cities Gruppe tour will start at 10:00 A.M. at the Home of Sebastian and Narmeen Gaeta in Ann Arbor. Please call Sebastian at 734-544-2230 for directions or a map that can be mailed or faxed. We will wind our way through back country roads on our way to Toledo.

There will be at least three completely rebuilt / restored vintage private railroad cars at the station. Other cars in various stages of rebuilding-restoring-repairing- repainting will be in their process of reconstruction for our review. If you have never had the privilege to be on one of these magnificent Private Railroad Cars, do not miss this opportunity. We will tour the cars and talk to the owners and the men who rebuild such wonderful transportation vehicles. These cars have roomy lounges, a large dinning area, a complete galley, and separate state rooms with their own showers. They are self contained with there own electricity, heat, air conditioning, water and sanitation systems. The power can come from the engine, plug into an offshore power source, or through their own generator. These elegant cars are a testament to the craftsmanship of post and to the present. After we have toured this facility we will gather for a late lunch at a near by restaurant. This is one event you should not miss.

A great scenic cruise along Lake Erie's North Shore or Michigan's back roads.

A tour of fine Private Railroad Cars.

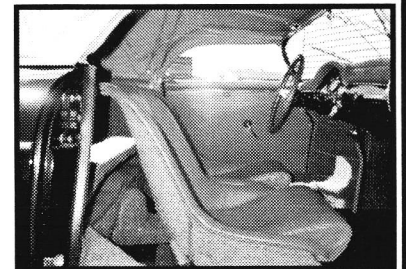
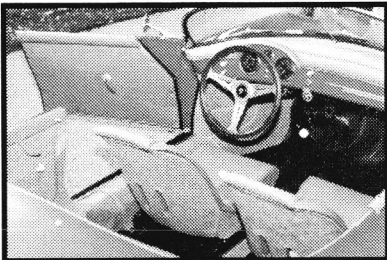
A delicious lunch, and all with the friendship of Tub Fanatics.

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MOTOR CITIES GRUPPE CALENDAR

JUNE

5th Stoddard Imported Cars all Porsche Swap Meet, with a Model and Literature meet the night Before. Please call Stoddard's at 800-342-1414 for info.

20th Dennis and Sue Denyer's Fathers Day Mystery Tour. See announcement on page 6.

24th-27th Mid Ohio Vintage Gran Prix and Barb's Barbecue. See announcement on page 7.

JULY

20th Members social meeting at the Brass Pointe, Ten Mile Rd and Orchard Lake Rd, 6:30 PM

24th- Garage Tour at Bill and Sher's See announcement on page 8.

30th-Aug 2nd Meadow Brook Concours d'Elegance and Historic races (at Waterford Hills). To participate in any event and to secure premium parking spaces they must receive the registration form (mailed to all Gruppe members in early May) by July 12th. For more info please call 248-350-3500

AUGUST

22nd Motor Cities Gruppe family Picnic at Ted and Lanita Dunham's home in Milford. Special mailing to follow.

SEPTEMBER

8th-12th SVRA Vintage Races at Watkins Glenn, NY. Call Dave Hinz for info. (H) 248-650-1975
(W) 248-852-0066

19th- Ferry Porsche's birthday! Celebrate this great day with a joint event with the newly formed Ohio Tub Fanatics. See announcement on page 4.

21st Members social meeting at the Brass Pointe, Ten Mile Rd and Orchard Lake Rd, 6:30 PM.

OCTOBER

TBD - Motor Cities Gruppe Fall Festival

NOVEMBER

16th Members social meeting at the Brass Pointe, Ten Mile Rd and Orchard Lake Rd, 6:30 PM.

DECEMBER

5th Motor Cities Gruppe Holiday Party at The Oakland County Sportsmans Club at the Waterford Hills Race track.

JANUARY

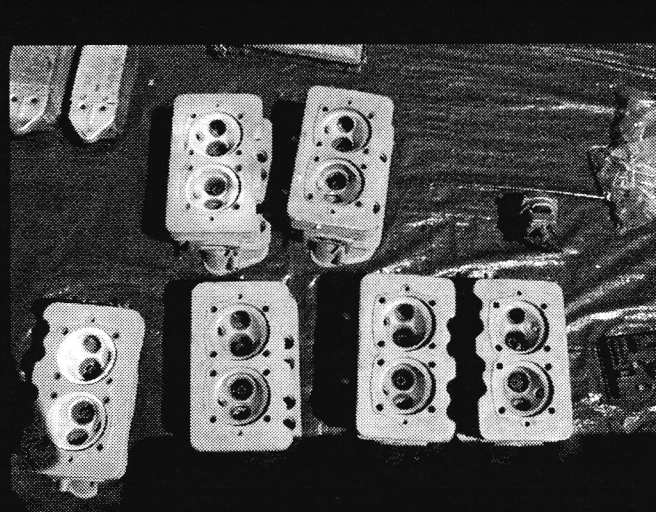
OPEN

FEBRUARY

OPEN



Sebastian pays way too much for a book at Doc Block's



Cylinder heads and oil coolers. Very Artsy

Scenes from this
year's Stoddard
Swap meet.
This one did not
disappoint!



Also very artsy

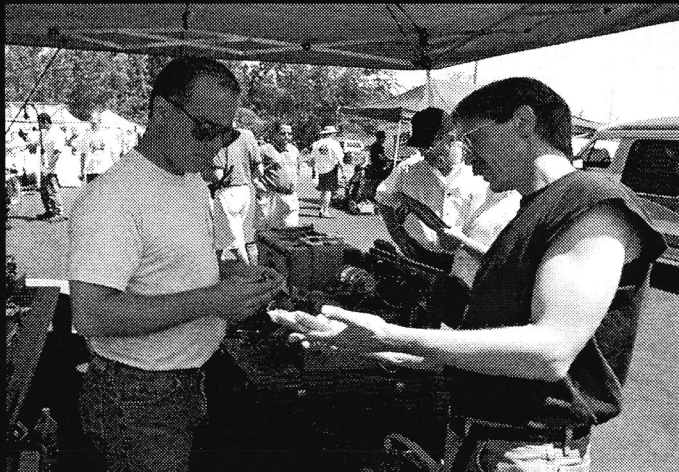


Will the VW Cylinders work on the Porsche Case?



Believe it or not, this was the good side!

All photos by Gottfried Hogg



Muscle Man Bill Rohrer discusses tools with Tony Euganeo



Brad Ripley of NLA fame makes the trip every year



Business was brisk at Doc & Cy's



Sebastian shows off his NOS interior mirror to the two Bills, Rohrer and Toburen



There's not much you cannot get in the way of used parts



Jack Chamberlain supervises at his booth with John Chatley

? **FATHER'S DAY FAHRT ins BLAUE** ? (that's Mystery Tour) Sunday June 20, 1999 ?

Time/Meeting Place- 12:00 noon The Orion Township Library
Joslyn Rd (4 mi. north of I-75)
Lake Orion, Michigan

Departure time -12:15 PM

Destination - Come on... it's a mystery!!!

Dinner -A delicious buffet with all the trimmings
Tossed Salad /condiments, 3 meats, Fresh vegetables
Non-alcoholic beverages w/refills, Dessert, Cash bar

Cost \$17.50 per person (inclusive)



This is the first of what we hope to be a series of interesting tours to out-of-the-way destinations and fine eateries. The tour will last approximately 2 hours on all paved roads and will end in a quaint little town with some unique antique and craft shops. After the dinner, the return trip will be 1 to 1 1/2 hours to the greater Detroit area.

Reservations By June 15th. Call Sue & Dennis Denyer 248-391-3268

Each participant will be given a set of route instructions which will be simple and easy to follow. There will be nothing to figure out and mileage will be clearly spelled out. In addition, you will be given an "emergency envelope" with our final destination. This way, no one will get lost or separated from the group. Please make your reservations early so that the restaurant can plan for our group.

Garage Tour 1999

By popular demand, the Garage Tour is back!

We apologize for not organizing this sooner, but the 356 schedule seemed full.

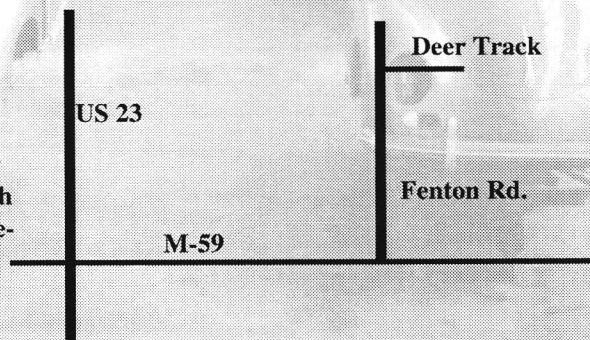
Saturday July 24th at Bill and Sher Toburen's home in Hartland, MI.

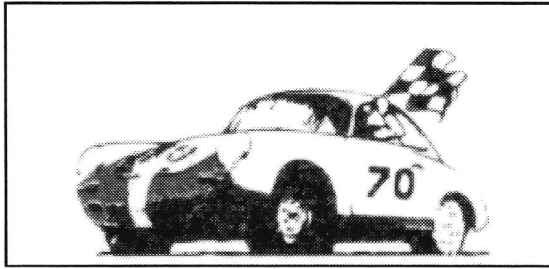
There will be homemade goodies, coffee and juice.

At noon there will be a back country road tour followed by a stop at a local pub for lunch.

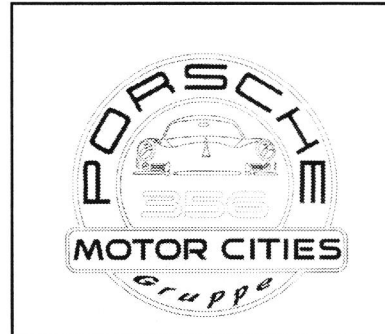
Should be fun, we hope to see you there. No RSVP required but call us at 248-887-3029 if you get lost on the way here.

US 23 to M-59 East.
Go 2 miles to Fenton road.
Take Fenton Rd North 2 1/2 miles to Deer Track.
We are at 4470 Deer Track, or the only house in the circle with all of the Porsche's in the driveway!





356 ENTERPRISES



**356 MOTOR CITIES GRUPPE
VIC & BARBARA SKIRMANTS
9TH Annual Chicken Brat Bash BBQ
Mid-Ohio's SVRA Vintage Races
June 25th-27th, 1999**

Make your plans NOW to attend. Join other 356 friends from all around the country and watch your favorite 356 drivers duke it out at the most beautiful road race track in the USA.

Saturday, June 26th is this year's BBQ to be hosted at the large hospitality tent located next to our truck/motor home in the 356 paddock area. The tent is furnished with tables and chairs will be available for our 356 friends to use for the weekend.

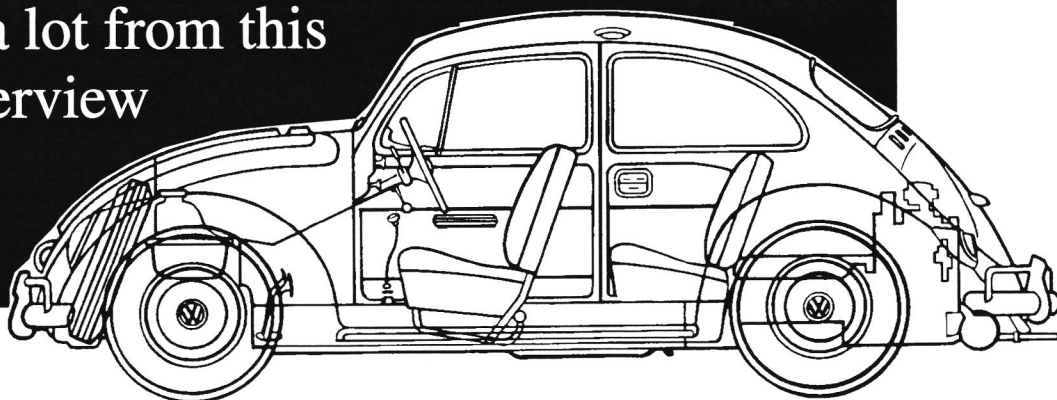
There is a charge for the BBQ of \$10.00 each, kids free. We provide plenty of BBQ chicken, brats / buns and condiments, and all table service. Please bring a dish to pass; appetizers, salads, potatoes, fruit, desserts, chips, and dip. You also need to bring your own beverages of choice, we do NOT provide BEER, because of logistics and liability. Whatever you bring will be appreciated. Dinner starts at 6:30 p.m.

The deadline for your reservation for my BBQ is Saturday, June 20th. PLEASE CALL, WRITE, FAX or E-MAIL me at skirmant@mich.com, for your reservations, so I can order the correct quantity of meat and buns. Payment in advance is always appreciated. I promise better weather than last year!

The L&K Motel, in Shelby, Ohio 419-347-2141 is reasonably priced with a pretty drive to the track. It has been a Motor Cities Gruppe tradition for many members to stay there in years past. If you need other motel numbers, call and I will fax you a list. Call NOW!!!!

Barbara

You'll learn a lot from this
exclusive interview
with a great
engineer



In 1939, the present Volkswagen began to assume its familiar contours. The torsional suspension had proved itself (along with trailing arms) in the Auto-Union racing cars and the air cooled engine had finished most of its shakedown tests to exceed the hopes of its designer.

THE CASE FOR THE REAR-ENGINED CAR

by Günther Molter

(This article was re-created
from the original one
published in the February
1953 issue of *AUTO*
Magazine. The original
article was supplied by
Dennis Denyer)

IT IS EVENING of an autumn day, a time to sit before the fire with good friends and good conversation. And tonight I sit by a fireplace where glowing wood chips crackle, while the red-gold gleam of the flame draws strange shadowy figures on the walls. There are three of us-Ferry Porsche, who creditably fills his famous father's place, Professor Prinzing, business director of the small Porsche firm in Stuttgart-Zuffenhausen, and I. Above the fireplace hangs the last portrait of the old professor, still so well remembered. On the table stands a flask of heavy, spicy Palatine wine which loosens the tongue and invites pleasant conversation. From time to time Ferry reaches for it and fills the glasses in which wine already sparkles. Somewhat removed from our group sits the widow of the late Dr. Porsche. She watches her son and listens to us intently. What singular and wonderful memories does our talk recall for her. Ferry, a young man at 42, is the best conversationalist one can find. He answers questions with a forthrightness which we find only in those who have a thorough knowledge of their material and who immediately grasp the essence

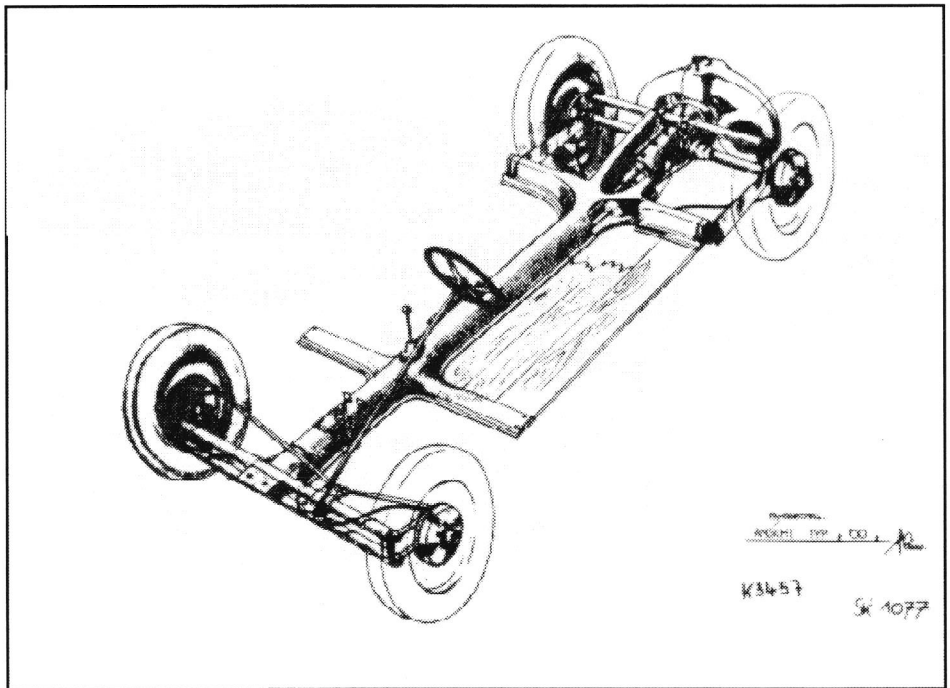
of a problem. Ferry reflects a moment before answering, and then speaks with that charm we find so delightful in the Austrians.

What an evening it is-only a few days before my departure for Mexico where the Mercedes-Benz sports car anticipates a hard fight. Our conversation covers the event. We speak of everything. We recall the time the old professor received a princely invitation from Stalin to become a "government engineer" in Russia. He was invited to see the country and its industries before deciding. Porsche went in 1932. He was treated with respect and veneration, traveled about in a chauffeur driven limousine, and inspected the

new factories rising beyond the Urals in an area where no one would expect to find giant industries. He saw machinery and presses of the most modern design and returned to Germany much impressed by what he had seen; but he politely refused Stalin's rare invitation: he didn't want to cut himself off so completely from the country fast grown to his heart.

Ferry Porsche tells how he went to America with his father and visited the old automotive pioneer, Henry Ford, recreating the moment when Ford asked him one summer's day in 1937: "What do you think the future car of Europe will look like, not the German people's car especially, but the European car of the next decade?" And Ferry, who was 27 years old at the time, answered immediately: "Such a car must cruise at 68-71 mph and obtain between 29 and 32 miles per gallon. It should be a five-seater with full utilization of track, wheelbase, streamlining and independent suspension." At that time the German "people's car" was midway in its development. The old professor had already arrived at the salient features of this design in the autumn of 1931. There was only one

way to make the available passenger space comfortable for four people and that was to put the engine in the rear. This engine had to have the smallest practical piston displacement possible and only the radial and horizontally-opposed types were considered. The drive shaft was eliminated as the gears and differential were integral mounted with the engine. Rear-engine installation was not a completely new concept as the first car of old Daimler and Benz had a rear engine. The design was used here for no special technical reasons, but in the earlier horse drawn carriages space was available the rear for the installation of an engine. So originally rear-engined vehicles were built for practical reasons only and, when engineers later converted to the front-engine design, they celebrated it as a great step forward in automotive construction. Meanwhile ten years passed. The old professor proved with the construction of the Volkswagen, the Auto-Union racing car and his last creation, the Porsche sports car, how brilliant this design was, although it still represents a minority in automotive construction today. With the building of the Cisitalia racing car, which was also developed in accordance with the rear-engine principle, young Ferry further developed the work of his father and proved that he could creditably assume his father's place. Old Professor Porsche had an exceptional natural ability for all technical subjects. He did not receive any specialized training in this field since his elementary and trade school education together with several guest lecture attendance's at a technical high school in Vienna, in no way constituted such training. His general knowledge was immense. His construction ideas embraced not only automotive design, but other fields such as airplane engines and turbines. Porsche's immediate perception of the practical was amazing: he could stand at the design board of an engineer, look at his sketches and immediately say: "This isn't practical. Change it . . . like this." And with a few lines he would show what it meant. But here I don't intend to write about the engineer Ferdinand Porsche, because his accomplishments speak for him. Instead I will take this opportunity to ask Ferry Porsche, the



One of the earliest preliminary sketches for the Volkswagen done sometime in 1934. Note the central tube chassis so popular with German designers for many years. This principle lends itself very well to rear-engined design. This was the "Type 60" That never reached production, although many of its features were used in the final Volkswagen and Porsche production models. Note Ferry Porsche's signature lower right

gifted son, a few questions on the problems of rear-engined design and, to save space, quote him directly. It wasn't difficult to divert our conversation to this subject which had sent me to the charming house located on the heights surrounding the South German city of Stuttgart, which houses not only the most famous factory of Germany's automotive industry but also its companion parts factory.

QUESTION: Why do you favor, as your father did, the rear engine?

ANSWER: That's easy to answer. I favor it because I learned through my father. In other words, I received much of my technical training from him, his views became mine, I expanded upon them and concluded that for cars up to a certain class size the rear engine is most suitable."

QUESTION: What problems are peculiar to rear-engine design?

ANSWER: "This question is not very well phrased since it doesn't matter where the engine is, in the last analysis;

so position isn't the most important problem. You see, an automobile is a chamber for people. In order to propel this chamber I need an engine and other power parts so assembled as to give the proper weight distribution. This last is the real problem. I would just as soon build a car with an engine beneath the floor, if there were an engine small enough to so install in a sedan, and still retain passenger room."

QUESTION: How does the rear engine affect weight distribution?

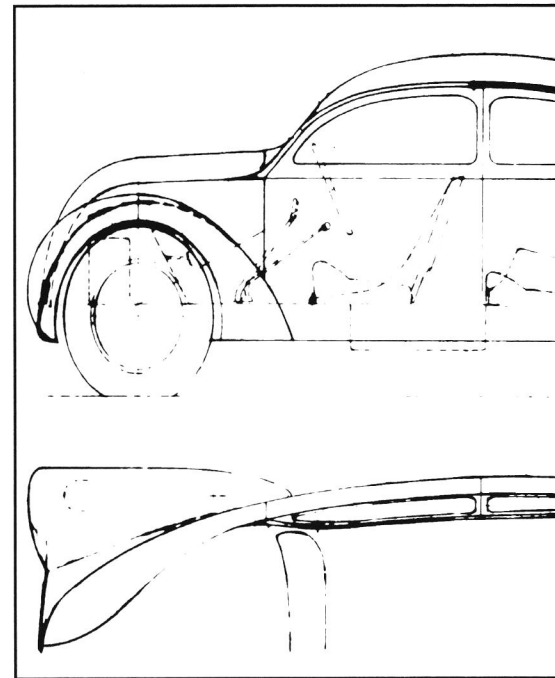
ANSWER: "Up to the present day the engine has been considered one of the principal weight factors of the chassis and is itself a composite mass. When I put this weight upon the front axle of a four-passenger car, then the load on the rear axle actually differs when the car is empty and when it is full. Since the rear wheels are propelled forward, the load for the drive components remains the same. In line with this reasoning, there are people who put sand bags in their trunk when they are driving alone in order to equalize the weight distribution. In the rear-engined car, the complete

weight rests on the rear wheels and, therefore, on the power wheels. Here the load remains unchanged, thereby making this arrangement the best."

QUESTION: How does it affect steering quality?

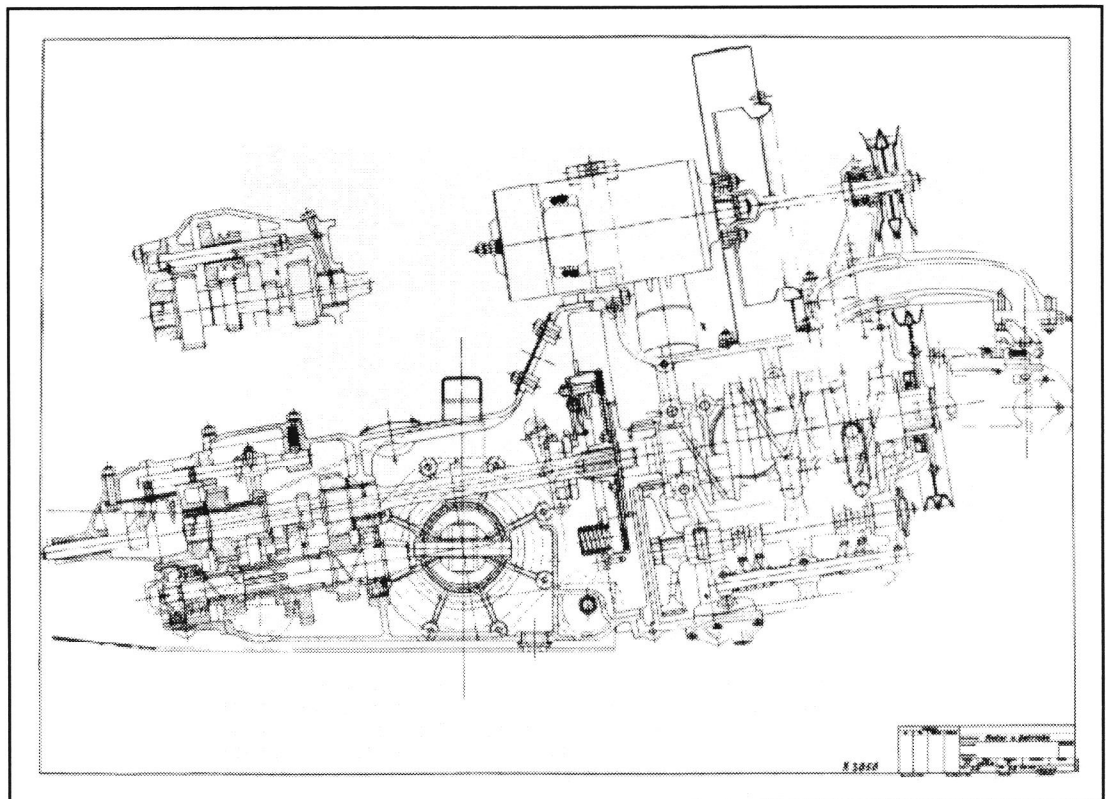
ANSWER: "As long as there is the proper weight distribution for the drive components rear engine has no effect upon the steering. Only when this distribution is wrong is the steering quality adversely affected. The center of gravity always lies in the middle of the car. It shifts only about -03 ft. in the operation of the vehicle. The actual problem does not lie in the question. To make the best use of the suspension and reduce sway, the masses must be concentrated in the middle. This is important in construction. The weight distribution or distribution of the individual masses must be equal. If I could slice an automobile into many small vertical parts, then the weight of all parts should be as nearly alike as possible. To obtain the best distribution of mass in small car construction, we must make concessions in comfort and, finally, in leg room. It is irrelevant where the engine is as long as it does not occupy an excessive portion of

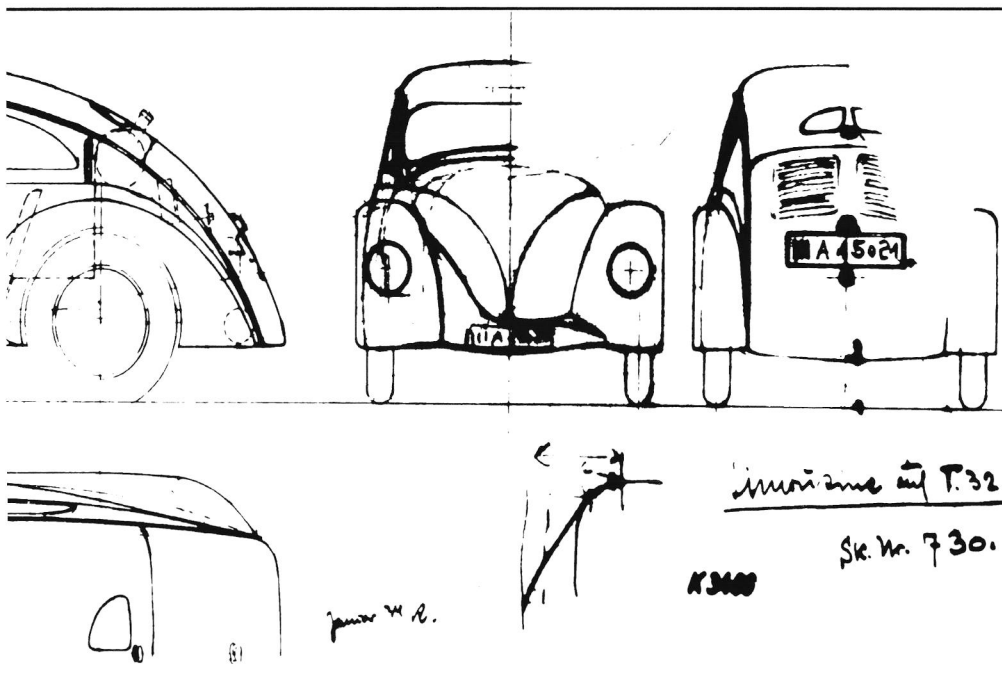
weight from the overall construction viewpoint. Many things are important here, *i.e.*, the suspension, its springiness, etc. The omission of the drive shaft makes a comparatively low positioning of the center of gravity possible. "We did some experimenting in the engineering of the Cisitalia racing car which is now in Argentina. The English motor sports. magazine, *The Motor*, wrote that in the Mercedes-Benz racing car the masses were deliberately placed at the end of the car: the engine in front, the driver with the gears and rear axle placed as far back as possible in order to bring a stabilizing effect to the whole car. Let us examine the tendency of a car to deviate from its chosen path. Naturally this tendency is greater in a racing car than in a regular sedan. Utilization, of space is just as good in the family sedan because this tendency still prevails, but such utilization can no longer be achieved so easily. Putting the masses at the rear has the following advantage and disadvantage: when, on a fast straight, a sharp turn of the wheel to avoid some object creates a tendency to slide, then the masses at the end are properly arranged. In curves such a car tends to drift backwards; then here, too, the rear



arrangement is the right one. A car with rear mass concentration will not display a tendency to skid longer than the car with the masses concentrated at another point. Naturally, it is hard to regain control of the car with the rear arrangement after it has skidded. On the other hand, the car with the middle mass concentration tends to skid more easily, although control can be regained faster. The ac-

From the "type 32" engine components came many modern engine features: the turbine cooling fan, the integral engine-transmission construction, and the reduction drive to the differential. This unit was designed in 1933, after the chassis had been more or less finalized, and was created to fit the one chassis type only. A car was not built around an engine as is so often the case today.





The "Type 32" was on the drawing boards in 1932, but the design was not practical for production at that time. This is one of the many larger engined designs that Prof. Porsche was working on from time to time. However, the engine was too heavy to provide all of the qualities of balance so sought after for by this designer. Again, the central tube chassis was to be used.

tual consideration then is: to which do drivers react better? Here it is best to choose the golden middle of the road-do not concentrate only in the middle, end, or front of the car. As men differ so does their ability to react to a situation; so does their awareness of the stability of their car at high and low speeds. It is similar to flying where the pilot must correct any tendency of his machine to

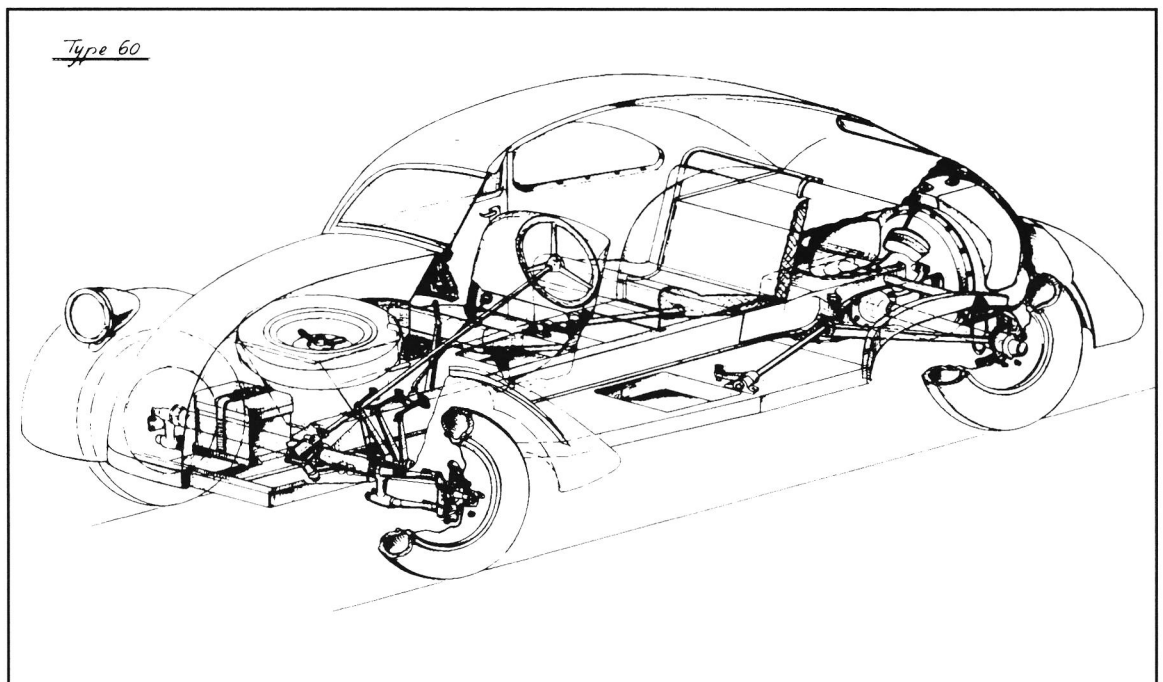
deviate before it gets out of hand. Naturally, we are constantly progressing in this regard, and the highest stability possible is our goal.

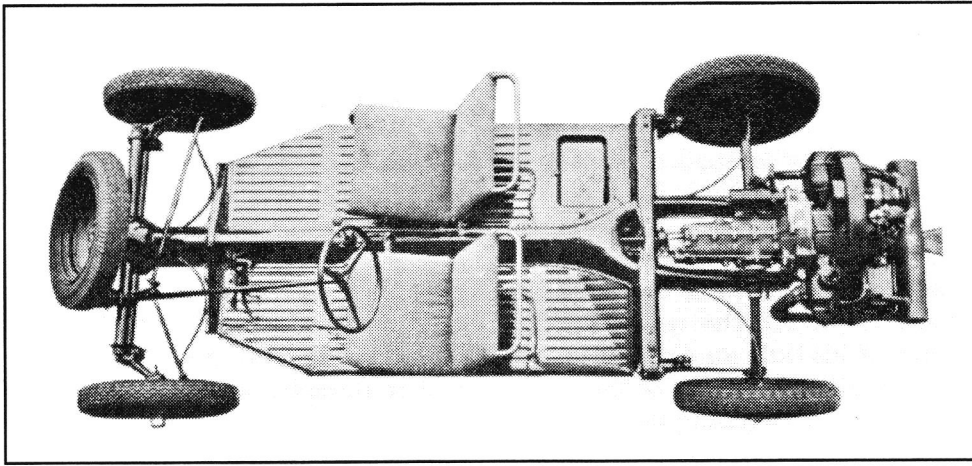
QUESTION: What are the problems of rear engine cooling?

ANSWER, "The problem surrounding rear engine cooling stems from the fact

that it is not influenced by operational air flow. In fact, increased heat can be better diverted in the case of the rear engine. Fans are used to circulate the air necessary for cooling. I believe the problem is greater with the front engine since here you cannot build a cooling system large enough to achieve complete cooling at all speeds. In front-engined cars cooling is more difficult at low

Right: Dated September 17th, 1934, this drawing of the "Type 60" was close to Porsche's final design of a *Volkswagen*. Note the backbone chassis design and the use of torsion bar suspension, front and rear.





While some details of this "Type 60" display chassis foreshadowed production design almost exactly, other features were to undergo gross improvement before freezing on the "Type 38". Outfitted with battery and fuel tank, a similar bare chassis was driven about in the neighborhood of Porsche's garage during this development period, affording clinical testing in the fine points in the torsion bars and trailing arms of the suspension. Use of the same system on Porsche's famous Auto-Union racing cars already had proven this type of suspension as desirable for the People's car.

speeds, a condition we experience often enough in mountain driving where high speeds are impossible. This problem doesn't exist for the rear-engined car since the fan operates independently of speed."

QUESTION: What type of engine is best suited to rear-engine design?

ANSWER: "The short engine-here the horizontally-opposed type works out best. Whether the radial-type will come under serious consideration is not known at the moment."

QUESTION: Can a large engine be used for the rear-engine design such as the Czechoslovakian V-8 Tatra-type?

Answer: In my opinion, with the building materials available today, practicality ends with the two-liter (122 cu. in.) engine for sedans. However, busses can go to all sizes. When it is possible to build an engine that is larger but whose weight is not greater than that of the two-liter engine, then the limits may be extended. Here again, the engine choice is a weight problem."

QUESTION: What are suspension problems peculiar to rear engined cars, seating problems, luggage space, etc.?

ANSWER: "For the rear engine, the swinging axle is favored for the rear suspension as being particularly suitable for this present the same problem. Since a power assembly which can be concentrated in the rear is necessary for such

an engine, it is possible to employ a rubber suspension throughout. The chassis construction requires no additional comment since it is the same as with the front engine. Passenger and seating room present no special problems. For luggage there is room in the front of the car and, according to the body design, behind the rear seats. In the beginning there was only one question to solve which today no longer remains, i.e., how could we shift the operation of the gears and engine from the front of the car to the rear. I am convinced that the rear-engine problem has been solved, and that no further problems exist."

QUESTION: How did the form of the car originate? Was it directed by beauty or expediency?

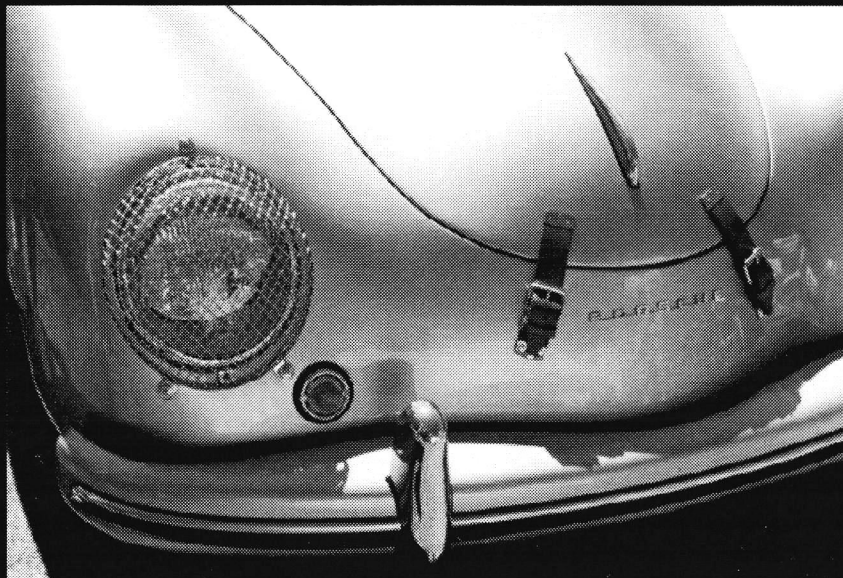
ANSWER: "Physical and aerodynamic laws directed the body form which offers in amazingly small cross-section and frontal resistance. We arrived at today's Porsche sports car from experience with the streamlined record car of Auto-Union. We were not influenced by fashion. We developed our body form purely from the technical efficiency viewpoint. At the beginning of rear-engine construction, the individual power components were still so large that a car of this design automatically offered a more pleasing appearance than the front-engined cars. Today this difficulty has disappeared; for instance, the Mercedes 300 SL, which is a front-engined car, still remains streamlined.

As far as body form is concerned, rear engine design influences the front portion of the car more than the rear. Our body form, surprising because it is different, is dictated only by aerodynamic laws. Look at today's airplanes. Their form originates from just such concepts and everyone finds them beautiful. I believe that what is efficient can also be beautiful. In closing I can only stress once more that the rear engine has brought a solution to problems which still plague many manufacturers. I believe the car of the future will be rear-engined, because I also believe that development on the gas turbine will continue and larger masses of air and higher temperatures generated by such an engine can only be diverted by this arrangement. Then, too, the gas turbine power assembly is better set apart from the passengers at the rear. This alone insures greater popularity for rear-engined cars in the future."

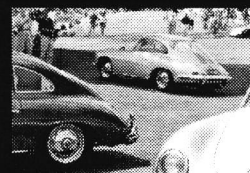
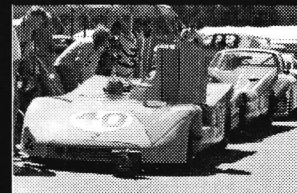
That is Ferry Porsche's last comment. Meanwhile, midnight has long since passed on a clear, cold autumn night. It is time to leave, and as I drive my car slowly down the hill towards Stuttgart, I think once more of the man Ferdinand Porsche, the brilliant engineer who has remained wonderfully natural despite his fame. Again I have ample proof that genius, in the last analysis, lies in naturalness and simplicity.

TNN NETWORK "MY CLASSIC CAR" MEADOW BROOK 1998 VIDEO

Gottfried Hogg Photos

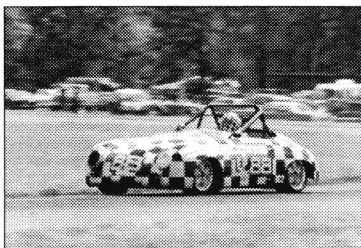
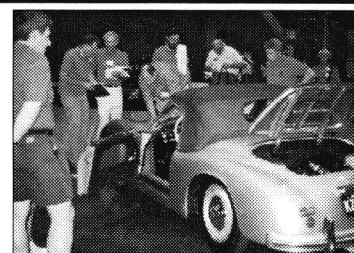


You can now purchase the video covering the 1998 Meadow Brook weekend, including some of our Holiday at Waterford Hills. \$19.95 + \$3.25 shipping. Tapes can be ordered through TNN's website at www.country.com



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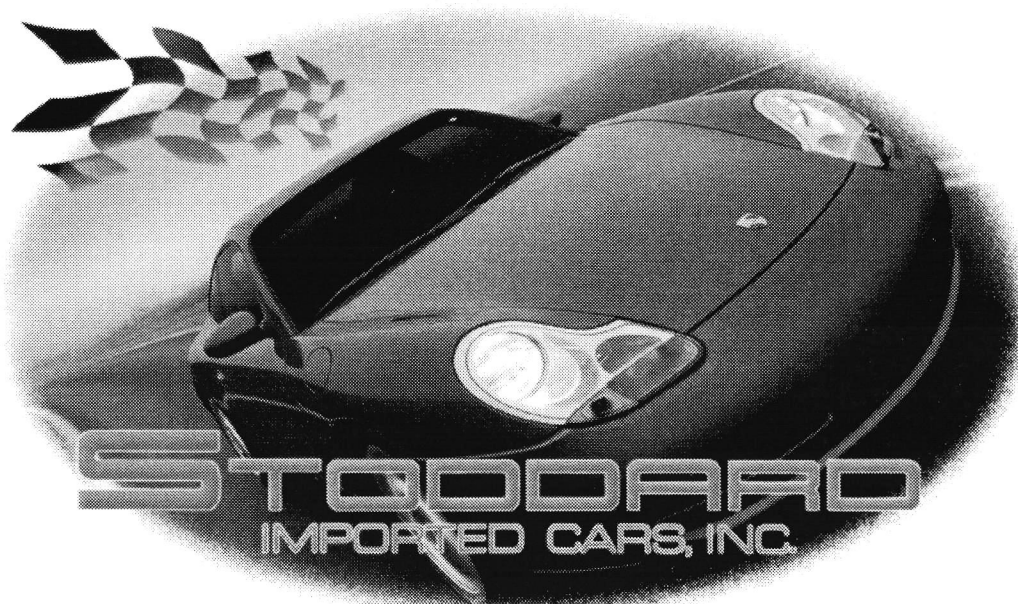
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FROM THE PORSCHE MUSEUM



Porsche 356 Coupé

"Ferdinand" 1950



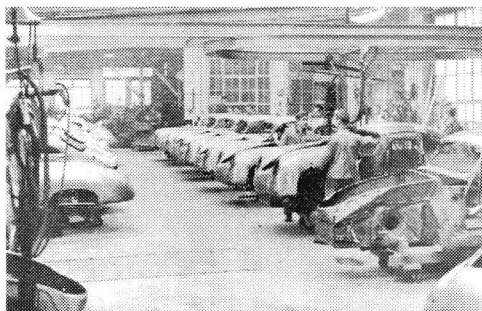
75th birthday at Solitude castle near Stuttgart:

"Ferdinand" was the private car of Ferdinand Porsche for a short time - the only automobile with the Porsche name the great designer ever owned.

Bottom left:

Porsche production 1952.

ROLLING TEST BED



Technical Data

Engine:

four-cylinder, two-valve, normally-aspirated engine (boxer), air-cooled, central camshaft with pushrod valve operation, 7:1 compression, output 40 HP at 4200 RPM, displacement 1086 cc, mechanical fuel pump, two downdraft carburetors.

Driveline:

four-speed gearbox, single-plate, dry clutch.

Chassis:

unitary, a/l-steel body, independent suspension, torsion-bar springs, drum brakes, 5.00 x 16 tires.

Measurements and weight:

wheelbase 2100 mm, length 3850 mm, weight 745 kg, top speed 140 km/h.

Chassis no of Museum car: 5056.

With the return of the Porsche Design Office from Gmund/Carinthia to Zuffenhausen in 1951 the history of Porsche as an independent automobile factory began. The Type 356 sports car was the first car to carry the "Porsche" name. These were the days when design office and management were found in a wooden barracks, body design in a *gasthaus* and production in Reutter's bodywork factory. Coupes and Cabriolets were now made of sheet steel rather than light alloy. This was also the era when test cars had names. There was a "Windhund" (greyhound), an "Adrian" and a "Ferdinand." Ferdinand, one of the first 356 Porsches built in Stuttgart, received that name from its first assignment. It was the present to Professor Ferdinand Porsche on his 75th birthday, 3 September 1950. However, Ferdinand Porsche was destined to enjoy this car for a scant three months. He died in January 1951. His 356 went to the test

department where it faced new tasks. In the eight years which followed Ferdinand covered nearly 400,000 kilometers as a rolling test bed. This car was one of the first to be fitted with a stabilizer and it ran on radial tires for the first time in 1955. Even rack and pinion steering, like that later used for the 911, was part of its experimental program. Every item which Porsche technicians could think up as new or further developments for their 356 was tested in Ferdinand. Even the first Carrera engine to be mounted in a Type 356 vehicle was tried out in this car. Ferdinand changed his colors six times. He was painted black in 1950, then turned gray and even appeared in two-tone colors. Following zinc primer treatment in 1956, he was painted signal red. Today this 356 Coupe named Ferdinand has been returned to its original condition, as one of the very first production Porsches, to take a place in the museum.

Peter Schneider

The Pirelli tires on my 944 used to go whop, whop, whop over the expansion joints. They made the car ride like a two horse wagon. I put Dunlops on. Same thing. Hard ride. I put Goodrich Comp TAs on. Still a hard ride. I sold the car and began to drive the 246 GT Dino more frequently. It had Michelin XWXs fitted and it drove beautifully, had very predictably handling and adhesion. Same with the 308 GT4. It was a firm ride but you didn't feel like you had a penetrating Shiatsu massage after a long ride. I bought a 911 which came with the latest Dunlops. It still went whop, whop, whop but didn't nibble so badly on crowned roads. So I put Bridgestone RE 71s on some BBS wheels. It changed the way the car felt. It was terrific. The RE 71s were designed to work with the suspension of the 911. When word got out, their aftermarket sales soared.

It's part of the "search" to improve the way our cars ride and handle. The current PCA concours crowd may not like it, but it's the "murkier way. Go fast. Stop fast. Turn in sharply. Communicate what's happening.

I remember a trip down to Roebing Road race track in Savannah in the early '80s. Saab was introducing their new 900 Series and Pirelli was piggy backing the long-term press lead for this gathering of auto publication scribes to let us compare their new VR rated tires and a low rolling resistance line which were intended to get better mileage and tire life during the gas crunch.

In order to keep the hot shoes from becoming too zealous in their testing, the PR types decided to have us run the track counter-clockwise instead of the normal way the circuit ran. They knew the decreasing radius, slightly off camber turn one could be a problem. There were deep ruts at the turn-in points, the apex and runout areas where the racers had tried to use every inch of the track to gain an advantage. Some of these ruts had been filled with soft sand.

They were rightly concerned that unskilled drivers coming down the long start/finish straight could enter the turn at speeds that were beyond their skills and the better drivers would take advantage of the rubber that had been laid down from the club racers and give the tyros a false sense of security as they watched them rotate and slide front wheel drive Saabs through the comers. They figured if they gave us a friendly lecture and changed the traditional line around the circuit the drivers would slow down.

Saab even brought in their world famous Swede rally racing champion

one on.

There were about 16 of us trashing about a dozen Saab cars. Some of the journalists were definitely better drivers than others. But on this occasion, even the rally meister Erik Carlsson was caught out by the lack of grip found in the low-rolling resistance tires being introduced by Pirelli.

He rolled.

And so did I.

We both had gotten out of a VR rated Pirelli equipped car and into one with the low-rolling resistance tire and on

Pot holes and tires that go whop, whop, whop

Can make a big difference in your enjoyment
By
Richard Hinson

Erik Carlsson who was to teach us the line through the corners and treat us to an eye-popping, stomach flipping ride that only an over-steer loving rally driver could provide. Instead his extraordinary skills served to egg every-

the last turn before the straight we went into the corner carrying the same speed as before and the adhesion went away just after the apex. We buried the right front wheel in the sand and rolled, testing the seat belts and the crush strength

of the Reindeer-proof "A" pillars.

Unfortunately they didn't have the cars identified as to which cars had the sticky tires and which had the much harder compound in order to give the owner an extra 15,000 miles over the life of his tires. After the embarrassing moment I discovered that only a couple of cars were equipped with the LRRT. And to make matters worse, Pirelli was changing the tires with some frequency in order to perform wear tests, check pyrometer readings, tire pressures and the like. If you didn't ask you didn't know which tires you were driving on.

Over the two weeks of press previews they had a total of four cars roll after the grip suddenly went away and the driver found himself sliding across the racetrack. Another handful understeered through the thicket and came back to the staging area with long grass sprouting out of the rims. The rollers were severely embarrassed and Saab and Pirelli were concerned about getting sued or worse: having a bad review of their new cars and tires.

What I did learn during that trip and many subsequent conversations with the engineers at Goodyear, Goodrich, Michelin, Dunlop, Avon, Bridgestone, Yokohama, and Pirelli is that the handling of various cars is very complex and goes far beyond suspension geometry design or how sticky the tires are.

Candidly, there is very little difference between the cost of the ingredients of various tires. But a great deal when it comes to the blending of chemical ingredients, the overall structure and tread pattern and how that matches the suspension design and set up. Nowadays there is a lot of cooperative design and testing between the suspension engineers and tire manufacturers. But that's a relatively new phenomenon.

Today, you can put an expensive sticky tire on your 356 and change the driving characteristics of the car. The rationale often used is that the intention is to

keep the rear end planted so you don't hie off the outside of the road when going around corners. After all, *every-one* knows that Porsche's are tail happy.

When Goodrich came out with the Comp TA's it was a wide, square tire with an aggressive tread pattern. The purpose was to put a lot of footprint on the road. Footprint in the

minds of the consumer equated to stick.

But if you put those wide, stiff sidewall tires on, had lowered your car and were driving very aggressively on track days, you changed the performance characteristics of the car. The suspension was designed for narrower more compliant tires that slid. With the latest wide sticky tires you stood a very real chance of snagging a tire on the edge of the wheel-lip and gouging out



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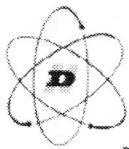
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large chunks of tread or bending the wheel well and cracking the paint or both. That's why Dunham and Goldberg were so busy with their Louisville sluggers rolling the wheel lips of 944s and 911s back then. In fact they just did a 911 a few weeks ago.

The tire companies were seeing features in the enthusiast publications about which tires were the "best". Now there was a potential impact on the sale of their products. The tire companies needed to find a way to help educate the enthusiast. The round-the-bend aficionado was eager to buy the latest tires, but all too often would end up dissatisfied because they messed up the way their car rode and handled.

The result usually is that by buying the latest technology we put significant stress on old suspension geometry if we are being aggressive in our driving style. We get aggressive because we can push the limits of adhesion more. Such changes can effect the way the steering tracks and communi-

cates--wide tires have a tendency to nibble-and it wears out stock suspension bits and pieces much quicker. Competitive vintage racers, I've noticed, end up making many changes using new technology and bushing materials and monitoring the stresses those changes create much more carefully.

So when it came time to put tires on the 356, I looked at the fittment that most of the local cognoscenti were using and while it looked macho and contemporary-short sidewall and wide-it didn't fill the wheel well and frankly gave the car a harsh ride especially on Michigan metropolitan roads.

The normal fittment for cars using 4.5" x 15" rims that landed stateside was a 5.60 x 15 or a 5.90 metric or translated to the current idiom 155 and 165 series tires. There are a few tire companies that are still making the 165 series size-Dunlop and Michelin. (Michelin has an exclusive arrangement with Coker Tire for distribution of their vintage and vintage racing tires. And as you'd expect because the quantities are very limited the prices reflect the limited production runs. E.g. A 185/70/15 XWX tire costs upwards of \$214/tire.)

The fittment guides used by our area's well known tire retailers like Discount Tire, Tire Rack, and Belle Tire show that they are trying to put us on tires that have overall diameter of 25.0 to 25.5 inches and overall width section between 6.4 to 8.0 inches. For the stock 4.5" rim they are recommending that the best fittment would be a 165 SR 15 which translates to a 25.4" diameter and 6.4 section width.

The next size up for the "sporting" enthusiast of the day is the 185/70/15 which is 25.4" and 7.6 section width. This size also fits very well on the 5.5" rim.

Again there are very few choices in this size today-Goodrich and Yokohama. The Goodrich Comp TA R1 is a Z rated racing tire and retails for \$115. Yokohama makes the A321 series which is a V rated tire and provides

splendid synergy between performance and comfort. These were developed for performance cars such as Mercedes, Jaguar and BMW. It features an advanced tread rubber compound and offers excellent wet and dry traction while providing a smooth, quiet ride. Being "V" rated means it is more than adequate to serve the performance capabilities of sports sedans and early Porsches.

The A321 Yokohama's normally retail for about \$105 but **John Schwartzenberger**, manager of **Discount Tire** in Novi (248) 347-1501 or FAX (248) 347 1504) has a limited quantity of them available to the 356 aficionado in the Detroit area for a bit less than \$80. And Schwartzenberger has educated his team about the anality and paranoia of the 356 owner so they don't grind away at the rims of your rare date-stamped wheels when they install them. They take time to do the job right, including putting wheel weights on the inside surfaces rather than the outside if possible.

The demand for this tire is very strong on the west coast where the bulk of the 356s are registered.

Conversations with west coast 356 *Registry* gurus not only reinforced the recommended Yokohama A321s but indicated that the in-the-know owner buys two sets when he goes in because they are aware that they have a short production run for this size and they sell out quickly. Since most have more than one car or do lots of track or touring excursions, they want a spare set. As they explained, "We want to be ready when one of our friends calls and says its time to make the trek up Highway 101 to Monterey for the soft shell crabs or visit friends and share the rack of lamb and Chardonnay in Sedona." They really know how to rub it in.

The 195/65 or 60/15 size, which is what I've seen on many cars in our area, is available in about 75 different lines with various performance characteristics. But to my eye they don't look quite "right" unless they're on a tweaked, lowered PorschRod. Prices for the 195/65 or 60/15 series ranges

Speed

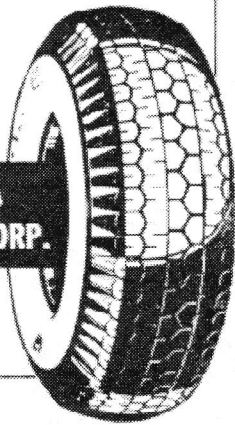
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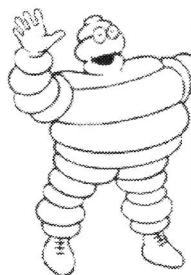
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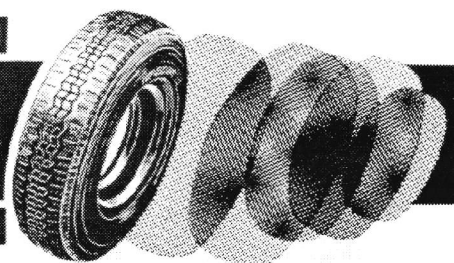


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from \$40 up to \$150 depending on their construction and how sticky you want them-HR, V or Z rated. On the positive side, there are lots of choices. The smaller diameter also can impact on the accuracy of your odometer. And sometimes they rub on wheel wells.

One of the other difficulties has been how to stuff the 185/70/15 or 195 series tires in that small well in front of the normal sized battery. It's a job for an experienced shoe salesman. Obviously, it's much easier if you start with a 4.5" rim. I've seen 165 series mounted on the 4.5" rim fit in easily, especially if you are using one of the new Optima sealed batteries. Some are using 135 /SR/ 15 Michelins as spares, they fit very easily in the allocated space but they're hard to find.

The latest trick set-up is to put the tire from a space saver on a 4.5" rim and that not only serves the purpose but gives lots of room, especially if you're using one of the Optima batteries. You can find these "sponsor wheels" at a good reclamation "junk" yard. Just ask them for a new, never-on-the-ground space saver. Don't tell them what you're intending to do with it. To some it's impossible to remount them. If they think it's for a Porsche it also might get more expensive. Then take the two items, 4.5" rim and space saver, to Schwartenberger for the magic switch. Junk yard purchase, dismounted and mounted, out-the-door for about \$50.

I've got a set of 185/70/15 Uniroyal tires that were made in 1988. The tread

is very good, there are no cracks on the sidewalls. But they were made in 1988 and spent the last 11 years sitting in a quonset hut in Tallahassee, Florida so we can expect them to have lost some of the elasticity and "taken a set". I sus-

pect the sidewalls won't be very compliant, but they're available to someone for show purposes if they want to make a donation to Motor Cities Gruppe which allows the club to enhance one of our festivities.

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STEPPED SHOULDER

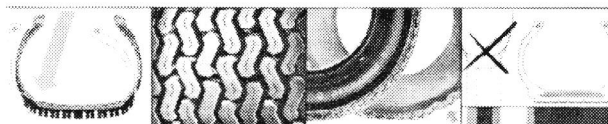
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356 OWNERS' QUALIFICATION TEST

(Condensed version) Compiled by Susan Hedman of 356 Talk
Submitted by Lanita Dunham

- | | | |
|--|--|--|
| 1. Are you ready to love this car, unconditionally? | 15. Do you have garage space? for the car, parts, tools, literature, toys, parts car, models, more parts, etc.? | 28. Do you think purchasing a Speedster is a practical decision? |
| 2. Do you realize that you will have to understand almost everything about this car, including the engine, transmission, brakes, carburetors, etc? | 16. Do you have a problem with puddles of oil? | 29. How do you feel about people asking you "What year is that Karmann Ghia?" |
| 3. If you already know about cars, are you willing to learn a whole new vocabulary? | 17. Puddles of blood? | 30. Are you sure you're feeling all right today? |
| 4. Are you willing to associate constantly, and publicly, with other 356 owners? | 18. Do you know who the Maestro is, his address, and the difference between him and a Turkey? | 31. Are you taking any medication? |
| 5. Do you know a nearby mechanic who is an expert with 356's? | 19. Did you learn your ABC's when you were 3 years old, or when you bought your first 356? | 32. Is your car taking any fuel supplements? |
| 6. Are you willing to get greasy? All over? In your eyes, hair, skin, clothing, etc.? | 20. Who is your Copilot? | 33. Given the choice between Claudia Shiffer, Brigitte Bardot and an America Roadster, is there really a choice? |
| 7. Are you willing to shed blood? | 21. Are you sure you love this car? | 34. Do you WAIT for the mailperson to bring you your copy of the Registry? |
| 8. Do you own a fire extinguisher? | 22. Do you think 'a little rust' is ok.? | 35. Are the "ads" the first section you turn to? |
| 9. Are fisticuffs an acceptable way to settle on jet sizes for Webers? | 23. Are you more interested in what "Vic said..." than what "EF Hutton said..."? | 36. Is it personal if even one other person receives his copy of the Registry before you? |
| 10. Do you realize that this will cost more money than you can sell it for? | 24. Can you recognize a lot of rust? | 37. Have you ever paid money to ride in a 550 ? |
| 11. If you already own tools, are you willing to purchase a whole new set? | 25. Are you willing to drive without musical entertainment so that you can enjoy the incomparable pleasure of listening to your engine run.....? | 38. Do you truly feel that if more people in the world were restoring 356's there would be less strife? |
| 12. Do you possess a large vocabulary of four-letter words? | 26. Do you love this car above all others? | 39. Would you travel thousands of miles, spend days in a hotel, and get wet and muddy for a chance to buy that "rare \$300 part" for only \$250? |
| 13. Is your spouse or Significant Other a 356 lover? | 27. Do you worry what other people think? | 40. Did your world end in 1965? |

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