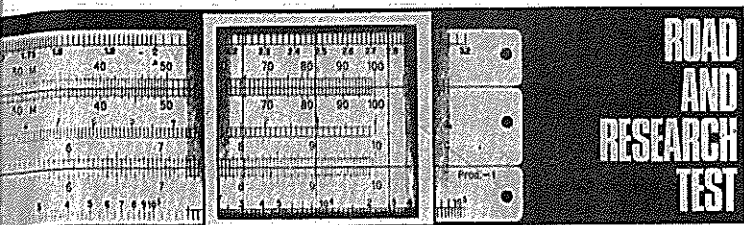


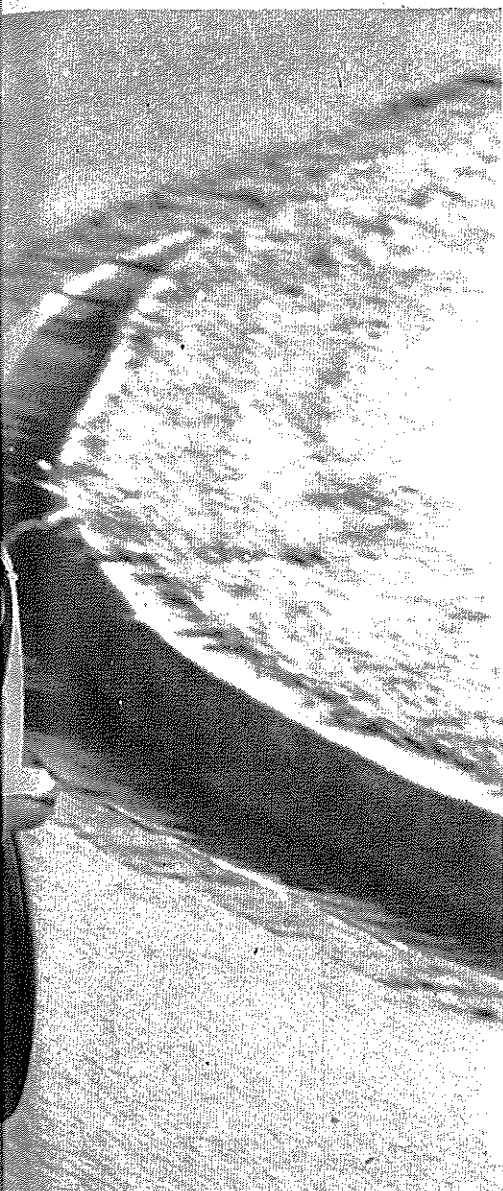
# HONDA



# HOTROD



**The 600 version of the Scamp has the performance and refinement which were missing from the 360, but it is still very noisy, according to Peter Robinson.**



**H**ONDA is the man who sets the pace in the Japanese motor industry. His company is only the fourth largest in Japan, but it is the most feared and respected and when you look at his fabulous success in the field of motor cycles you can understand why. Honda's entry into the Mini car world with the 360 Scamp didn't really worry people like BLMC or Fiat, who until then had been the largest manufacturers of very small cars. Fiat re-introduced the 500 in Australia, but on a world wide basis the Scamp didn't cause much alarm although its sales in Japan were staggering.

Not so with the 600 we have just tested. BLMC Australia has prepared comprehensive literature for its dealers pointing out all the advantages it believes the Mini has over the 600. Honda are still on the ground floor so far as sales of cars in Australia are concerned and it is a good month if 150 vehicles are sold. But if the 1300 model does come here next year, and I think it will, then this figure could be doubled, tripled or quadrupled inside six months as long as the price is right.

If the opposition is a little concerned at the 600 then it must be shaking at the knees at the thought of the 1300. At the moment the 360 is outselling the 600 two-to-one, probably because its low price gives it a big advantage over other small cars whereas the 600 at \$1699 (the 360 is \$1397) is selling against the Mini and the cheaper Datsun 1000s and the much bigger and more conventional Corolla, Torana and Cortina are only a couple of hundred dollars more. Even against such stiff opposition the 600 has plenty to offer.

It is more than just the 360 with a bigger engine. There have been a number of important changes made to increase the overall appeal of the car even if the general layout is much the same. Like the 360, the 600 uses an all-alloy vertical, air-cooled twin engine with chain-driven single overhead camshaft driven from the centre of the crankshaft, thus providing four

main bearings as well as ensuring enough space for cooling air between the cylinders. Also chain driven is the primary shaft of the gearbox so that the drive reduction is in two stages of 2.050 (before the clutch) and 3.037 as the conventional final drive ratio.

With a bore and stroke of 74.0 mm and 69.6 mm (compared with the 360's 62.5 mm and 57.8 mm) it has a capacity of 598.4 cc or 36.5 cubic inches (the 360's capacity is 354 cc) and produces 45 bhp at 7000 rpm and 40 ft. lb. of torque at 5500 rpm. On the 600 the fan belt pulley is on the offside of the engine outboard of the generator; there is a separate starter ring and the starter is mounted just below the jockey pulley. The 360 has a composite generator/starter and the fan pulley is on the nearside of the engine at the opposite end to the 600.

The 600 also has a servo for its front disc brakes (the 360 uses drums) and this has necessitated moving the spare wheel from its position above the engine to a tray under the boot where it sticks out a little, so a deeper bumper bar has been provided to cover the extension. On the outside there are the inevitable badge changes and the 600 has its own grille and a bit more chrome work. It is, if you know your Hondas, quite easy to distinguish from the 360.

Inside the changes are even more marked. The latest 600, known as the 600G for the early models were virtually identical to the 360 inside, has carpets, a console for the gearchange, circular instruments on an imitation wooden dashboard, a sporty looking steering wheel with leather steering wheel glove, and two sun visors. A very neat pushbutton radio is a dealer-installed option. The matching 100 mph speedometer and 8000 rpm tachometer with a smaller fuel gauge between them are easy to read and well lit. The speedometer also contains a trip meter.

The heater is a simple push-pull affair on the passenger side of a console which runs from just in front of the handbrake, between the seats, to the dashboard with the gearchange lever halfway between the floor and the dashboard. The direction of the air flow is controlled by moving a slide above the radio. The glove box is of a reasonable size and there is room for matches and cigarettes in tiny cubby holes at the base of the console and at the extreme right of the dashboard. A passenger's grab handle is incorporated in the padded dashboard surround and matching this on the

## IN BRIEF

Price: \$1699.  
Engine capacity: 598 c.c.  
Brake horsepower: 45.  
Max. speed: 79.2 mph.

Accel., 0-60: 19.5 sec.  
Consumption: 37.8 mpg.  
Insurance rating: 1.  
Warranty: 6/6000 miles.



# HONDA HOTROD

**continued**

**RIGHT (top):** The 600 has its own grille and a small hood bulge so you can tell it apart from the 360. Note neat radio aerial on the roof just above the door pillar.

**RIGHT (below):** Engine mountings have been changed since we last tested a Scamp. Outwardly it resembles the 360 very closely, but is much more powerful.

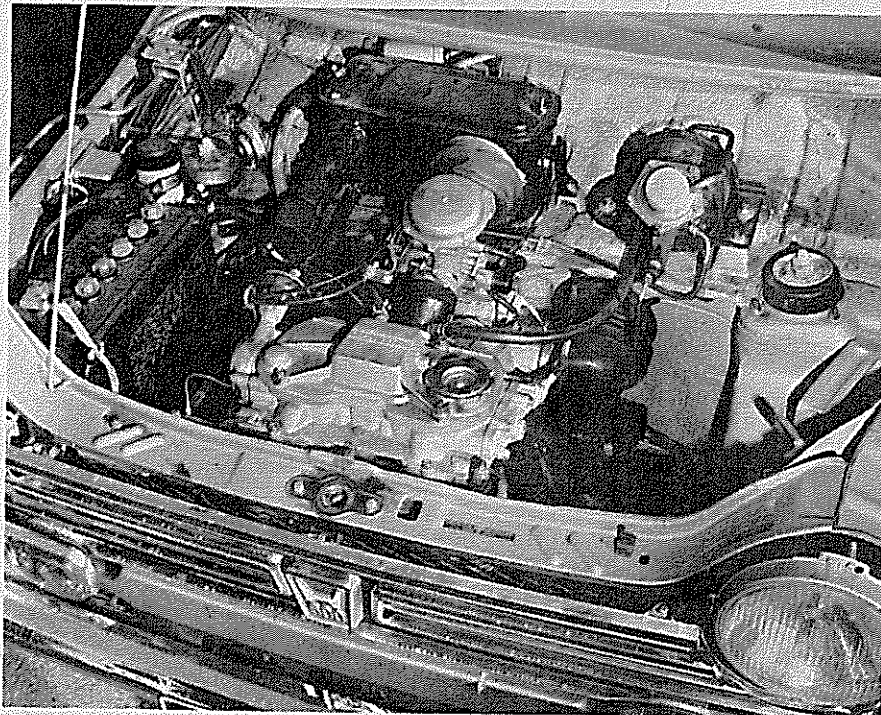
**OPPOSITE PAGE (left):** The interior fittings and finish belie the 600's low price. Carpets, sporty steering wheel, with glove, console and circular instruments, are all standard. The wheel is low-set and the pedals slightly offset to the left.

**OPPOSITE PAGE (right):** On the 600 the spare wheel is under the boot and sticks out a little, so the bumper bar has been extended to cover it. The boot lid is made of plastic.

driver's side is a small tray for coins. Fresh air ventilation is provided by crude but effective vents at shin level in front of the doors but it is a case of all or nothing for there is no way of adjusting the flow. The boot is tiny, but by undoing a couple of bolts the back seat squab can be taken out to increase the available space considerably.

Like the Mini the 600 is surprisingly roomy considering the car's overall dimensions. If anything, the Honda is smaller inside simply because it is much narrower than the BMC car. A tall driver will splay his legs apart because the steering wheel is low set—not because there is any great lack of leg room. I found the driving position more comfortable than the Mini as the steering wheel is at a more conventional angle. Both front seats are adjustable fore and aft and the passenger can stretch out quite well.

The seats are hard and don't look very comfortable, but apart from a lack of lateral support when cornering hard they are reasonable for anybody under six feet tall. Taller drivers will find they develop a few aches after an hour or so behind the wheel. The pedals are larger than those on the Mini and very slightly offset to the left so that the clutch is almost behind the console. With the car in top gear there isn't much room between the gear lever, the steering wheel and the driver's knee. Long, easy to use seat release levers

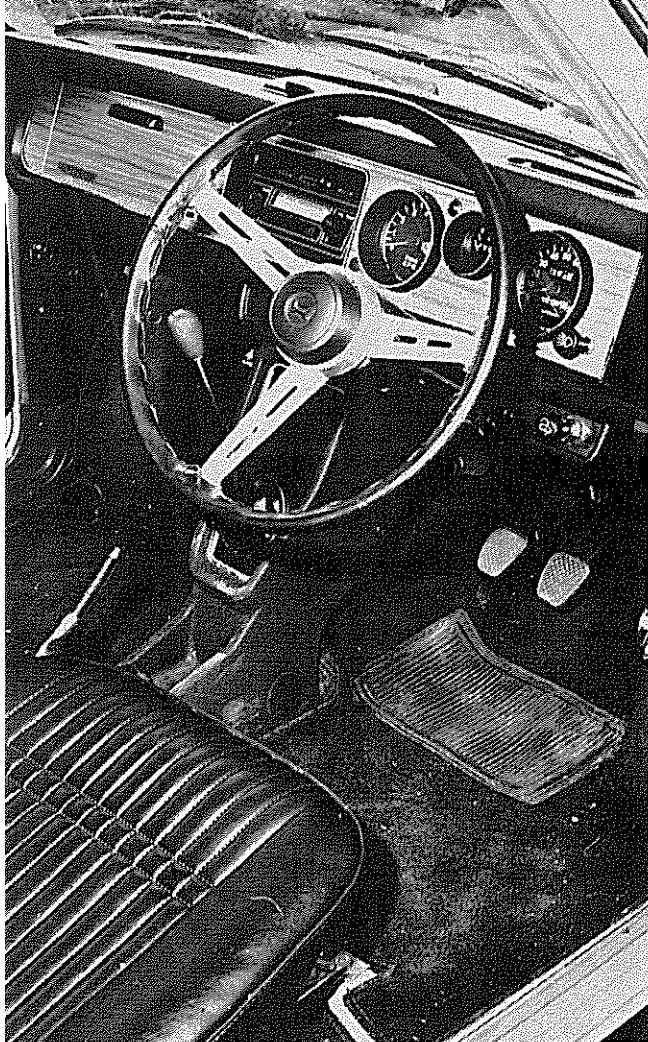


unlock and tilt forward the front seat backs for access to the rear compartment where there is sufficient accommodation for two persons, although legroom with the front seats right back is almost non-existent. A very firm suspension, MacPherson strut front and a leaf sprung dead axle rear, gives a hard, unforgiving ride, but there is no pitch and little body roll and the car is so small you can generally pick your way through the bumps. Finish inside is much improved over the 360 and compares more than favourably with the Mini.

On smooth roads the 600's road holding and handling are very good and

combine with the nippy acceleration and the small size of the car makes for very quick transport for town work and even on country trips. It is a simple and easy car to drive and park for the steering is very light and so is the gearchange. Pushing the car really hard through our favourite series of tight bends revealed the usual quirks of front wheel drive cars for there is a pronounced throttle steering effect particularly on wet roads.

Although the steering is high geared with only three turns lock-to-lock the understeer is such, with the power on, that it requires a good deal of lock to hold your line so that at high cor-



nering speeds it is not as responsive as first impressions indicate. Lift your foot from the accelerator in mid-corner and all the lock must be instantly unwound to prevent the nose tucking sharply into the corner or, on a wet road, the tail from sliding. As long as you remember to keep the right foot well down on the accelerator the car will go round almost any corner as quickly as a hydrolastic Mini.

I must point out that this steering characteristic is only apparent at high cornering speeds for at a lesser rate of knots the car is entirely predictable. Rough roads tend to throw the little car around, but it is very stable even at high speeds in cross winds. I was disappointed in the brakes, but apparently Honda Australia is experimenting with various servos and our test car wasn't typical of a normal 600. The stopping distances were longer than I expected for such a light car with disc brakes, but the worst feature was a feeling that the brakes just weren't going to stop the car. After a second or so with the right foot well down on the pedal you could feel them come into effect. But I had some disconcerting moments in traffic when it seemed we would be using the car in front as a means of stopping. For a car with only 600 cc the Honda has an amazing performance. It is only fractionally slower than the 1100 cc

Mini and much faster than the 360 as the following table clearly indicates:

	Honda 360	Honda 600	Mini 1100
0-30	5.2	6.8	4.6 sec.
0-40	8.5	11.1	8.3 sec.
0-50	13.3	19.5	12.4 sec.
0-60	10.5	36.7	18.5 sec.
1/4 mile	21.0	23.5	20.8 sec.
First	25	22	26 mph
Second	39	34	40 mph
Third	57	55	62 mph
Top speed	79.2	63.2	80.4mph

The redband on the tachometer starts at 6500 rpm, but the engine will go way beyond that although there is really no point to exceeding 7000 rpm and we used 6500-6600 rpm during our acceleration runs. Unfortunately, the noise level rises in proportion to the revs and the engine screams at 6500 rpm. In normal driving you tend to change up between 4000 rpm and 5000 rpm which is more restful, if slower. Once the engine warms up it idles smoothly at 1100 rpm, but for snatch-free motoring it needs to be kept above 3000 rpm. Although it will pull top gear at these speeds it is much happier from 4500 rpm.

If my memory serves me correctly the 360 engine is both smoother and less noisy. Flat out the car runs to 6300-6500 rpm on a flat road but given a slight downhill run it will go as high as 6700 rpm with the speedometer

needle hovering around the 87 mph mark or about a genuine 83 mph. Top gear cruising between 50-60 mph is quite peaceful. Fuel consumption depends largely on how the car is driven. If it is taken to the redline at every gear-change you can expect around 35 mpg; treated more gently it will give 45 mpg.

Like the 360, the 600 has a sump-mounted gearbox with four forward speeds engaged by dog clutches. (Like the Fiat 500) with no synchromesh provided. Through a series of rods and pivots, the gearchange is precise despite a dull clonk if the engine is moving quickly. The dogs do grate in very fast changes, but if you pause even for a fraction of a second in neutral the changes are silent. By double-declutching, especially on downward changes, there is no reason why an uninformed passenger could ever know the gearbox wasn't conventional.

The overall gearing is much higher than the 360's, so the speeds in gears are higher. Second is lowish, but the other ratios are well chosen with third direct and top an overdrive.

The 600 Scamp is a real threat to the supremacy of the Mini. It is better finished and equipped and performs and holds the road almost as well. Only a very high noise level prevents it eating right into the Mini market, but it is fun to drive and makes an ideal first car for the young motorist.



# AMS ROAD AND RESEARCH TEST No. 86

Make: Honda.  
Model: 600G Deluxe (Scamp).  
Options fitted:— Radio.  
Test mileage: In, 1905; Out, 2170.  
Total: 265 miles.

## SPECIFICATIONS

### ENGINE:

Type: Air-cooled, two-cylinder, single overhead camshaft, front mounted.  
Bore: 74.0 mm. 2.91 ins.  
Stroke: 69.6 mm. 2.74 ins.  
Capacity: 598.4 cc 36.5 cu. ins.  
Compression ratio: 8.5.  
Carburetion: One Keihin constant vacuum.  
Power output: 45 (gross) bhp at 7000 rpm. 40 ft. lb. Torque at 5000 rpm.

### SUSPENSION:

Front: Independent, MacPherson strut and lower links, integral telescopic shock absorbers.  
Rear: Dead beam axle located by leaf springs, telescopic shock absorbers.

### BRAKES: Power assisted, tandem master cylinders.

Front: Disc.  
Rear: Drum.

### STEERING:

Gear: Rack and pinion. Overall ratio: 17.4. Turns lock to lock: 3.1. Turning circle: 29 ft.

### TYRES:

Size: 5.20 S x 10. Make fitted: Firestone Deluxe Champion. Pressures: F. 26 psi, R. 22 psi.

### CHASSIS: Integral.

### DIMENSIONS:

Wheelbase: 6 ft. 6.7 in. Length: 10 ft. 2 in.  
Width: 4 ft. 3 in. Height: 4 ft. 4.4 in.  
Track, front: 45.3 in. Rear: 43.4 in.  
Ground clearance: 6.3 in. Weight: 1323 lb.  
Fuel tank capacity: 5.7 gallons.

## TRANSMISSION

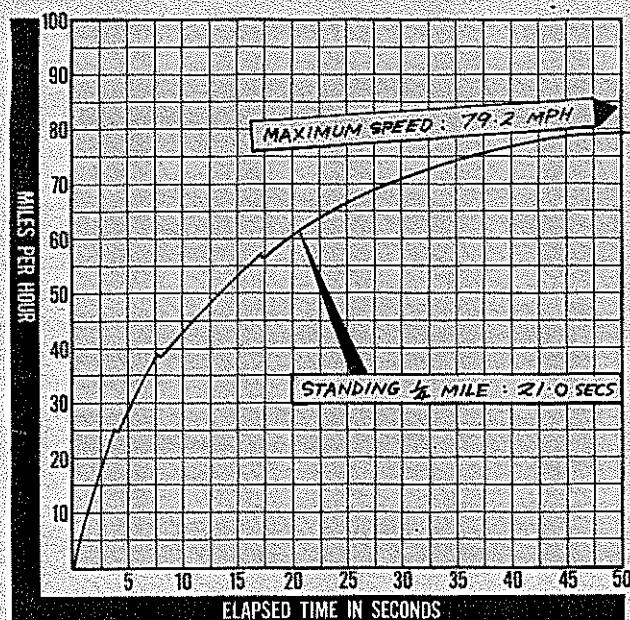
Type: Four-speed, two-shaft, engagement by dogclutch, console mounted lever.

Gear	Ratio	Overall	mph/ 1000 rpm	max speed at 7000 rpm
1st	2.529	15.746	4.00	28.00 mph
2nd	1.565	9.563	6.00	42.00 mph
3rd	1.000	6.226	8.75	61.25 mph
4th	0.714	4.443	12.40	86.80 mph
Rev	2.437	15.173		

Final drive ratio: 3.037. Primary reduction ratio: 2.050.  
Clutch: Single dry plate, diaphragm spring.

## TESTERS' CHECK LIST

Brakes: Fair.	Interior:
Steering: Good.	Visibility: Good.
Suspension:	Instruments: Excellent.
Ride: Good.	Storage space: Good.
Handling: Good.	Noise level: Fair.
Controls: Good.	Heating: Good.
Seats: Fair.	Ventilation: Good.
	Finish: Good.



## PERFORMANCE

### Maximum speeds in gears:

First: 25 mph (6500 rpm).  
Second: 39 mph (6500 rpm).  
Third: 57 mph (6500 rpm).  
Fourth: 79.2 mph (maximum speed).

### ACCELERATION:

0-30 mph: 5.2 secs. 0-50 mph: 13.3 secs.  
0-40 mph: 8.5 secs. 0-60 mph: 19.5 secs.

Standing quarter mile: 21.0.

Fuel consumption: 37.8 mpg.

## HOW THEY COMPARE

### FUEL CONSUMPTION

	25	30	35	40	45	50	55
Honda 600 (\$1699)				37.8			
Datsun 1000 Special (\$1745)			34.9				
Fiat 500 (\$1268)					49.8		
Fiat 850 (\$1782)			34.9				
Morris Mini-K (\$1669)			35.8				

### TOP SPEED

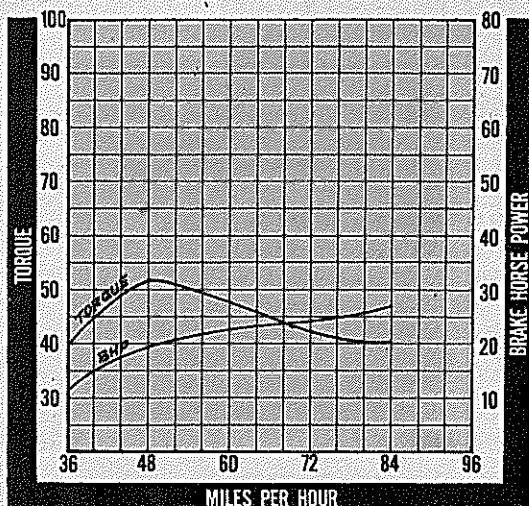
	55	60	65	70	75	80	85	90	95	100
Honda 600						79.2				
Datsun 1000 Special							82.8			
Fiat 500			63.8							
Fiat 850					75.0					
Morris Mini-K							80.4			

### ACCELERATION

	30	28	26	24	22	20	18	16	14	12	10
Honda 600							19.5				
Datsun 1000 Special								15.5			
Fiat 500											
Fiat 850							25.4				
Morris Mini-K										18.5	

### BRAKES Ten stops from 60 mph at 1 minute intervals.

	100	125	150	175	200	225	250 feet
1st							161 feet
2nd							174 feet
3rd							168 feet
4th							155 feet
5th							152 feet
6th							160 feet
7th							165 feet
8th							162 feet
9th							161 feet
10th							156 feet



### PERFECTUNE DYNAMOMETER TEST

#### SPEEDOMETER CORRECTIONS

Indicated	20	30	40	50	60	70	80	90
Actual	21	28	37	47	56	66	75	85

#### TACHOMETER CORRECTIONS

Indicated	1000	2000	3000	4000	5000	6000
Actual	1100	2000	3000	4000	5000	6000

Maximum front wheel bhp: 27 at 6770 engine rpm.

Maximum front wheel torque: 52 ft. lb. at 3870 engine rpm.

David Bennett comments: "A tiny engine which delivers far more power than was ever thought possible from only 600 cc until Honda came on the scene. Not as smooth or as quiet as the 360 version."