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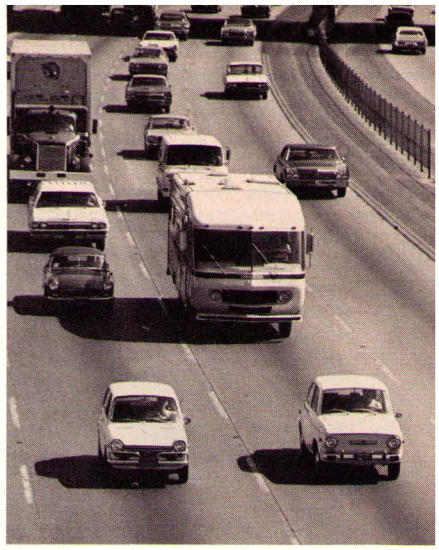
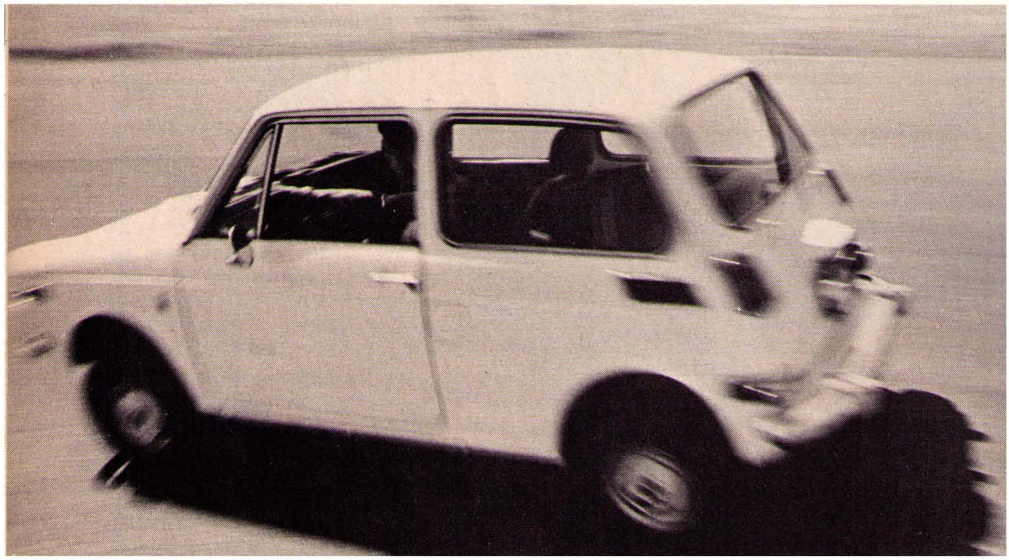
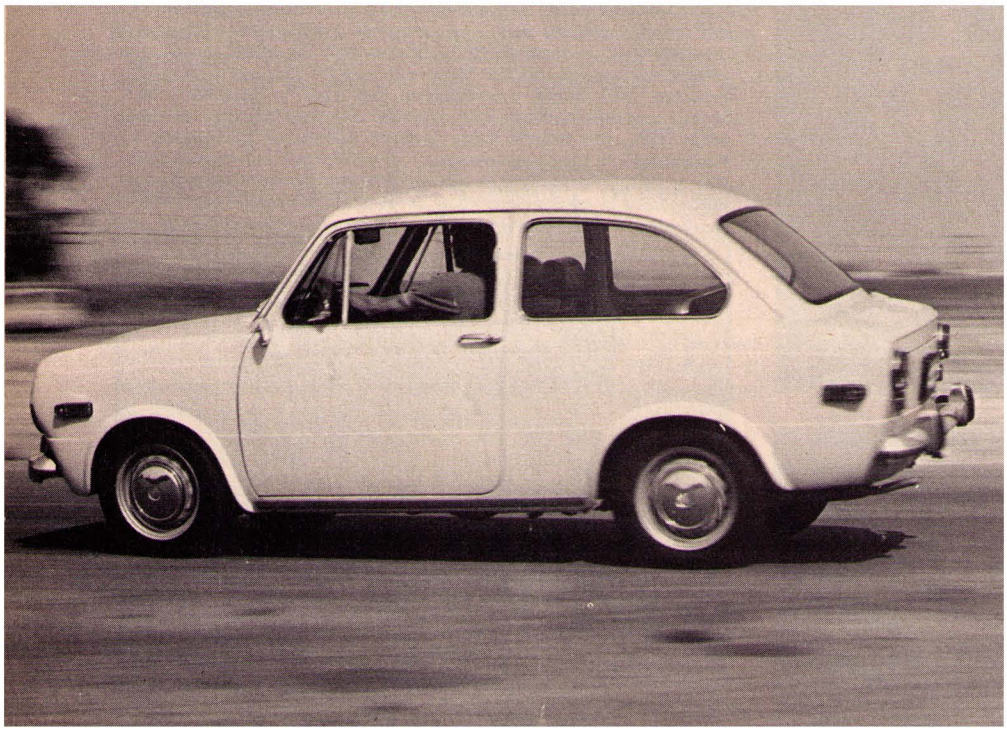


The Honda 600 and Fiat 850. Two sedans that answer a question Detroit hasn't asked yet. ***By Chuck Koch.***



Above: With a 2-cylinder air-cooled engine displacing 598cc, the Honda 600 delivered excellent fuel economy and surprisingly good performance. Below: The Fiat 850, although its performance figures were better than the Japanese competition, also outpriced its Eastern rival by $300.



Urban travel is perhaps the most difficult problem in modern society. With population figures spiraling ever upwards, there has been a proportionate increase in the number of automobiles inhabiting our roads, and whereas it once took only a few minutes to commute from the suburbs to the city, it can now consume more than an hour for the same distance.

There is no surprise at the public outcry against overcrowded streets but, no one is willing to give up his personal means of transportation to help assuage the problem. The solution, therefore, has fallen to the automobile manufacturers and they have responded by offering the public smaller cars. First it was the compacts of the '60s, then a new breed arrived on the scene, the sub-compact. Now, no sooner than we see the Vega and Pinto, foreign auto makers offer a different species; the mini-car, pocket vehicle which may be the ultimate answer. Small vehicles designed for short distance travel with minimum space on crowded highways.

The Honda 600 and Fiat 850 sedans are perfect examples of this new genre of the automobile. They are both extremely small, very maneuverable in all traffic situations, easy to maintain and require gasoline refills only at infrequent intervals. But, the new American sub-compacts can also claim size, ease of maintenance and economy as virtues. However, what they cannot claim, and what is so appealing about the Fiat and Honda, is a price tag under $1,600.

Although the two cars share a common goal, to get you from point A to point B with a minimum of fuss and frustration, along with similar specifications like curb weights less than 1,550 pounds, wheelbases in the 79 inch range, unitized bodies, 32-foot turning diameters and almost equal performance figures, the Honda and Fiat are very dissimilar.

The Honda, for example, has a 598cc 2-cylinder air-cooled engine which looks a lot like a motorcycle engine until you discover a differential and cooling fan not included on the 2-wheelers. It is a front-engine, front-wheel-drive unit which produces 36 hp at 6,000 rpm and

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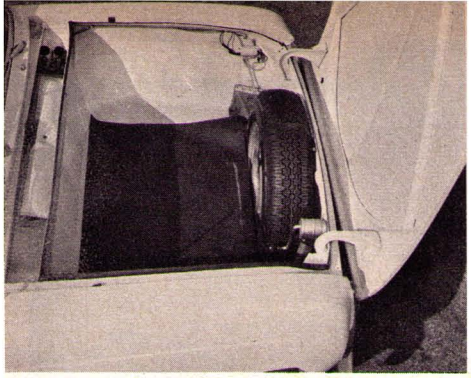
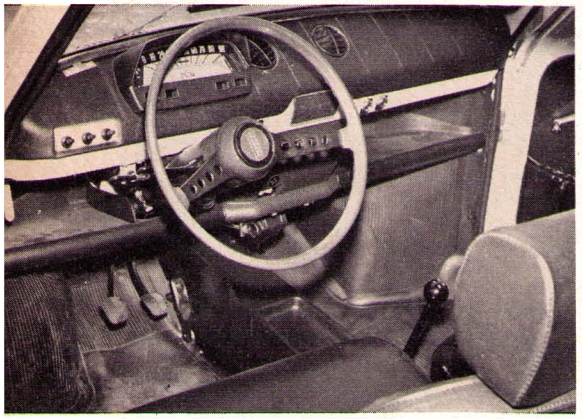
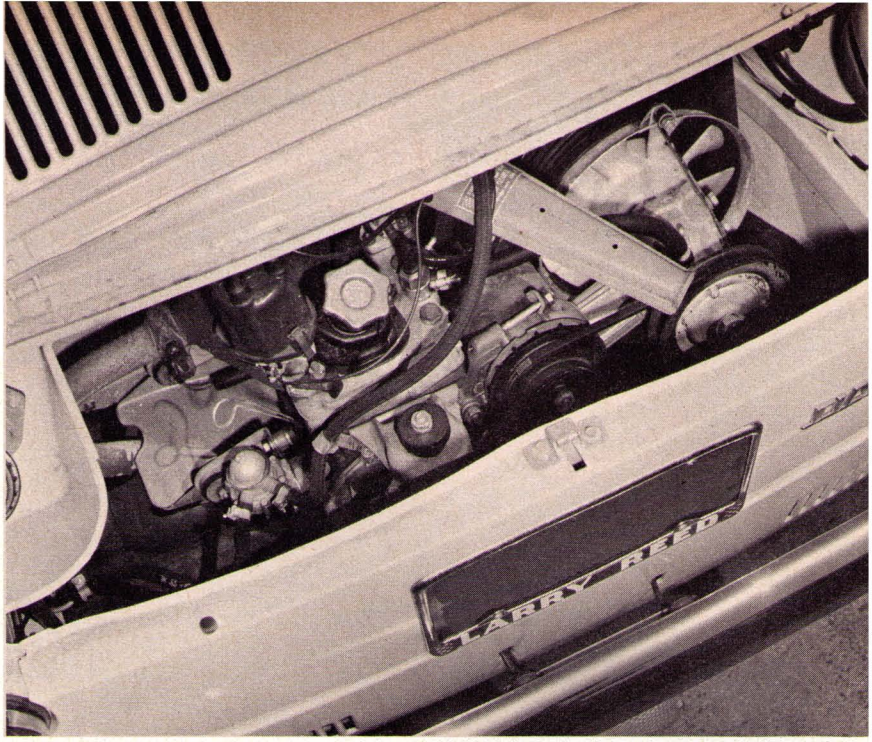


FIAT 850





Top left: For a car with small exterior dimensions, Fiat featured good-sized trunk space. Above: Fiat's 843cc 4-cylinder engine produces 42 hp at 5,300 rpm and while not fast, the 29.4 mpg fuel consumption figure is a welcomed consideration in today's tight economy. Left: Although by means roomy, interior is comfortable with a simple dashboard design.

31.8 lbs-ft of torque at 4,000 rpm. The Honda has a 4-speed all synchromesh transmission and a 6.23:1 final drive ratio. The front suspension is independent through MacPherson struts, coil springs, and tube shocks. Rear suspension components are a beam axle, transversely-mounted leaf springs, and tube shock absorbers. The Honda has front disc brakes and rear drums while tire size is 5.20-10.

Fiat, on the other hand, has taken a different engineering tack to fulfill the needs of commuters. The 850 sedan, like its sporty cousin the 850 Spyder, incorporates a rear-engine, rear-wheel-drive set up. The Fiat's 4-cylinder engine displaces 843cc, produces 42 hp at 5,300 rpm and 44 lbs-ft of torque at 3,600 revs. Fiat suspension also differs from Honda's in that it is independent both front and rear. Upper swinging arms, semi-elliptic springs and a stabilizer bar compose the front suspension while hydraulic shocks, swinging arms and a stabilizer bar are used in the rear. The braking system is 4-wheel drums with 5.50-12 tires.

With the placement of the engines and drive-units both cars have, they do not suffer from the driveshaft mound syndrome, therefore, giving occupants a little more room. Actually, though, the room is there anyway, unless you sit in the back seat for extended trips.

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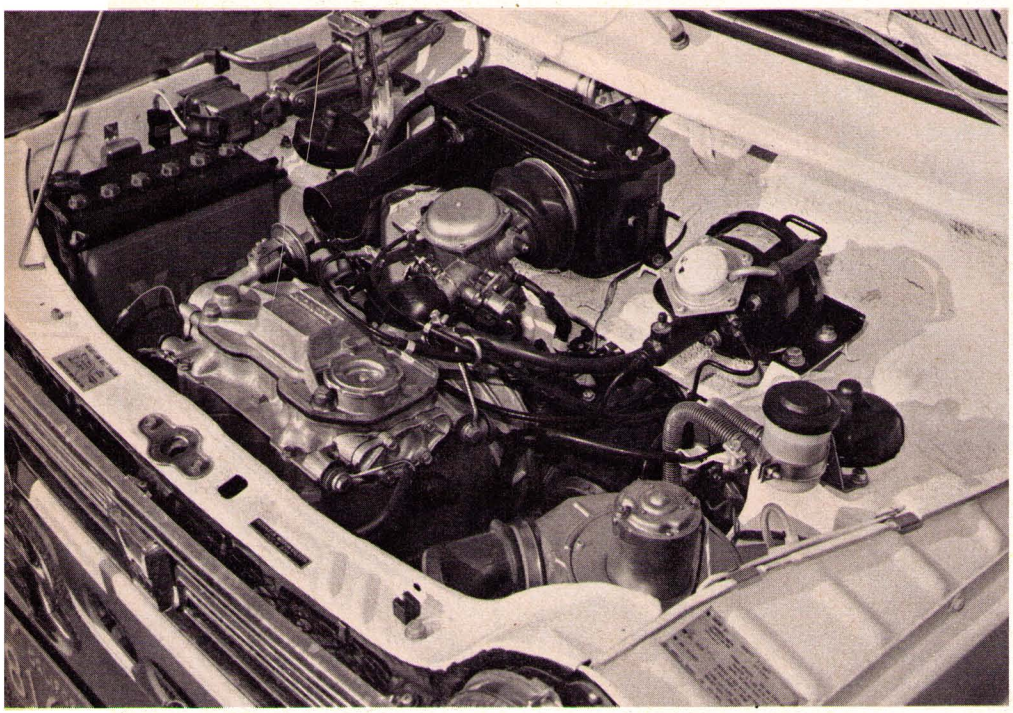

HONDA 600

Above: Two-cylinder Honda 600 engine looks a lot like a motorcycle power plant until you discover a differential and cooling fan attached. Top right: As in the Fiat, the Honda's interior is simple and direct. Strange positioning of shift lever does cause problems during gear changes. Right: Trunk space in the Honda is sadly lacking with a smallish cubicle sufficing.

In most small cars the occupants have a feeling that their feet are riding on the front bumper. Not so in the Fiat or Honda. Maybe it's the high seating position of the Fiat or the seemingly endless expanse of glass in the Honda. There is ample arm and leg room for front seat occupants in both cars and the driver is afforded an excellent view of the road in all directions. It even gets a little scary when you see this big Cadillac coming at you from the rear when before you couldn't see that portion of the road from inside a Detroit automobile.

Due to the overall size of the Honda and Fiat, some of the normal Detroit creature comforts are not possible. The seats in the Honda are only comfortable up to a point and the strange positioning of the gear shift lever, up high under the dashboard, combined with its close placement to the driver allows you to pull a quick speed shift with your kneecap. Also, everytime the transmission is shifted a rather loud and disconcerting "gerchunk" issues from the unit. The Fiat has its interior failings also. They center mainly around the operating controls of the car. The clutch, brake, and gas pedals are located too close to each other. This often leads to the error of stepping on both the brake and accelerator at the same time. If you are lucky you'll avoid wedging your foot between the two pedals. The shift lever is long, which cuts down on reach distances, but you get the feeling during shifts that your calf is going into second gear. Other than those quirks, the Honda and Fiat have good interior design.

Instrument packages in both cars are very simplistic and extremely easy to read. In the Fiat, one huge dial suffices for the gauge cluster and includes the speedometer with calibrations showing shift points, a gas gauge and fuel reserve indicator, idiot lights for temperature, oil pressure, and amperage, along with turn signal lights, high beam indicator, and so forth. The Honda has two round dials containing necessary instruments placed directly behind the steering wheel. On the right is the speedometer which also has shift point indicators while the left dial contains the fuel gauge, battery discharge warning and lights for turn signals, high beams and parking brakes. Regrettably, no oil pressure light is included. All operating controls on both cars are extremely easy to reach and the all-too-normal confusion of too many buttons does not exist in these vehicles.

When you get down to a discussion on the styling of the Fiat and Honda, you have to bear in mind the old cliche that "function is beauty." If that statement is true, then these two cars must be the most beautiful machines ever produced, for their design is purely functional: basic box. There are no huge banks of headlights, overbearing grille work or tons of shining chrome. These fixtures would only be superfluous to the cars' basic job, that of commuting in traffic. The Honda resembles a dehydrated station wagon with a high – 52.4-inch – roofline which ex-

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FIAT 850

SPECIFICATIONS

Engine	4-cyl. in-line OHV
Bore & Stroke	2.56 x 2.50 inches
Displacement	51.4 cu. in.
Hp	42 @ 5,300 rpm.
Torque	44 lbs.-ft. @ 3,600 rpm.
Compression Ratio	8.8:1
Carburetion	1 dual throat
Transmission	4-speed all synchro
Final Drive Ratio	4.62:1
Steering Type	worm & sector
Ratio	13:1
Turning Diameter	31.5 ft. curb-to-curb, 3.5 turns, lock-to-lock.
Tires	5.50-12
Brakes	4-wheel drums
Front Suspension	Independent, upper swinging arms, semi-elliptic springs, stabilizer bar
Rear Suspension	Independent, swinging arms, stabilizer bar, hydraulic shocks
Body/Frame Construction	Unitized
Overall Length	140.7 ins.
Overall Width	56.1 ins.
Overall Height	54.5 ins
Wheelbase	79.8 ins.
Front Track	45.2 ins.
Rear Track	47.5 ins.
Curb Weight	1521 lbs.
Fuel Capacity	8.0 gals.
Oil Capacity	3.75 qts.

PERFORMANCE

Acceleration: (2 aboard)	
0-30 mph	6.0 secs.
0-45 mph	13.1 secs.
0-60 mph	22.0 secs.
Standing Start ¼-mile	
From 59.72 mph	21.6 secs.
Passing Speeds:	
40-60 mph	15.7 secs. ft.
Speeds in Gears:	
1st	22 mph @ 5,400 rpm
2nd	39 mph @ 5,400 rpm
3rd	57 mph @ 5,400 rpm
4th	60 mph @ 4,000 rpm
MPH per 1000 RPM	15.0 mph
Stopping distances	
From 30 mph	27.8 ft.
From 60 mph	125.2 ft.
Mileage	
Range	28-32.1 mpg
Average	29.4 mpg

HONDA 600

SPECIFICATIONS

Engine	OHC, 2 cyl. air cooled
Bore & Stroke	2.91 x 2.74 in.
Displacement	36.5 cu. in.
Hp	36 (SAE) @ 6,000 rpm.
Torque	31.8 (SAE) lbs.-ft. @ 4,000 rpm.
Compression Ratio	8.5:1
Carburetion	Keihin variable venturi.
Transmission	4-speed all synchro
Final Drive Ratio	6.23:1
Steering Type	rack & pinion
Ratio	17.4:1
Turning Diameter	32.2 ft. curb-to-curb, 3.1 turns, lock-to-lock.
Tires	Bridgestone 5.20-10
Brakes	Front disc/rear drum 7.1 disc diameter
Suspension	
Front	Independent MacPherson struts, coil springs, tube shocks
Rear	Beam axle, leaf spring, tube shocks
Body/Frame Construction	Unit Steel
Dimensions, Weights, Capacities	
Overall Length	125.0 in.
Overall Width	52.5 ins.
Overall Height	52.4 ins.
Wheelbase	78.7 ins.
Front Track	46.1 ins.
Rear Track	44.3 ins.
Curb Weight	1,355 lbs.
Fuel Capacity	6.9 gals.
Oil Capacity	3.2 qts.

PERFORMANCE

Acceleration (2 aboard)	
0-30 mph	5.8 secs.
0-45 mph	13.3 secs.
0-60 mph	22.2 secs.
Standing Start ¼-mile	
59.31 mph	21.8 secs
Passing Speeds	
40-60 mph	20.3 secs. ft.
Speeds in Gears	
1st	22 mph @ 6,000 rpm
2nd	36 mph @ 6,000 rpm
3rd	55 mph @ 6,000 rpm
4th	77 mph @ 6,000 rpm
MPH per 1000 RPM	12.8 mpm
Stopping Distances	
From 30 mph	29.0 ft.
From 60 mph	131.3 ft.
Mileage	
Range	35-42 mpg
Average	38.2 mpg

tends back until a rather abrupt slash sends it plummeting to rear bumper level. The only hint of style in the car is a windshield slanted a "rakish" 31 degrees from the vertical position. This, combined with a slightly lowered front end profile, lends the honest-to-goodness illusion of speed. Although originating in the fatherland of automobile styling, the Fiat has only a sloping rear window, suggestive of a fastback GT car, and flared wheel wells as concessions to modern design while the remainder of the car sticks to the functional box look.

Speed is also a duty of function. While a figure of 150 mph may sound impressive, on a Group 7 race car it would mean nothing. That is the way you must look at the Honda and Fiat. They are not fast cars, but they are not meant to be. Even with this in mind, it is a good feeling to know that both cars are quite comfortable when traveling at freeway speeds. Both can handle a smooth 70 mph without difficulty and it is possible to coax them above 75 mph on occasion. Their only downfall lies in inclement weather. The slightest breeze, coupled with the cars' light weight, narrow track, and short wheelbase, causes both cars, particularly the Honda, to wander in traffic lanes. It is nothing serious, but you do get an insecure feeling when the wind blows. Despite this slight failing, the ride qualities in both cars are good, maybe a little rough, but stable under normal conditions.

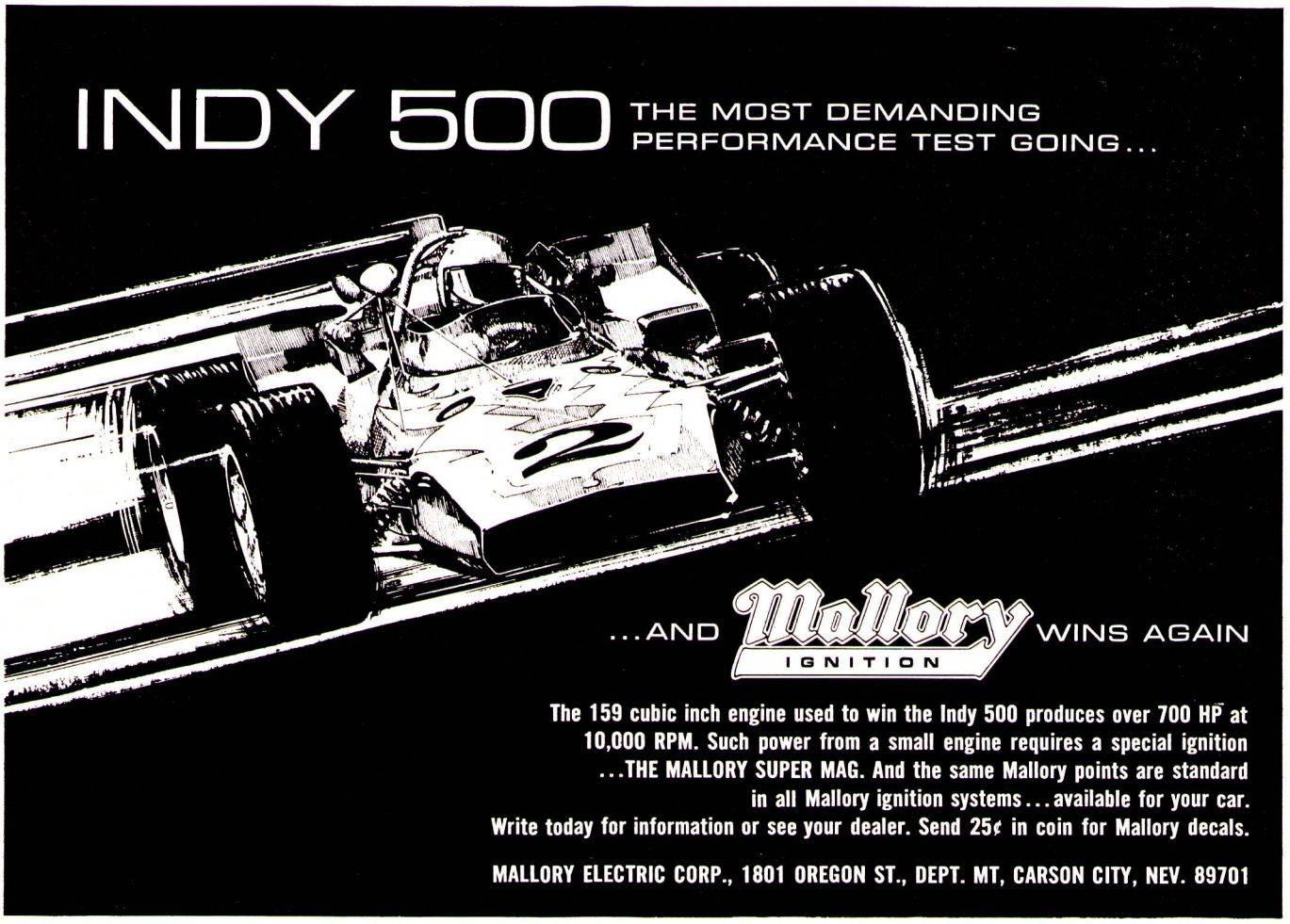
Performance figures for the cars are, of course, not at all spectacular. In fact, it almost seems inappropriate to quote them, but they do allow some insight into the machines and their functions.

Surprisingly, the Fiat and Honda, despite their small displacements and prodigious lack of power, show a fair amount of pep on the track. In acceleration runs the Honda, with a much lower drive ratio, was faster to 30 mph, 5.8 seconds to the Fiat's 6.0. Once above this speed, however, the Fiat came on to record a 13.1 time to 45 mph and 22.0 to 60 mph while the Honda droned to times of 13.3 and 22.2 at the same speeds. In the quarter mile runs, the Fiat got down to 21.6 seconds and 59.72 mph with the Honda registering a 21.8 e.t. at 59.31 mph. Passing speed honors also went to the Fiat with 15.7 seconds from 40 to 60 mph while the Honda required 20.3. Sure, you're not going to suffer whiplash everytime the accelerator is depressed, but you will get mileage figures of 29 mpg for the Fiat and an astonishing 38 mpg average by the Honda. What more can a commuter car do?

Handling characteristics are as dissimilar as the cars, with different engine placements and drive units this is only to be expected. The Honda, with its front-wheel-drive and beam axle rear suspension, exhibits decided understeer when cornering, a normal reaction for a power train of this sort. Under hard cornering the front wheels just plow across the turn while the inside rear wheel elevates itself a good 4 inches off the road surface. The rear-engine Fiat, on the other hand, enters a corner with initial understeer and as you begin to accelerate out of the turn, final oversteer is encountered. Both cars had body roll during cornering, but it is not the sort to be upsetting although the driver feels he must exert a certain amount of body english in order to negotiate the turn.

Steering response on each car is fairly good with the Fiat feeling a little front heavy despite its engine location. It has a 13:1 ratio in the worm and sector steering unit with 3.5 turns lock-to-lock at the wheel. The Honda's rack and pinion steering claims a 17.4:1 ratio and 3.1 turns lock-to-lock. One disappointing, and unexplained fact is the width of both cars' turning circles; 32.2 feet for the Honda and 31.5 feet by the Fiat. Somehow compared to the VW's 36 feet, this doesn't seem plausible for automobiles with such short wheelbases.

After driving the Honda and Fiat for two weeks in Los Angeles traffic and after seeing what they could do when really pushed, we came away thinking that these two cars fulfill their function beautifully. The Fiat 850 and Honda 600 sedans have everything a commuter could possibly want, small size, ease of driving, low maintenance cost, and an inexpensive list price. When you swoop



into the ultra-low-buck class, even price differences of a hundred dollars are sufficiently significant to bracket vehicles in different classes so you can't compare the Honda and Fiat head-to-head. By logic of its lower price, Honda is a better investment. By ride and space the Fiat is more sensible, if that enters into it at all. The only other problem is convincing those drivers of big cars that this is the solution to our immediate traffic problems. Besides, in their way, they bring back some of the fun of driving we've crowded out of our lives. /MT

CERV II

continued

converters at their 2,500 rpm stall speed.

When I released the brake CERV II shot away, straight and smooth without a chirp from the 10.50x15 Firestones. Car speed climbed, scenery streamed by the quivering windscreen, as the engine revs moved up to 3,500, then roared even faster to 6,000, then the 6,500 rpm rev limit. With spectacular ease and indifferent driver skill this astonishing car had rocketed from rest to 100 mph in a scant handful of seconds. No matter what the throttle position it steered easily, tracking with precision and stability. As I'd expected, CERV II was and is something quite new in high-performance cars.

Back at the Test Garage, we took some lingering last looks at this muscular hunk of machinery. Zora mused about its present and future: "I am sorry you could not try it with the newer tires we just received, with wider ones at the rear. But the chassis is not designed to take today's very wide tires. We had no idea then how far this trend would go.

"In this car," Zora continued, "we could use the 427 engine before others could go that large. Today, a similar car by comparison would need 800 horsepower, with modern tires, of course. I think before we send CERV II to a museum we will use it for a few more tests . . ." As we walked out of the Test Garage we passed another mid-engine two-seater, a silver coupe with louvers in the back, the experimental Corvette that made a surprise appearance at last April's New York Show. Could there be some evolutionary link between that and CERV II? Since both have the same parents, Zora Arkus-Duntov and the Chevrolet Division, it would be hard to deny a relationship. These were our thoughts as the green door swung closed on a most illuminating experience. /MT

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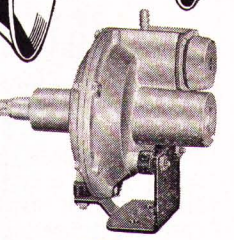

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