



EDITOR BOB CROSSLEY drove Honda N600 on Sayama track and found "Japanese Flea" an agile performer

Handy Little Honda

Japan's motorcycle king has hooked a new air-cooled engine to a front-wheel drive for people who think a Volkswagen is too big

By ROBERT P. CROSSLEY, Editor

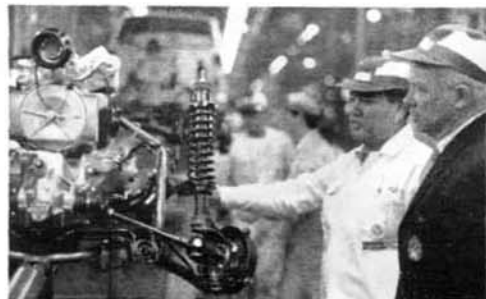
IT WAS JUST GETTING DARK. The November air was crisp for Japan, and nobody was swimming in the huge, free-form pool in front of the employees' recreation building. An electronic carillon was pealing *O Susanna!*—why, I'll never know. All was right in the revved-up world of Mr. Soichiro Honda.

I had just driven the motorcycle wiz-

ard's latest brainchild, a tiny automobile called the N600 which he is putting together at Sayama, 50 miles west of Tokyo, and into which he hopes to pack Americans who want cheap transportation but are reluctant to take it on two wheels. Admittedly this is a gamble. The car that the N600 most closely resembles is the Austin Mini. The British Motor Co. doesn't even try to sell

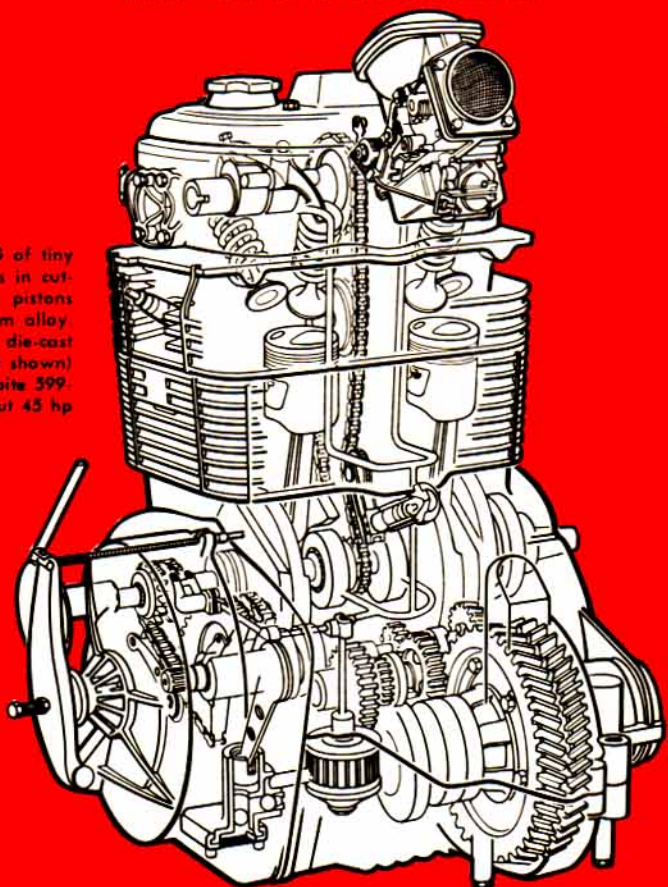
45-HP ENGINE in the N600 enabled Crossley to accelerate from 0 to 80 km/h (50 mph) in just 15 seconds

N600 has independent suspension in the front only. With Crossley is plant manager Shigeru Shinomiya



REAR VIEW OF HONDA 600 ENGINE

SOPHISTICATED ENGINEERING of tiny front-wheel-drive Honda shows in cut-away at right. Block, head, pistons and crankcase are of aluminum alloy. Cast-iron cylinder sleeves are die-cast into block. Air-cooling fan (not shown) mounts on back of motor. Despite 599-cc displacement, engine puts out 45 hp



it in this country. And Fiat stopped importing its rear-engined mini-car, the 600D, this year. But Mr. H. has gambled before. No one thought you could sell a million lightweight motorcycles in the United States either. The Honda strategy is to look for a market no one is serving, then move in on it. He would rather dominate whatever market he can create for mini cars than pick up strudel crumbs from the Volkswagen table.

It wouldn't be fair—or accurate—to call the N600 a four-wheel motorbike, although it brings to mini-car design much of the sophistication that enabled Honda to revolutionize the two-wheel business. Its air-cooled, two-cylinder, four-stroke, single-overhead-cam, hemihead engine, mounted transverse

ly and hooked to a front-wheel drive, is a bored-out version of a brand-new motor introduced when the car made its debut in Japan a year ago as the N360. Except for the more powerful engine and modifications to satisfy U.S. safety laws (because it's under 800 cc it doesn't have to have exhaust-emission control), the N600 is essentially the same as the N360, which car-hungry Japanese are grabbing up at the rate of 20,000 a month.

Even with the "big" engine, the N600 is the smallest car any manufacturer has ever put a real push behind in this country. The first ones should be showing up for around \$1275 at selected motorcycle dealers and foreign-car outlets this summer.

Too small to be labeled a "Japanese

HOW THE N600 COMPARES WITH FIAT 600D AND AUSTIN MINI

	Fiat 600D	Austin Mini	Honda N600
Cylinders	4	4	2
Displacement	767 cc	848 cc	599 cc
Horsepower	32 @ 4800 rpm	37.5 @ 5500 rpm	45 @ 7000 rpm
Cooling	Water	Water	Air
Drive	Rear	Front	Front
Main bearings	3	3	4
Block, head	Cast iron	Cast iron	Aluminum alloy
Compression ratio	7.5:1	8.3:1	8.5:1
Top speed	68.4 mph	73 mph	80 mph
Acceleration (1/4 mile)	26.7 sec.	23.6 sec.	19.7 sec.
Power/weight ratio	42.3 lbs. per hp	32.9 lbs. per hp	27 lbs. per hp
Wheelbase	78.74 in.	80.16 in.	78.8 in.
Length	129.72 in.	120.25 in.	122.1 in.
Width	54.33 in.	55.5 in.	51 in.
Height	55.31 in.	53 in.	52.2 in.
Weight	1356 lbs.	1230 lbs.	1213 lbs.
U.S. price (POE)	\$1237*	(not sold in U.S.)	\$1275

*Price for remaining 1967 models.

Beetle," the Honda might be called a Japanese Flea. Its literature says it is "conceived as a dual-purpose family saloon car." They may buy that in Tokyo, but if I were starting off for Yellowstone with the wife and kids I'd take my '53 Hudson.

But if the Flea is tiny, it's also agile. The N600 is anything but sedentary. The track at Sayama is short, and daylight was almost gone, so I didn't get to really "test" the N600 the way Dan Gurney wrung out the AMX for this month's *PM*. But I did get the feel of it and I'll give it a vote of confidence.

I didn't have a stopwatch, and the speedometer registered kilometers per hour, but I got a reading of 0 to 80 km/h (50 mph) in 15 seconds. Honda's official claim is 1/4-mile in 19.7 seconds. That's not bad for 45 hp.

The N600 is considerably more nimble than either the Fiat 600 or the Austin Mini. Both have larger engines—767 and 848 cc, respectively, to Honda's 599—but the Fiat takes 24 seconds to get up to 50 mph, the Austin, 18.3. As we said, we unofficially got the Honda up to that in 15 seconds. Honda claims a top speed "over 80 mph." The Austin's top is 73, the Fiat's 68.4.

To achieve its low weight-to-horsepower ratio—27 pounds against 32.9 for the Austin and 42.3 for the Fiat—the N600 gives up a little in size and

weight, but not enough to really hurt. Honda says it designed space into the N600, then placed the engine.

The N600 has independent suspension in front only, but its ride isn't bad, and the car wasn't hard to control when I drove it fairly fast over the test track's corrugated bumps.

In keeping with the Honda tradition of high engine speed, the N600 is turning 7000 RPM when it develops maximum power. Block, head, pistons and crankcase are made of aluminum alloy. Cast-iron cylinder sleeves are die-cast into the aluminum block.

The unitized body is of .9-mm steel —(Volkswagen's is .88-mm)—with front fenders and trunk lid made of tough ABS plastic. The whole body is dipped in a paint bath. After tests in Canada, the rustproofing formula was improved to provide greater protection against salt. The car was also tested in the Nevada desert.

The one we drove was white, the most popular color in Japan, but for export the N600 will also come in blue and scarlet. A long list of options includes reclining seats and an automatic transmission. The latter has a seven-position quadrant: P-R-N-D-3-2-1. The first four are for automatic driving; the last three permit manual shifting.

The Sayama factory, just three years

(Please turn to page 202)



Some people can't buy our hacksaw blades at any price.

But you don't have that problem. Your hardware dealer has plenty of sharp, long-lasting Nicholson hacks for you.

They come in six varieties—with flexible or hardened blades, armed with teeth that bite through any kind of metal.

Get a supply soon—and escape from dull, tedious metal cutting.

There's never a dull moment with

Nicholson

Nicholson File Co., Providence, R. I.



HANDY LITTLE HONDA

(Continued from page 90)

old, makes only automobiles—the N600 and N360, plus a few \$2000 S800 sports cars. According to our host, plant manager Shigeru Shinomiya, who had decorated his conference room with tiny American, Canadian and French flags in honor of his three foreign visitors, there is a big demand for S800s in Europe, but Honda is “too busy to make them.”

Honda makes its motorcycles in two other factories: little ones at Suzuka, big ones at Hamamatsu, motorcycle capital of the world, home also of Suzuki and Yamaha. Mr. Shinomiya said the Sayama plant is essentially a “laboratory,” and that if the N600 really takes off, production will be shifted to Suzuka. Sayama, though small by Detroit standards, is extremely modern and automated. Honda makes its own machine tools here for all of its factories, a fact of which the company is understandably proud.

Another thing it brags about is the youthfulness of the work force. Average age of Sayama's 4000 workers is 24. They may not all be hot-rodders, but it's obvious they like building cars. It's a cinch their morale didn't suffer when John Surtees drove Honda's 12-cylinder Formula I race car to victory in the Italian Grand Prix last fall.

With its tiny two cylinders, the N600 is no race car, but it goes faster than anything you can buy on four wheels for \$1275. If you want a car this small, this is a good one—fine for driving to work or to school, to supermarket or station. ★★

From PM's How-to-Do-It Library:

6 Easy-to-Build FUN BOATS

- SAUCY SHINGLE—Make this fast and rugged 3-point hydro from \$30 worth of materials.
 - POWER OR PEDAL WATER BIKE—Putt-putt or puff-puff at drop of your paddle wheels.
 - RIBLESS 14-FT. CANOE—It's fast, light and stable, just perfect for camping trips.
 - WATERBUG—The midget hand-cranked paddle wheeler that's perfect for your small fry.
 - FEATHERWEIGHT KAYAK—You carve it out of an 8-ft. block of foam, it's unsinkable.
 - PLATFORM BOAT—Plans for pontoons and a deck; base for any kind of floating fun.
- Construction details for all six of these fun boats are in PM's 32-page Booklet H102. For your copy send 50¢ to

Popular Mechanics Bureau of Information,
575 Lexington Ave., New York, N.Y. 10022