

Except for identifying name, the Carrera exterior is identical to Porsche's less expensive coupe models. Test car has sun-roof, an optional extra advisable for tall people.

Oil cooling tank is squeezed into left rear fender behind wheel, protected by a perforated steel guard.

road test: PORSCHE CARRERA

IT HAS BEEN six years since Porsche first entered the sports car market, and the advent of this new car has been underscored by three significant facts.

1. No body styling changes have been made, nor are believed necessary.

2. Over 10,000 units have been built.

3. Powerplant changes have increased the horsepower available from 40 to 110.

The latest Carrera coupe (officially the 356A-1500 GS) looks almost identical to the original 1100cc, 40 hp model introduced in 1950, but this "Grand Sport" version is powered by a slightly de-tuned, four-cam, "550" type engine.

As is well known, the Porsche line-up of powerplants have Volkswagen ancestry, and little else. The "550" engine used in the Carrera retains the original VW stroke dimension of 66 mm (2.60"), probably for sentimental reasons. This engine is, of course, a very expensive unit to build, but its record in American competition furnishes a remarkable demonstration of outright performance and near-perfect reliability. A complete description of this powerplant appeared in R & T for January, 1956.

Our test car was supplied to us by the local distributor, Competition Motors of Hollywood. We also managed to get the day off for Ken Miles, who did all the actual test driving. According to Miles, who should and does know, the car wasn't quite in a full 100% state of tune, but even so a machine with only 21 lbs/hp is going to move—and this one did. Actually anyone not familiar with the Carrera would be more amazed at the flexibility of the machine, rather than its sheer performance which was not unexpected. The dohc engine idles at under 1200 rpm, and it will even start from a standstill in 2nd gear, pulling away from 800 rpm without a sign of temperament. In 4th gear, Miles once lugged

Instruments include two knobs above tach for individual control of dual ignition. Top of dash is padded for safety and to prevent reflections in windshield.

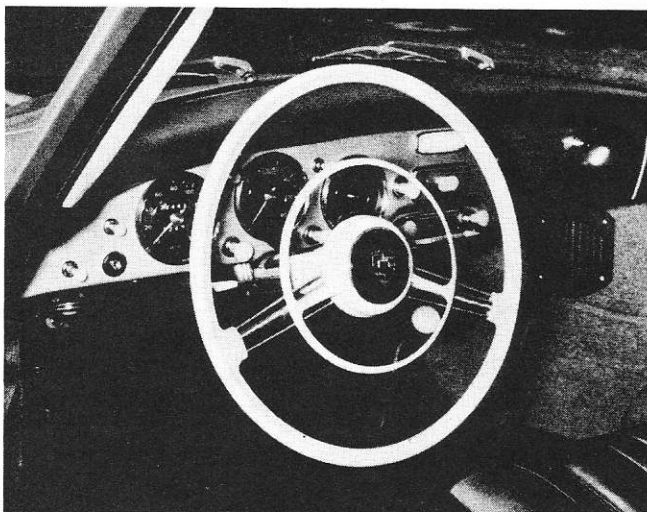
down to 1200 rpm and accelerated away. Admittedly the performance below 2500 rpm is not brisk, and no one but an absolute clot (as Ken says) would drive the car that way. Also, at low rpm the engine will not take too much throttle opening, but such demonstrations do illustrate that the Carrera can be driven as a dual-purpose car, even though it is primarily a high-speed road car. As further proof of the flexibility of the 550 engine, it is worth mentioning that we used the same spark plugs throughout the trial, and the engine was not touched at any time.

Technically, this particular test car was not "strictly stock" for it had special gear ratios. Probably no two Carreras are ever exactly alike anyway, and it is interesting to note the multiplicity of options which can easily be incorporated to suit individual preferences and driving habits. The standard Carrera axle ratio is 4.428, but our test car had 4.85-to-one gears. Fourth gear in the transmission is normally 0.96 (there is no direct drive) but this car had a ratio of 0.885. The rest of the gears were stock and the net result of the changes tends to give slightly better acceleration through the higher numerical ratios and an identical-to-standard 4th gear performance.

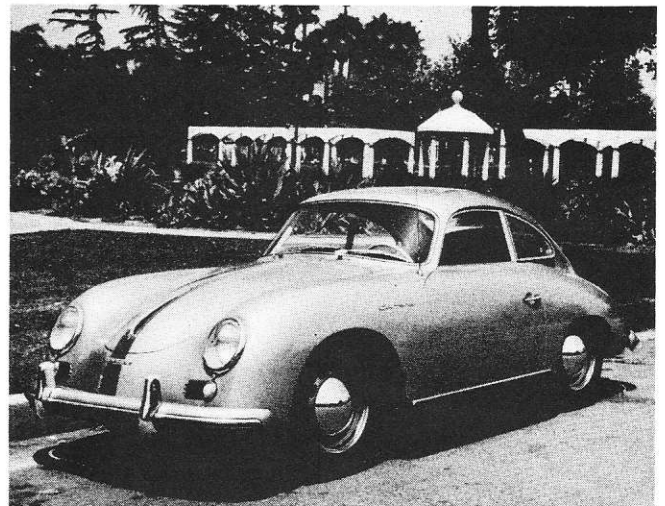
	<i>Std. Ratios</i>	<i>Test Car</i>
axle	4.428	4.850
4th	4.25	5.95
3rd	5.43	5.95
2nd	7.81	5.56
1st	14.11	15.44

Driving the Carrera presents no special problems, and the only thing new to the experienced "Super" owner is the push-pull knobs which control the dual ignition system. The engine will not start

Long a Porsche feature, "rubber buggy bumpers" eliminate enumerable minor dents. The Carrera comes with convertible and speedster bodies as well as coupe.



Photography: Poole



unless one or both knobs are pulled out and these controls are most useful, not only for tune-up work, but also on the road where ignition faults can easily be detected. The idle seems a little smoother and quieter than with a Super, and low speed performance is about the same. Referring to our Road Test Annual, we find that up to 60 mph the Carrera coupe performs about mid-way between the Super Speedster and the Super Coupe. Above 80 mph the Carrera takes off and hides from any Super.

All of the 1956 Porsches have incorporated changes in suspension, steering and shocks which do not appear important in detail, but which have made a considerable improvement in handling. In addition, the Carreras appear to be coming through with a torsion bar setting which gives about 1° of negative camber at the rear wheels, with no load. This, and the larger 5.90" section road-racing tires give as close to neutral steering as is conceivable. With the tremendous power available, a burst of throttle in a corner (in the correct gear) will give oversteer, just as it does with any machine of comparable power-to-weight ratio. High speed stability at over 100 mph in a cross wind still leaves something to be desired, in our opinion, but this applies to almost any well-streamlined coupe with preponderance of weight on the rear wheels. In any event the steering is accurate and quick and requires only common sense and alert attention at over the magic century mark.

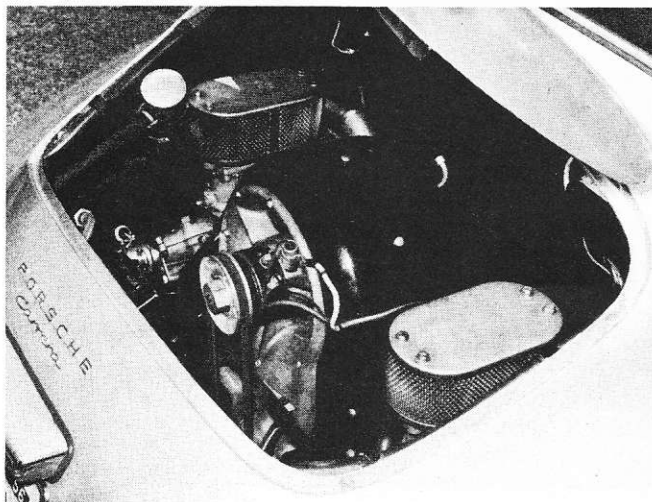
Acceleration testing with Ken Miles at the wheel produced no problems except that, as is usual for high-performance cars, it was difficult to get consistent starts. The 550 engine will rev at over 7500 rpm, but Miles used a limit of 6700 rpm during most of the runs, as shown in the acceleration chart. All of the acceleration figures from 30 mph to 80 mph are approximately .5 seconds slower than published in a recent test report by the authoritative *Das Auto*. The clutch seemed to slip a little on the initial take-off yet gave no sign of distress, and we feel that we lost the .5 second at the very start. However, we report the car's data as recorded, not as it might have been if . . .

The same is true of the top speed. The factory claims 125 mph and the German test gives the top speed as 198.3 Km/st (123.144 mph) but we were handicapped by a light wind which always hurts more than it helps over a two-way average. There is reason to believe that a Carrera in good tune can, under favorable circumstances, exceed an honest 125 mph, and it might be of interest to note that Italian Weber carburetors are now a factory option for \$200 extra. Our car had the standard Solex units, and Miles felt that only a slight change in the accelerating pumps would correct the tendency to flood at full throttle under 2500 rpm.

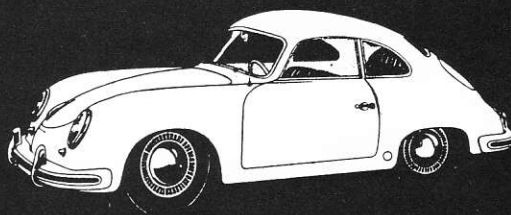
Without a doubt this was one of the most interesting cars we have ever tested. It completed the vigorous performance tests as if it were out for a Sunday drive, the fully synchronized gearbox is fool-proof though not ultra-rapid, and the brakes are tremendously powerful and fully adequate for the performance. Add to this the undeniable comfort advantages of a coupe, the detail qualities so greatly admired and typical of the marque, and the price doesn't seem quite so steep.

If the dream of a million VW owners is someday to own a Porsche, then the dream of 10,000 Porsche owners must be someday to own a Carrera. And, we don't blame them. ●

Powerplant for the Carrera is the same as the 550 Spyder but detuned to give 10 less horsepower and more tractable performance for street driving.



R & T ROAD TEST NO. 111



PORSCHE CARRERA COUPE

SPECIFICATIONS

List price	\$5995
Wheelbase, in	82.7
Tread, f/r	51.4/50.1
Tire size	5.90/15
Curb weight, lbs.	2035
distribution	41/59
Test weight	2320
Engine	flat 4, dohc
Bore & stroke	3.35 x 2.60
Displacement, cu in.	91.4
cu cm.	1498
Compression ratio	8.70
Horsepower	110
peaking speed	6200
equivalent mph	111
Torque, ft.-lbs.	87.5
peaking speed	5200
equivalent mph	93
Gear ratios, overall	
4th	4.29
3rd	5.95
2nd	8.56
1st	15.4

PERFORMANCE, Mph

Top speed, avg.	120.0
best run	121.4
3rd (7000)	90.0
2nd (7000)	62.5
1st (7000)	34.5
see chart for shift points	
Mileage range	15/24 mpg

ACCELERATION, Secs.

0-30 mph	4.5
0-40 mph	6.5
0-50 mph	9.0
0-60 mph	11.5
0-70 mph	14.9
0-80 mph	19.0
0-90 mph	25.4
0-100 mph	33.5
Standing start ¼ mile	17.7

TAPLEY DATA, Lbs/ton

4th	170 @ 70 mph
3rd	270 @ 60 mph
2nd	440 @ 48 mph
1st	off scale
Total drag at 60 mph, 87 lbs.	

CALCULATED DATA

Lbs/Hp (test wt.)	21.0
Cu ft/ton mile	76.6
Engine revs/mile	3360
Piston travel, ft/mile	1455
Mph @ 2500 fpm	103

SPEEDO ERROR

Indicated	Actual
30 mph	30.0
60 mph	58.8
80 mph	78.5
100 mph	98.0
122 mph	121.4

