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# ROAD TEST

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**The Incredible  
175 hp Volvo  
RoadSport**



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ROAD TEST • OCTOBER 1977

ROAD TEST

# The Volvo Roadster

## The Ultimate Street Machine

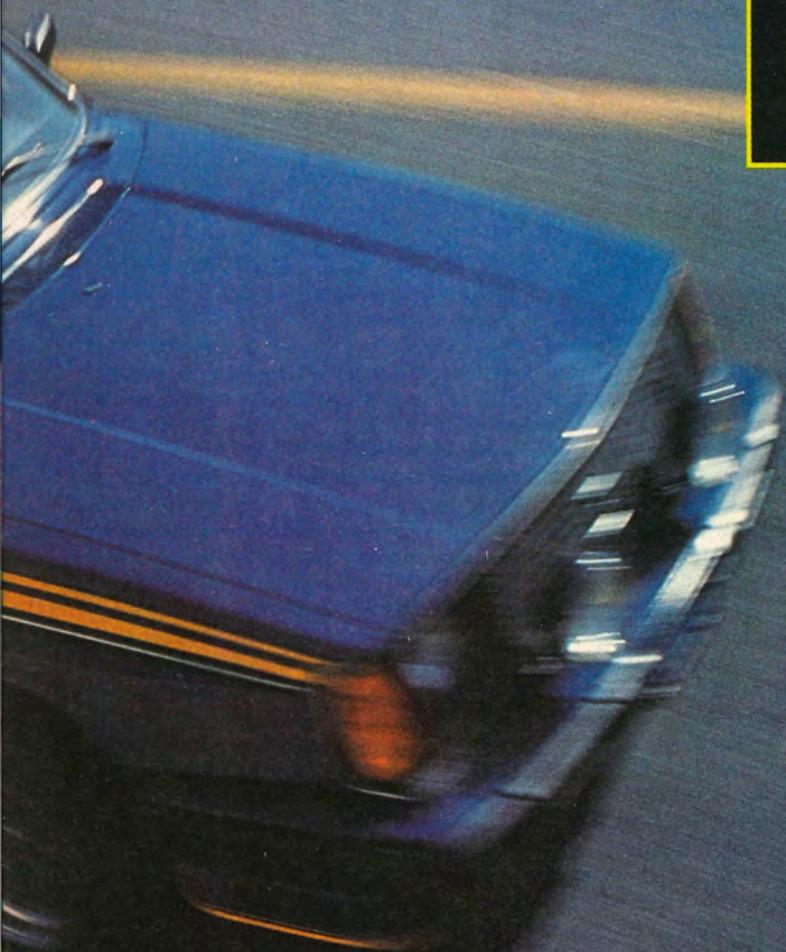


What's the color of the Swedish flag, seats five, and eats German sportscars for breakfast? *Continued*

port:

e?

PHOTOGRAPHY: LARRY GRIFFIN





**A** balls-out street fighter of a car—that's what we promised you in the last installment of the RoadSport story, an installment you saw just a year ago. That's right, a year later we're still playing with our pet Volvo, but take it from us, this car is nowhere nearly as tame as it was when it rolled off the assembly line in Gothenburg. When that happened the car was a nice, sane, medium-blue Volvo 242 SRO—that means it had sunroof and overdrive. As you see it here it's an all-out street racer—the closest thing we know of to a street-licensed racing car.

Why a whole year between stories? Why has it taken us 12 months to complete the job we started so long ago? Simple: we've spent just half that time completing the car and the rest of the time we've been out hunting—hunting in the RoadSport I, hunting winding roads, difficult curves, and maybe the odd sportscar. Even before the last round of work was done and the car emerged from its cocoon to spread the colors you see here, it was a ball to drive—it cornered flat, understeered just a little in the slower corners but hung its tail out when you poked the right-hand pedal—in short it did All The Right Stuff, all the things a proper piece of sporting machinery is supposed to do, and frankly it did them better than just anything else we can think of. Still, the RoadSport cried for a bit of additional work. We knew that while it cornered very well, we could make it corner harder still; we knew that though its little 2.1-liter engine ran like a Baldwin

by Jon Thompson

locomotive, it could be made to run still better—and lastly we knew that though the car worked like no other Volvo anybody had ever seen, there was nothing about it to make anybody suspect anything but a stone-stock 242—nothing wrong with that, makes it hard for the cops to see you and all that and that's fine, but with all the work that we had planned for the car, it seemed proper that instead of looking like a four-wheeled Frigidaire, the thing should have a little of what you call your Visual Impact. We think it does now.

The constant reader will recall that in the last RoadSport episode we promised you something—er, interesting; we said RoadSport II would be so low to the pavement it would scrape the asphalt clean, sport enough tires and fender flares to keep a pro racing team stocked up, yet would still look remotely like a Volvo. The point of RoadSport, Phase I, was to build an absolutely super street machine that absolutely anybody with the right amount of Long Green could copy by checking off the right boxes in his local Volvo Competition Services parts book. We succeeded nicely. The purpose of Phase II was—well, it was to build the damndest Volvo the world has ever seen, a car that would be faster than brand P, more comfortable than brand B, and more reliable and cheaper to keep running than either of them. A tall order. It's taken time, a papal dispensation from the California Air Resources Board, and a whole lot of coast-to-

coast (and not a few transAtlantic) telephone calls, but here's the result. Has it been worth the wait? Are you kidding, mate? Don't talk to us about your Pusher, Your Fazzazz, your Launcher or your BWZ. Up to about—oh, the ton or so the RoadSport'll blow any of 'em right off into the weeds where they belong. Beyond the ton, speeds above 100 mph? Beyond that—well, beyond that you can get a whole lot of jail time and we just don't want to know about that.

All it takes to prove our point is one little test ride, a simple little blast down your favorite curvy road in this wild, bespoiled, fat-tired, turbocharged Ultimate Weapon of a car. For most folks we know that's plenty enough demonstration of how a proper road car ought to behave—impeccable manners, but an absolutely voracious appetite for Still More Throttle. Our kind of car, make no mistake.

This project initially got under way some 18 months ago when we drove a stock 242 SRO to Solar California from the East Coast—a neat little trip that impressed everybody involved with the car's livability and solid construction. We got it back to Los Angeles and began pondering, as Fred Hayes of the Weavers would say, the imponderable. The car was so solid and so responsive, even in its stock form, and Volvo Competition Services has such an incredible range of bolt-'em-on go-fast parts that toying around with the suspension just a little—turning the 242 into an RT project car—just came natural. We really didn't intend for the whole thing to

take quite so long, but what the hell. And besides, we've had all that time in which to drive the car. . . .

The project has been worth the time, the work, and the money involved—and believe it, there are considerable amounts of all three involved—because at the bottom line we have a solid, five-place family car that offers exceptional comfort, excellent visibility, a good general reputation for sturdiness and reliability and documented safety capabilities—plus it has razor-sharp reflexes, at .85g on the skidpad it corners harder than anything we've ever tested, and with its nearly stock 2100cc engine it's almost as fast in the quarter-mile as a Camaro Z28. We don't know about you, but a car that fits that description is just exactly the car we've been looking for for a very long time.

By what magic did this normally stodgy, slab-sided, unlively piece of Swedish automobilia become the blue and yellow rocket ship you see here? Here's the story.

It all started with the suspension. The details of what got done there are available in the suspension sidebar; rest assured that everything that could be tweaked was tweaked. The springs were shortened, it got different anti-roll bars, trick gas-pressure shocks, a power steering unit to make the slowish steering faster, huge brakes from Volvo's bigger 262, ultra-wide, ultra-light racing wheels and a set of gumball-sticky Pirelli P7 tires. The result was a car so stable at speed that it was—well, eerie. For instance, during testing at Riverside we discovered that the car could be completely hung out, right on what seemed the limit of adhesion, in a high-speed corner like the banked turn Nine. Yet still it had enough reserve to allow the driver a mistake, a course correction, or a sudden addition of steering lock just to see what the car would do. All this while in an exaggerated oversteer condition at speeds well above 90 mph. And it makes no difference if you're on the throttle or off—the

RoadSport is dead stable. In slower corners that oversteer is replaced by a case of understeer—the racers call it push. It's natural for a nose-heavy car with a limited-slip differential, and the nice thing about it was that a little throttle would in most cases bring the tail around and allow the driver to steer the car with his right foot as well as with the steering wheel. This was the case even with the stock engine, and was even easier to do with the turbo-charged unit. Probably a little more test time could have dialed up completely neutral handling, but as it was the handling just wasn't objectionable. And besides, at long last we just flat ran out of time. The car was so good that it could be hung out all the way through turn Nine, and driven flat-out through the Esses, and believe us, that's plenty good enough. Also good enough were the brakes, which were drilled for lightness and increased cooling. Using Reppo pads, standing on the RoadSport's brakes reminded us of what might happen

□ It already was incredibly hot on pit row when we pulled into Riverside International Raceway at 8:30 a.m. one Thursday not long ago. We had come to wring out the RoadSport—find out what its weaknesses were, and maybe find a few of our own as well. We also meant to find out how fast the car was, and to find out how fast we were. It's plenty fast; we're not quite so fast.

As tech wizard Fuller fiddles around with tire pressures, checks the oil and generally makes himself look busy I begin pulling on my Simpson firesuit. At first it seemed a bit silly to wear the thing, and hot besides—but then I thought of Andre Hallett, a French driver who died last year at LeMans when his Datsun crashed. He burned to death. I'll wear the firesuit and the Bell Star helmet too, and be glad for them. I want all the help I can get.

At last—I'm waiting, strapped in the car, Fuller and Castellano and Brad Nelson—a Volvo wrench who's worked his ass off on this project—all take one last turn around checking, rechecking. Thumbs up! Drop the car into first, bring the revs up, slowly disengage the clutch—we're moving! A little more throttle, shift, move out of the pits and left onto the racing surface just past the flat-out left that is turn One, heading towards Two, a right; into third, around Two, and through the Esses as I shift into fourth. Feeling my way, I pass through Six, a sharp uphill right-hander where Joe Weatherly was killed; hit both apexes, and head down the short straight towards Seven. This is a snap, the car feels fine, and I'm having so much fun I'm whooping to myself inside my crash hat; God, this feels good! Lift a little, downshift, turn left



## The Acid Test: Will The RoadSport Work At Riverside?

into Seven just as I crest a hump. That'll be a bitch when I get up to speed. Around Seven and Seven-A—Fuller, who knows this track and is much faster than I, says to stay tidy here. In my exuberance that's advice I'll not remember until I sit down afterwards to try to figure out why I'm three seconds slower than Don—and onto the main straight.

Alright now, ALL the way into the throttle, up into overdrive—kink left then right into Nine—damn, that steel wall around the outside is intimidating—let's just lift a bit here; no sense hurting ourselves on the first lap. All

the way around, maybe 200 degrees, and finally there's the corner's exit. Aim for the outside clipping point and put my boot into it. Up into overdrive by the start/finish line, flat-out, tail-out through One, lift/into fourth/tap the brakes hard and I'm through Two but badly—this corner will prove very difficult for me and that's too bad; it's the key to lots of precious rpm through the Esses. Up towards Six as fast as I can, the RoadSport's tail hanging out through Three, and Four, hard on the brakes/down to third/jink left—more gas, now hard brakes and into the radius for this double apex right-hander—back onto the gas, aim for pavement's edge by the Goodyear billboard, right against the steel barrier—hit fourth and watch the tach climb. It just hits—6000 and it's on the brakes hard just before the hill, up—we're light—and down and into Seven—tail out, but Seven-A causes problems, hard understeer, too much throttle—we scrub on out and onto the straight. Full throttle/fourth/overdrive, check the gauges, take the left kink into Nine, turn 5200 rpm, see the signs on the side—4—3—2—1 and it's into fourth/brakes and into Nine. Demon gravitational pulls, the car hangs its tail out in classic oversteer and takes all the power the turbo can make. On around to the exit, shift to overdrive and lift—stay off the gas, idle around, be cool, cool the car and me. It's a slow lap and into the pits; we've both just had our first hot lap of Riverside. The car has handled it all beautifully and cries for still more throttle. I coast to a stop in pit row and Fuller, Castellano and Nelson all rush up for a report. They want to know how the car works. I just smile, a big, wide smile. It really works.—J. T.



## RoadSport's Motor: 2.1 Liters Under Pressure

□ The Volvo needed more horsepower. Like a good utility infielder who is all glove but no hit, the RoadSport was destined to live its life banished to the minor leagues if it didn't come up with the punch to match its handling.

We considered two options. In Sweden we had seen and driven a twincam, 16-valve cylinder head bolted into a 244. It produced well over 200 horsepower, ran excellently from idle to 7000 rpm, and was also, we learned much later, unobtainable. That left the second choice, a blower. Harness all that wasted noise going out the tailpipe to pump in more of Mother Nature's air.

We needed an expert, so we sent the Volvo off to Tom Castellano of Castell Enterprises, Inc. (4943 McConnell Ave., Los Angeles, CA 90066, 213/822-7130). Among other things, he is the reason current Porsche Turbo Carreras don't have the waste gate problems associated with the earlier versions. To clinch the deal we took one look at his outrageous gnarled burl pipe and figured anybody with the gall to be seen in

public with something like that had to really have his act together.

Castellano started by building a fresh engine, with everything blueprinted and fully balanced and a special set of forged pistons (made especially for this project by Mahle. Price: \$880.00 for the patterns and nine pistons). Compression ratio was reduced to 7.8:1. The cylinder head was polished and the combustion chambers were matched. The camshaft came from the European injected car; its only difference from the USA version is slightly more lift. Before assembly, the moving parts were Dircronited, a dry-lube process developed for aerospace. Initially meant for computer components operating in an inert atmosphere (like outer space), Dircroniting provides lubrication where oil would be unacceptable.

For the blower installation Castellano moved the CIS injection unit to the right fender, right behind the headlight, where it could draw air through the grille. A special steel exhaust manifold was fabricated to bring all the

pipes together at the same place, and a flange accepted the exhaust gas side of the turbocharger. The turbo itself is a Garrett Airesearch model T04, with an O compressor (the middle-size compressor for a T04) and a 0.58 aspect ratio exhaust trim (the next to smallest size for the T04). Essentially, you choose the compressor size to match the size of your engine and the smaller the exhaust trim the better the throttle response will be. An intake pipe was formed to lead from the compressor, across the engine, to the bottom of the Volvo intake manifold. From the intake manifold to the engine the rest is all stock Volvo; with the exception of the fabricated exhaust manifold and intake pipe the whole thing looks extremely production-like.

Castellano does not use a waste gate when installing turbochargers on CIS-injected engines. Rather, what amounts to a constant-bleed pop-off valve is located in the intake pipe—on the Volvo it was right below where the pipe went into the intake manifold—and a simple

if the driver of some 1500-pound econocar suddenly flung the anchor to the Queen Mary out his window and came up tight against the anchor chain—we stopped, and right now.

Those wild fender flares were the natural result of the fat little Pirellis. Without the flares, there was just not *quite* enough tire clearance inside the fenderwells to make the whole thing work. That meant some cutting and some fiberglass work and for that we turned to C. Roger Chastain, the man behind the Capri S2 cars you occasionally see in your Lincoln-Mercury showroom. His man Tom David drew up a few sketches and after seemingly endless rounds of coast-to-coast telephone calls, we agreed upon a final shape. Frankly, in retrospect we wish we'd either held out for a taller rear wing or decreed that there would be no wing at all, but you've gotta say this about the final result: it certainly catches the eye. One cop we met—he just wanted to *look* at the car, see, we weren't doing anything illegal, not this time, honest—called it rolling Probable Cause, another called it the Batmobile, but no matter what you called it, you have to admit that people *saw* the RoadSport. Partly thanks to Chastain's wild bodywork

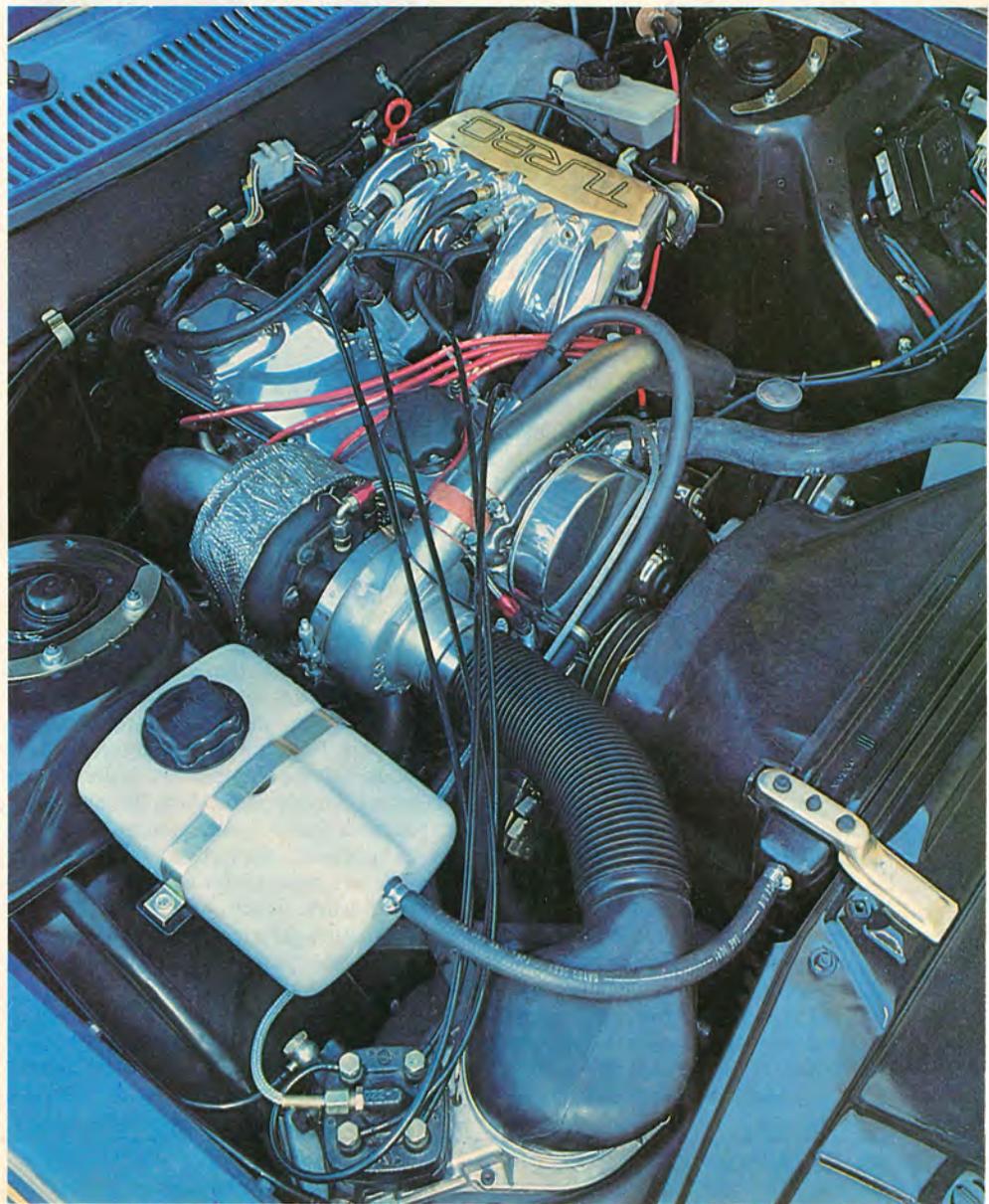
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sidebar and chart overleaf

change of springs changes the pressure at which the valve will open and therefore alters the maximum boost. And therefore the horsepower. Under boost the car makes a whooshing sound, which is the valve bleeding off excess pressure.

The pressure that stayed in did a lot. We ran the Volvo with 11 pounds of boost (the turbocharged Saab and Buick both run in the range of seven to eight pounds). The engine never saw a dyno, so the horsepower can only be a guess, but the performance is for sure. Compared to the car in the stock condition, the quarter-mile time went down from 18.9 to 16.6 seconds with a rise in speed from 72.5 to 84.0 miles per hour, and the 0-60 time went from 12.1 to 8.6, but even more impressive, 0-80 went from 23.7 to 14.7; once that thing got into it just *hauled tail*.

You might also be interested in another little bit of information. Our Volvo was not the only one Castellano built. The RoadSport project spurred a flurry of interest at Volvo, and there is right now somewhere on the East Coast a plain 242 with a turbocharger plugged into its lambda-sond system. If you get embarrassed some night by a Volvo, it might just be Son of RoadSport.

Remember, you read it here first, folks.—Don Fuller



# Sniffing the RoadSport's Chassis

□ By the time we had reached Stage I with our Volvo last year its road manners and highway etiquette would probably have qualified for stamps of approval from everyone from Richard Petty to Amy Vanderbilt; in fact, it seemed the kind of car Richard could use to give Amy a ride from a Darlington victory party to a Washington social bash.

We could have left well enough alone and still had behavior and numbers (0.79g lateral acceleration) right up there at cruising altitude of the world's best, but we didn't want to be *with* them, we wanted to be *above* them, with cornering limits coming straight out of the sun from twelve o'clock high. What we had up to that point was more than any reasonable being could ask for, but our reasonableness has sometimes been questioned. We wanted more, damn it, and the only way to get more was to load the Volvo up with more tires and wheels than you would find on most racing sedans. Racing tires are about as suitable for the street as wearing Nomex to a Fourth of July picnic, fireworks or not, so real competition-only rubber was out. That was the only limiter.

The tire choice was easy: we got the best. Pirelli's Cinturato P7 has been the recognized head-and-shoulders-above-all-others tire ever since it was introduced. A streetable racing tire or raceable street tire, depending upon your point of view, it has fabric radial plies, belts with fabric and steel and is good for 215 mph. Ours were 225/50 VR 15s, one of the few sizes presently available with molded tread. For most of the other sizes the tread is hand cut on a slick casing, and the price is even higher. As it was, if you were to go out and buy four tires like ours your wallet would be thinner by just about one thousand dollars.

And that doesn't even get the tires connected to the car. *That* takes some wheels. We called up Jerry Trotter at American Specialty Products (2140 W. 15th St., Long Beach, CA, 90813) and ordered some of his new racing wheels with the spun aluminum rims and cast centers. These are pretty trick. The rim is spun from a piece of tubing he welds from flat stock. The fit between the rim and center is very close, and the two are secured by bonding; a bolt and nut is installed behind each spoke as a kind of fail-safe. The wheels are *strong* (he had one on a Corvette that tangled with the boiler plate wall at Riverside's turn Nine, and although the entire front

suspension was torn off, the wheel was still in one piece while a steel wheel at the other end of the car was totally destroyed), light, and available in the usual wide range of rim widths. And, due to the unique method of joining the rim and center they can be made in a literally infinite number of offsets; you aren't stuck with moving things around in some given increments.



Jerry made us wheels with 9.5-inch rims for all four corners. We determined the offsets by first fitting the fronts as close inward to the strut as possible and then specifying one more inch than that for the rears to bring the rear tires outward and more into line with the fronts, as the standard Volvo has a front track 2.8 inches wider than the rear. It is good to check things like this first, because the front brake calipers (ours were the ventilated front rotors and calipers from the six-cylinder Volvo) stuck out too far to allow bolting the wheel directly to the hub. To clear the calipers Trotter made some spacer rings to fit between the hubs and wheels and gave us special long wheel studs from a Ford truck which were fitted to the Volvo hubs. The rears were fine, and we capped everything off with outrageous 2.75-inch-long red anodized lug nuts, giving it the Ben-Hur look.

Even though we never had any brake problems before, we optimized those too. The four-wheel discs with the ven-

tilated front rotors gave us enormous stopping power, but Tom Castellano cross-drilled the rotors for even more fade resistance and installed harder Recco pads for Riverside. The brakes on the RoadSport are superb, probably the best brakes we have ever experienced. Fade has been nonexistent, stopping distances are ridiculously short (averaging 128 feet from 60 mph), the feel is absolutely perfect with a good, firm pedal and the directional stability under hard braking is what race drivers wish for. Stopping distances are largely a function of tires, but even after repeated hard use, application of the pedal just causes the car to flat stop moving. The brakes are probably the single best aspect of the car.

The rest of the chassis was pretty much as it had been for Stage I. The same cut springs, the same anti-roll bars (23mm front and 25mm rear) but new shocks to replace a couple that had worn prematurely. In addition, we added power steering for its quicker ratio, but Castellano made a special, larger pulley for the pump to reduce the amount of assist.

The numbers tell the result. The already excellent chassis with the addition of the enormously-efficient Pirelli P7s gave us a car that was simply worlds better than anything else we have tested. At the skidpad Stage I had achieved 0.79g, a respectable number. Stage II raised that to 0.85g, the fastest cornering streetable car in our experience, and that includes a lot of expensive nameplates.

The real evidence came at Riverside. With Stage I we had lapped consistently at just over two minutes, with a best of 2.01.76 and no lap more than a second off that. The car had handled fine but was severely horsepower-limited, being flat-out just about everywhere. We naturally expected some improvement but we were surprised by how much. After all was said and done the RoadSport, Stage II, had a best lap of 1.47.82, or *fourteen seconds* faster. That kind of improvement, with a five-passenger, streetable car that will still deliver over twenty miles per gallon, is a *lot*. For a reference, a few years ago a group of journalists took a Ferrari Daytona and a famous racing driver to Riverside to see how fast it would go. The famous racing driver got the Daytona, all 350-odd horsepower of it, around Riverside in 1.44.0, or less than four seconds faster than a typewriter-pounder behind the wheel of the *Road Test* RoadSport Volvo.—D.F.

## SPECIFICATIONS

### ENGINE

Type	OHC L4
Displacement, cu in	130
Displacement, cc	2127
Bore x stroke, in	3.62 x 3.15
Bore x stroke, mm	92.0 x 80.0
Compression ratio	7.5:1
Hp at rpm, net	NA
Torque at rpm, lb/ft, net	NA
Carburetion	fuel inj. & turbocharger

### DRIVELINE

Transmission	4-spd manual w/O.D.
Gear ratios:	
1st	3.71:1
2nd	2.16:1
3rd	1.37:1
4th	1.00:1
O.D.	0.80:1
Final drive ratio	4.10:1
Driving wheels	rear

### GENERAL

Wheelbase, ins	104.0
Overall length, ins	192.6
Width, ins	73.5
Height, ins	57.5
Front track, ins	59.8
Rear track, ins	59.0
Trunk capacity, cu ft	13.8
Curb weight, lbs	3020
Distribution, % front/rear	55/45
Power-to-weight ratio, lbs/hp	NA

### BODY AND CHASSIS

Body/frame construction	unit
Brakes, front/rear	vented disc/disc
Swept area, sq in	407.1
Swept area, sq in/1000 lb	134.8
Steering	rack & pinion
Ratio	17.1:1
Turns, lock-to-lock	3.5
Turning circle, ft	32.2
Front suspension: Independent, MacPherson struts, coil springs, tubular shocks, anti-roll bar	
Rear suspension: Live axle, trailing arms, Panhard rod, coil springs, tubular shocks, anti-roll bar	

### WHEELS AND TIRES

Wheels	15 x 9.5
Tires	225/50 VR 15 Pirelli P7

### INSTRUMENTATION

Instruments: 10-130 mph speedo, trip odo, 400-8000 rpm tach, volts, coolant temp, oil press, fuel level, clock  
Warning lights: directionals, high beam, amps, brake, parking brake, seat belts, hazards, bulb failure, overdrive indicator

### PRICE

Factory list, as tested: ARE YOU KIDDING?  
Options included in price: EVERYTHING

## TEST RESULTS

### ACCELERATION, SEC.

0-30 mph	3.3
0-40 mph	4.5
0-50 mph	6.6
0-60 mph	8.6
0-70 mph	11.2
0-80 mph	14.7
Standing start, ¼ mile	16.6
Speed at end ¼ mile, mph	84.0
Avg accel over ¼ mile, g	0.23

### SPEEDS IN GEARS, MPH

1st (6000 rpm)	26
2nd (6000 rpm)	44
3rd (6000 rpm)	70
4th (6000 rpm)	96
O.D. (6000 rpm) (observed)	120
Engine revs at 70 mph (O.D.)	3500

### SPEEDOMETER ERROR

Indicated speed	True speed
40 mph	34 mph
50 mph	42 mph
60 mph	51 mph
70 mph	59 mph
80 mph	68 mph

### INTERIOR NOISE, dBA

Idle	65
Max 1st gear	81
Steady 40 mph	76
50 mph	77
60 mph	71
70 mph	73

### BRAKES

Average stopping distance from 60 mph, ft	128
Avg deceleration rate, g	0.94

### FUEL ECONOMY

Overall avg range	16-23 mpg
Range on 15.8 gal tank	363 miles
Fuel required	premium

### HANDLING

Avg speed on 100-ft rad, mph	35.7
Lateral acceleration, g	0.85
Transient response, avg spd, mph	24.8



## RATING

### PERFORMANCE/ECONOMY

*Acceleration	4
*Fuel Economy	3

### RIDE/HANDLING

*Lateral Acceleration	5
Subjective handling	5
Predictability	5
Ride	3
Steering	4

### ENGINE/DRIVETRAIN

Starting	5
Throttle Response	5
Noise/Vibration	3
Shifting Action	4

### BRAKES

*Stopping Distance	5
Fade Resistance	5
Subjective Feel	5

### COMFORT/ERGONOMICS

*Interior Noise	3
Controls/Instruments	4
Visibility	5
Entry/Exit	4
Front Seat Comfort	5
Rear Seat Comfort	4
Space Utilization	4
Interior Environment	5

### QUALITY

Assembly	4
Finish	2
Hardware/Trim	5

<b>TOTAL</b>	<b>106</b>
<b>Percentile rating</b>	<b>85</b>

\*Denotes recorded data

5=Excellent, 4=Above Average, 3=Average, 2=Below Average, 1=Poor, 0=Unacceptable.

# Volvo RoadSport:



and partly because of the beautiful paint job—a rough approximation of the colors of the Swedish flag, we should point out—every time we stopped the car we were surrounded by gawkers. Not that we minded. We want you out there to know what we're about, and this car says it all. And if it doesn't say it from the outside, it will from the inside, because that got the *Road Test* touch too. Most obvious are a great hulking pair of Recaro Ideal LS seats, beautiful things and completely adjustable so that anybody—anybody—can make himself or herself comfortable in them. Unless maybe his (or her) *derriere* is too wide. A word about these seats. You may think their only purpose is to look Trick. You'd be wrong. We'd figured all along on an all-out, mind-bending, full-throttle day at Riverside International Raceway with the RoadSport, a day in which we'd find out just how good (or how bad—we're realists, after all) the car was. We figured we'd need something in the way of a killer seat to hold our bods in place as we careened on the edge of control around the track and we were right. If you're going to drive hard, a seat like this is the only way. Even if you're not going to drive hard, they look great and they're super comfortable. By the way, at the same time the front seats were installed the rear bench was recovered in a matching fabric and all seats got off-center yellow Swedish crosses on them as a final touch. But that wasn't where the work on the car's interior ended. We had chatted briefly with two-time World Driving Champion Emerson Fittipaldi at the Long Beach Grand Prix about a new line of steering wheels he had designed, wheels that actually fit the

# Vilém B. Haan, Inc. ...for protection with style



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**SOFGARD**—Strong cotton drill with flannel back. Tan color.

	Weathergard	Sungard	Sofgard
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Datsun 240Z, 260Z, 280Z; Alfa GTV; Audi Fox; BMW 1600/2002, 320i; Fiat X19; Jensen Healey; Porsche 911/912/914/924; Honda Civic, Accord; TR7	\$ 79.95	\$69.95	\$ 81.95
Alfetta GT; Audi 100LS; BMW 530i; Camaro; Corvette all; Datsun 260/280Z 2+2; Ferrari Dino Daytona; Firebird; Jag all, except XJ Models; MB all except 600; Volvo all	\$ 89.95	\$79.95	\$ 91.95
Cad. Seville; Jag XJ Models; RR Corniche	\$109.95	\$99.95	\$111.95

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# Vilém B. Haan, Inc. international motoring accessories

driver's hand, and Emmo's wheels sounded like a great idea. The wheel is built by Personal in Italy and distributed in this country by Vilem B. Haan, so a quick call to Haan promoted such a wheel for the RoadSport. The windshield wiper and turn signal stalks had to be bent back a bit to make everything fit, but aside from that the wheel slid right on and though it looks a little funny, it's very comfortable to use.

Okay, so we've given the car a new suspension, new bodywork and a new interior. What about making the thing go faster? Glad you asked, because that's the best part. Enter one Tom Castellano, a bearded, bespectacled young man with a

reputation for being one of the top wrenches in the country. We went to Castellano for a specific reason. We wanted as much power from the RoadSport's B21 engine as possible but we wanted to do as little work as possible to it. In a word, we were interested in bolting a turbocharger to the engine. Castellano fixed us up, but only after taking the engine down, blue-printing it, adding forged pistons, and polishing every surface in sight. The result was beautiful, a gleaming, four-cylindered work of art that was displayed on a stand alongside the unfinished RoadSport at the Los Angeles Auto Expo. And run? Geez, does this motor run. Below about 4000

rpm it behaves exactly the way you'd expect a stock Volvo engine to behave. It starts quickly, responds to the throttle very well, and idles smoothly. No lumpiness, no bad manners, no funny noises, nothing to make anyone suspect that anything but a stone-stock B21 lives beneath the RoadSport's hood. Ah, but pop the throttle blade open at about 3500 rpm in second, third or fourth gear and see what happens. As the tach needle reaches 3900 rpm there suddenly is enough exhaust gas to wake the turbocharger up and in a trice the car has gathered itself up and is hurtling forward at an unbelievable rate. It all happens so fast, even in the higher gears, that the driver must keep a *very* close eye on the tachometer or he'll be well over the rev limit before he knows it. In no time at all you hear the hiss of compressed air rushing past the turbo unit's waste gate, you shift to third, to fourth, into overdrive—and your tachometer is reading—ohmygod, can this be true?—the tach reads close to 6000 rpm in overdrive. That, friends, is called speeding, and it's what this jewel of an engine is all about. Just out trundling around Southern California's freeways is kid stuff—it'll do that all day and all night long and deliver 20 mpg in the bargain. Unleash it however, bang that throttle open and let the manifold pressure get up to 10 pounds, and you're looking at 175 horsepower—far more than God ever intended should be in a Volvo. But it all works, and the car behaves as though it was bred for this kind of activity.

Which, in a way, it was. It didn't start life as the Ultimate Weapon. It started life as Sane Transportation; God knows Americans need all of that they can get. But they also need something beyond that from time to time, something that will make the blood boil, something to remind them just how much fun driving can be, how rewarding a smooth, safe, fast trip can be. A car like the Volvo RoadSport provides the best of both worlds. That may sound to you like pro-Volvo propaganda, and maybe in a way it is. But it isn't meant to be a Volvo commercial, none of this is. The same things that we've done to the RoadSport can be done to any number of good, gray transportation cars and if there's any message here, that's it. It's getting more and more difficult to *buy* a driver's car, but there are any number of good foundations around. The suspension work isn't all that hard to do, people like Tom Castellano can build a turbomotor that will meet all the emission requirements, even the most recent ones, and proper tires and wheels can be made to fit anything and will result in an amazing difference in a car's handling. The result can be something like our Volvo RoadSport. Beautiful, comfortable, safe, and very, very fast—all the things a proper car is supposed to be.

Oh. You just can't build your own? That's okay. Stay tuned, we're gonna build some others, and you may as well come along for the ride. ■



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