

# the Automatic Mini-Brute

A Volkswagen it isn't. An Austin it isn't either. What it is, is about the fastest economy car you ever drove.

Text and photography by Eric Dahlquist

You see this guy coming up next to you at the light with one of those brilliant red Fiat 124 Sport Coupes and he looks over your chartreuse (Spring Green) Opel with the black vinyl roof and dismisses it as just another Americanized import for those without soul, those with tiny, economy minds. The light changes and there you are — two cars open on him. He has that look of surprise and knowledge — surprise that the Opel, any Opel, is initially fast — and knowledge that he will shoot by in low gear after his rpms come up. The brilliant red Fiat does not go by. If he had a half mile he might, but in metropolitan America when you lose in the first thousand feet, you have lost forever. Opels you see, even chartreuse ones with vinyl roofs, are quick.

This is one of the two things that will sell the 1.9-liter (115.81 cubic inch) Opel Kadett. The other is their new, fully automatic, 3-speed miniaturized version of Buick's Turbo Hydra-Matic transmission. The big Buicks (1800 of whose dealerships sell Opel in America), especially the GS 400 Stage 1s are competitive because their 3-speed automatics are terribly consistent. The automatic 1.9-liter Opel is a scaled-down version of the Stage 1 Buick 400, sort of a Stage 1/2. In both, the powertrain combination is almost perfect. In an age when the Volkswagen has gone shiftless, as well as all their competitors, the Opel is the supercar of the economy imports. It won't knock down 30 mpg but it will put away some fairly good sized American iron like standard-shift '55 Chevys for instance, and that's worth a lot. Sure, some of this giant-killer mystique is the sheer surprise; but what's the difference, when you've been had, you've been had.

The five main bearing overhead camshaft engine was introduced last year in its continuing 1.9-liter version. It isn't an ohc in the purest sense of the term, cam-in-head might be better since the camshaft is located to the left of the valves and actuates them with conventional stamped-steel rocker arms. The camshaft is driven by a double-link, single-stage, Renold roller-chain and valve-lash is taken up by common hydraulic lifters. All this works out very well providing an rpm range to six grand, although maximum power (102 hp) is reached at 5200 rpms. The 9.0:1 compression ratio engine demands premium fuel and the way it works out your economy factor is in a direct sliding scale proportional to your competition factor — the more you race the less you get. During all-to-the-wall acceleration tests a nadir of 17.9 mpg was achieved but the average seems to hover between 20-23, slightly less than the semi-automatic VW and 4-speed automatic Austin America. But then it's the eliminator champ, too.

Because there exists in Europe nothing like the convoluted Motown society of Detroit, where the people who design, build and market our cars all live in a kind of closed little society of their own, the European bunch have come up with some pretty revolutionary engineering over the years. That is except in V-8 engine development and automatic transmissions — here we have won hands down. Opel's 3-speed unit is a prime specimen. It looks like a half-scale

1. Opel 1.9 fairly gets it on through the turns but standard tires leave a little to be desired in traction. General riding characteristics, though, are much improved over previous years. Overall detailing reflects German origin.

2. Rear seat room is adequate but a bit tight for tall passengers. Back windows swing out for extra air.

3. Instrument cluster is placed directly in driver's sight line and are big and round and easy to read. Sadly, idiot lights predominate. Center-mounted air ducts direct refreshing breezes right where the driver needs it — in his face. Ventilation is best of almost any car we've ever tried and that's a lot.

4. One of the things you remember most about the car is its great automatic, a miniature of Buick's normal sized slick box. Maximum throttle shifts occur at 44 and 66 mph.

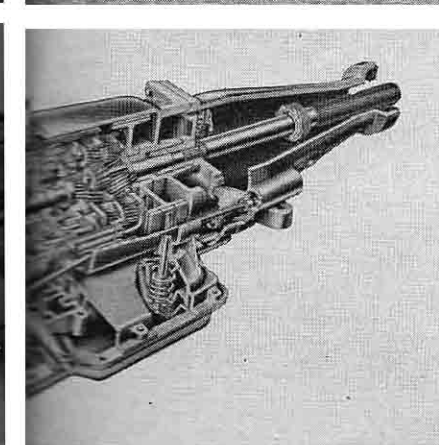
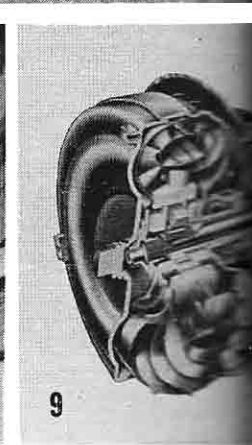
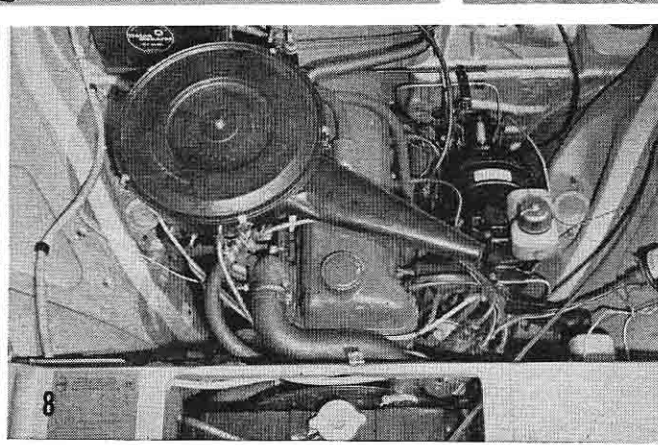
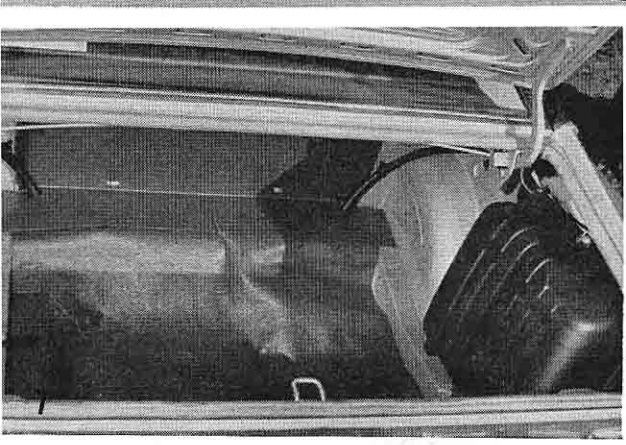
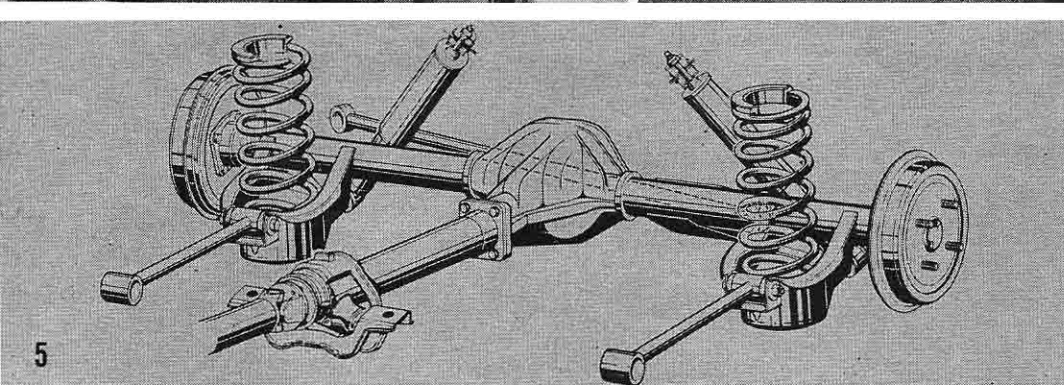
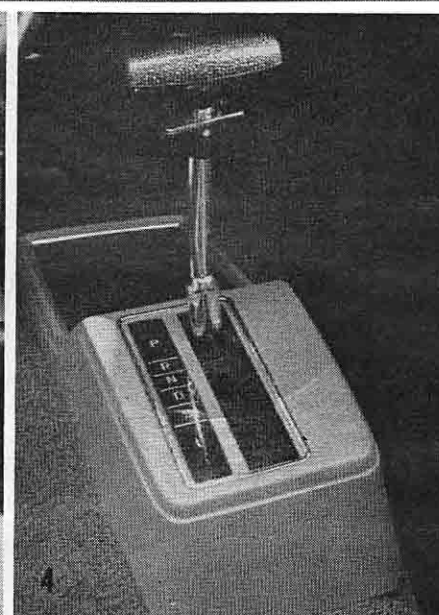
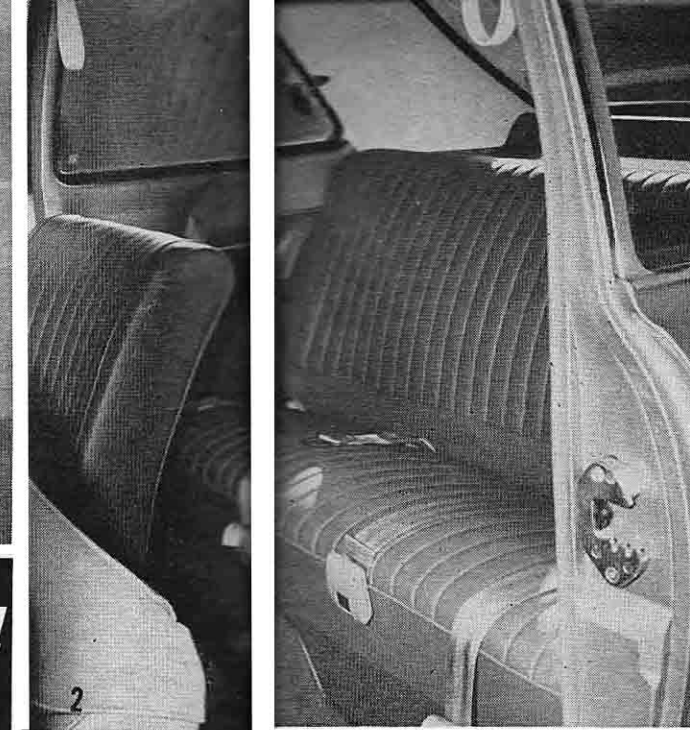
5. Rear suspension is typical live axle layout with coil springs and Panhard rod. Or full power hard cornering, rear wheel can be brought off the asphalt.

6. When you get right down to it, the 1.9 Opel is to its line what the Grand Sport Buick Stage 1 400 is to its — hot. 18.9 second quarters were done with two passengers on board.

7. Opel's 11.1 cubic feet of trunk space is cave-like, compares with T-bird.

8. 115.8 cubic inch engine fits snugly in compartment yet service is easy for most items like spark plugs.

9. If you didn't know otherwise, this cutaway could be a normal 3-speed Turbo. Performance of unit is up to high American standards as well it should be. Quickness away from the traffic light will amaze your friends and opponents.



# Mini-Brute

version of a normal Turbo Hydra-Matic using a normal torque converter a Ravigneaus planetary gear set, with three multiple disc clutches and a single band to provide three forward speeds and reverse. Maximum full-throttle upshifts occur at 44 and 66 mph and the transmission can be down-shifted at any speed, a rather unusual feature demanding a certain amount of prudence or abandon depending how long you keep your engines. With ratios of 2.40:1 (low), 1.48:1 second and 1.00:1 (high) it is smooth, takes full advantage of the rpm range and performance cannot be bettered by manual shifting.

One thing we have noticed about Opel Kadetts from the beginning was that, first they have the world's best windows-up fresh air ventilation system; and second, that the powerplant, be it the smallest (1.1-liter, 65.8 cubic inch, 8.2:1 compression, 55 hp job, or the escalated 1.1-liter, 65.8 cubic inch, 9.2:1 compression, 67 hp one) or our 1.9, suffer from excessive engine noise that filters into the passenger compartment, especially on the driver's side. The automatic transmission has reduced this situation to a degree and Opel engineers stated flatly they are working to solve the problem, but it still gets to you after all day in the saddle.

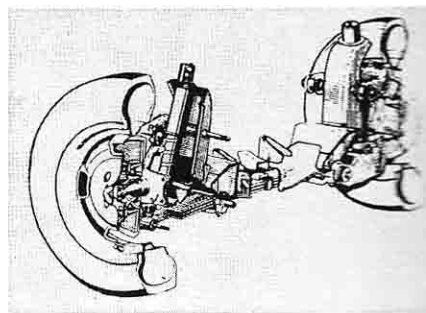
As a compartment to get fresh air in and exhaust out, that bad old stale stuff, Opel has no one even close. VWs and Americas are hot houses by comparison. Dual rotary air ducts are located in the center of the dash and they direct a refreshing gale into the driver's face if he chooses. This is a fine point most manufacturers miss: you can have hundreds of cubic-feet-per-minute blasting into a car but a human being's temperature sensing device is his face, people don't fan their knees. If your face is cool, it goes a long way toward making the rest of you feel comfortable. Now, if Opel can just get the heater to defrost the rear window with the same efficiency as the rest of the ventilation system, they'll have it all. That they now offer an optional (standard in VW) electrically heated back light did not go unnoticed.

Opel front suspension is a bit of a surprise since it incorporates a transverse-leaf spring arrangement, reviving memories of Ford's of bygone days. In back, it seems more like big brother Buick with a coil-sprung live axle with a Panhard rod. On previous non-rallye-sport models, this setup provided choppiness, and severe lean in corners but this is no longer true. Although the ride is firm, it is by no means unpleasant, ironing out cobbled streets in good fashion. With all the weight of the 1.9-liter engine up front, the car expectedly understeered—a condition that is sometimes handy in losing speed in a hurry, yet unnerving at times, too. On very tight turns the rear wheels can be brought off the pavement slightly with full power in low gear. Our 2-door came equipped with Uniroyal Englebert 155 x 13 tires and these simply are not the answer. Michelins would probably be just dandy. Another reason for them besides pure handling is that the 9.37-inch diameter disc brakes front and 7.87-inch drum rear tend to be touchy on hard stops—156 feet from 60 mph is not the greatest.

Now that VW has Porsche suspension in the rear it is doubtful that the standard Opel 2-door could stay with it in the esses. And, surely, the Opel probably doesn't have the pure space utilization of the Austin America. But it is a comfortable car to ride in, it is fantastically well detailed, it has decent road feel and it goes like hell. As one passing random reflection about GM's current revival of a domestic small car, one wonders how the devil Chevy will beat its inhouse rival, Opel. With all the extra stuff, vinyl roof, beautiful brown interior, and matching carpets, radio, white walls and the automatic; on a completely loaded Opel the tab is \$2424. That's going to be tough to beat on the showroom floor and especially out on the street—that's where it's happening.

/MT

In these days of coil springs it seems strange to see a 3-leaf transverse spring up front, but there's one up there as big as life. It works amazingly well and doesn't provide a bad ride.



ACCELERATION standing quarter-mile (2 aboard)

	seconds					
	0	5	10	15	20	25
Opel auto				60	18.9	
VW auto					21.43	60
Austin America auto					60	20.6
Camaro 2-speed auto (6)				60	18.7	

## SPECIFICATIONS

**Engine:** 4 cyl. in-line, cam-in-head. **Bore & Stroke:** 3.66 x 2.75. **Displacement:** 115.8 cu. in. **Hp:** 102 @ 5200 rpm. **Torque:** 121 lbs.-ft. @ 3600 rpm. **Compression Ratio:** 9:1. **Carburetion:** 1 2-barrel downdraft. **Transmission:** 3-speed automatic; low 2.40:1, second 1.48:1, drive 1.00:1. **Final Drive Ratio:** 3.18. **Steering Type:** rack & pinion. **Ratio:** NA. **Turning Diameter:** 33.5 ft. curb-to-curb. **Tires:** 155 x 13. **Brakes:** Disc, front; drum, rear. Effective area 32.8 sq. in. **Suspension:** Front: Transverse 3-leaf spring. Rear: Link and track bar with coil springs. **Body/Frame Construction:** All Steel Unit. **Dimensions, Weights, Capacities:** Overall Length: 164.6 ins. Overall Width: 61.9 ins. Overall Height: 55.3 ins. Wheelbase: 95.1 ins. Front Track: 49.2 ins. Rear Track: 50.2 ins. Curb Weight: 2043 lbs. Fuel Capacity: 10.6 gals. Oil Capacity: 2.9 qts. **Price:** \$2424.44.

## PERFORMANCE

### Acceleration: (2 aboard)

0-30 mph	5.3 secs.
0-45 mph	8.8 secs.
0-60 mph	14.7 secs.
0-75 mph	24.9 secs.

**Standing Start** ¼-mile .....70 mph, 18.9 secs.

### Passing Speeds: (2-3 gear)

40-60 mph	7.9 secs. 577 ft.
50-70 mph	10.7 secs. 941 ft.

### Stopping Distances:

from 30 mph	28 ft.
from 60 mph	156 ft.

### Mileage:

Range: 18-23 mpg; Average: 20.5 mpg.