## Mel Nichols tests the latest from Japan and finds that...

# HAPPINESS IS A HONDA 1300!

THE NICEST thing about driving the Honda 1300 Coupe is that you'd never know it was front wheel drive unless you'd peeped under the bonnet first.

One driver — one of the most senior men in the Australian motor industry — took the car for a quick squirt around a test circuit. He was screwing it through some devilish bends when we casually remarked: "Handles well doesn't it — especially for an fwd machine . . ."

He was astounded. In fact, he didn't really believe us until he'd whipped open the bonnet and saw, yes, a neat little four-pot sitting smugly east-west. And air-cooled to boot.

He wasn't the first, and certainly won't be the last, to be surprised by this superb and incredible Japanese Coupe.

Right from the word go with the 1300 Mr Honda thumbed his nose at convention. He used principles that had been tried and rejected by other manufacturers. Determined that they *would* work, Mr Honda just nodded quietly and worked on relentlessly to prove his point.

He has certainly done that. The 1300 uses front wheel drive with spectacular success, air cooling with efficiency that embarrasses even the best water-cooled systems and other advanced techniques that many others shy away from.

There are two models of the 1300 Coupe on sale in Australia: the "9" and its baby brother, the "7".

The cars are identical in body and trim specification and share the 1300 engine capacity. But the 9 has 9.3 to 1 compression instead of the 7's 9.0 to 1, timing set 10 degrees earlier . . . and four of those delightful little Keihin carbies, instead of the 7's one. Thus the 9 has 116 bhp at 7300 rpm and the 7 100 bhp at 7000 rpm.

Bennett-Honda, the NSW distributors, invited us to have exclusive first drive of a 9 just before the Coupes were released here.

We drove it into the city after it had been immaculately prepared by Brian Vinson at Bennett-Honda's Banksia showroom and our first impression, the one that was to remain dominant throughout the test, was its stunning lack of fwd characteristics. This, of course, warranted investigation:

The 1300 cc mill is mounted firmly to a special sub-frame that in turn bolts up extremely firmly to the car's body. There is an extension of the sub-frame jutting rearward, not only to house the remote control gear shift, but to provide extra rigidity. The motor/sub-frame is exceptionally well-located just slightly in front of the wheels.

The suspension itself is delightfully simple: Front A-arms rubber-mounted to the sub-frame and McPherson struts. At the rear Honda has used (brilliantly, too) a system unique to road cars. Each rear wheel is on a swing axle that pivots on the opposite side of the chassis, and is therefore almost as long as the track is wide.

The axles are sprung and located longitudinally by semi-elliptics with a floating connection to prevent the leaves twisting as the axle rises and falls. The advantages of this system include much lower roll centres, reduced camber change and less susceptibility to undesirable jacking effects than with shorter swing axles. These long cross beams are only used elsewhere on the U2 sports-racers and at the front of Ford F-100/250/350 series commercials.

We tested the Honda on the greatest variety of roads we could find and we say it's suspension is one of the best-sorted of any car, regardless of size or configuration.

As our friend discovered, the Coupe tears into corners flat and just a shade on the understeer side of neutrally. It feels like a very well set-up front-engined, rear-drive car. It is so well set up that pouring on the power at the apex of some tight

*Honda styling draws plenty of attention: it's smooth, flowing flanks and rear treatment are most impressive. Nose appears dated, doesn't blend with efficient overall styling.*

*Lower Right: Honda 1300 Coupe 7 blasts along a dirt terror-strip: the ride and control on dirt are outstanding, although the more docile 7 can't match handling performance of the pokier 9 with its tougher suspension settings.*

APQ 259

*Our lovely Asian model Yvonne loved the Honda: she was impressed by the comfort, control layout and superb attention to detail, even in the boot. Rob Luck shot these pictures of her and the Coupe 9 in Sydney's Cahill Expressway tunnel.*

bends brings the front in tighter, just as rear-drive does — and that is not an fwd characteristic at all. Backing off in a tight bend brings only a very mild and pleasant transition to oversteer.

Pounding over dirt, we found the Honda quite ready to travel much faster than we would have believed comfortable for such a small car. Despite shocking surfaces, it rarely moved off line, and when it did, only minute correction was necessary to bring it immediately back where it should be. The ride was so smooth and comfortable over bad dirt that I was able to write road test notes with ease.

At one stage I wrote that you heard the bumps more than felt them; that the passengers were carried firmly and comfortably in their seats, with the impression that somewhere underneath was a *real* suspension deftly coping with whatever came along.

But the 9's ride is not without fault. It is far too pitchy on rough bitumen, a result of the short wheelbase.

We also found when we later drove a 7 for photography that its suspension is set considerably softer than the 9. For town use, the 7's ride is more comfortable than the pokier car, but it does not handle corners or dirt nearly as well. It shows definite fwd traits when hard pushed.

With the brilliant little motor, Honda has proved once and for all that it has overcome all the problems previously associated with air-cooling.

The engineers devised a system called Duo Dyna Air Cooling. The head and block have "airways" — passages just like the water channels of liquid-cooled engines — that are cast with short, thick vertical fins. A multi-bladed impeller mounted directly to one end of the crankshaft pumps air through the passages, providing the main cooling. It is assisted by more fins on the exterior of the motor.

Because Honda has made the fins thick and stubby, they do not ring with high-frequency vibrations — a major problem with previous air-cooled engines. So the motor is in fact far quieter than many small water-cooled jobs.

The lubrication system — and its beautiful-looking dry sump — also helps the cooling. There are two oil pumps: one feeding the oil from the dry sump tank mounted high up inside the right-hand mudguard to the motor, and the other pumping it back from the crankcase to the tank. The tank, like the rest of the engine, has the stubby cooling fins.

The 1298 cc engine with its OHC

hemispherical-chamber, cross-flow head is all alloy, considerably reducing weight. This is a major reason the car is so well balanced.

The four Keihin side-draught carbies have just one air cleaner and are canted slightly on their inlet manifolds. At the other side of the head, there's a beautifully cast extractor that flows down in front of the engine into two pipes, then one.

The engine's performance is incredible: it knocks out 116 bhp (88 bhp per litre!) and 75.9 lb/ft of torque.

As we pointed out in our "Just Cars" column last month, the fact that the 116 bhp is developed at 7300 rpm raises many sceptical eyebrows. But you'd look a long way to find a motor that is smoother, less peaky and more willing than this one.

Second gear will pull strongly from as low as 700-800 rpm and wind out to its maximum 54 very rapidly. Third and top performance is just as impressive, letting the driver potter down to 1000 rpm if he likes. There's no hint of complaint from the motor, just smooth, silent power. And because the motor/gearbox/remote control is so well-mounted, there is absolutely no vibration as the little motor lugs away from 1000 rpm.

On the open road we stirred the engine along in the 5000-7500 rev range in third and top to clock incredibly swift times over one of our test routes. Third gear runs out to 79 mph, so it is spot-on for overtaking and fast cornering. Once again, the motor's smoothness and quietness are impressive as you back off, line up the bend and squeeze on the power going through. One of our drivers remarked as we wound out of yet another bend: "It's not raw power like say a V8 or a hot six — just smooth pull that makes the whole process so damned nice".

At the Hardie-Ferodo strip we found the Honda pulled 17.9 second quarter miles and hit 80 in a brilliant 20.8 seconds. The 0-60 figure was 11.7.

Unfortunately we didn't have enough road to record a top speed: the most we saw was 108 mph on the clock for a genuine 100 mph. We were pulling that up a hill and it was no trouble for the car: in fact it was winding out with great gusto, so we have no hesitation in saying Honda's claim of a genuine 116 mph at 7000 rpm should be accurate.

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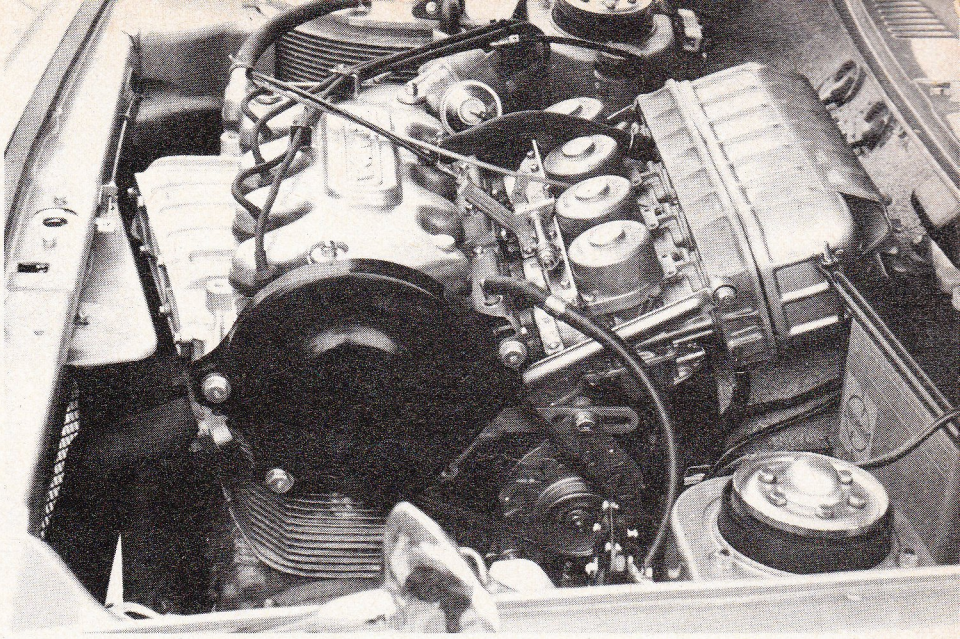
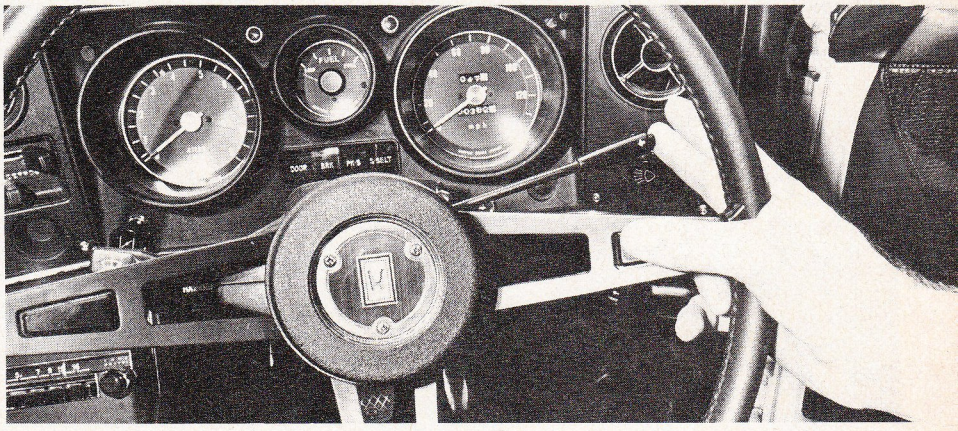


*Four Keihin carbies feed the 116 bhp engine of the Coupe 9 for mid-17 quarters and 116 mph performance. Motor is finned inside and out.*



*All controls are well within drivers' reach, gauges simple and unobstructed. Location of high-beam flasher (presstip of indicator stalk) blends perfectly with horn for efficient highway/multi-lane traffic work.*

*That nose again: appearance is debatable, but believe us, it means business.*

## HAPPINESS IS A HONDA 1300

*(Continued from page 15)*

Over the test, we returned 24.5 mpg. You could expect 30 mpg or more with quiet driving.

The brakes are just as good as the performance: they drag the car down from 60 mph in a very, very good 3 seconds.

But I wasn't happy with their pedal feel during the touring tests: the rest of the driver's scene is so good that you come to expect an extremely high standard, and despite power boosting the brakes need a decent shove. They're also not as progressive as I'd like to complete an otherwise fabulous touring set-up for the driver.

The steering wheel is mounted abnormally high, but you adapt to it instantly for a particularly good all-round position. The 7500 rpm red-lined tacho, speedo and fuel gauge are straight in front of you, with oil and amp gauges to the left, in a section of the dash board that wraps around towards the driver. The right-hand end curls back towards him too, giving an aircraft-like effect and making the entire gauge/control layout among the best of any car. With such scrupulous attention to detail, the dash alone is a significant contribution to driver relaxation, and thereby, safety.

The pedals are well-placed, but perhaps should be a little further forward for supreme comfort, although in typical Honda fashion the important toe-and-heel set-up is wonderful.

The gearstick will nestle too closely to the left leg for some drivers, but we like it that way. Your hand falls automatically on to it. The box itself is good, except for quick changes into second gear. The syncro there is poor and if you whip the change through quickly it crunches nastily.

We also found that our car became terribly stuffy in Sydney's 85 degree humidity even though it had through-flow ventilation and quarter windows. There's no power boost for the through-flow, so you cook when moving slowly in city traffic.

The lack of a blower presents another problem when it comes to demisting: you must use heat, and this is uncomfortable in conditions like ours where the windscreen may be badly fogged during summer rain, but the temperature is still 70 or 80 degrees. Certainly it clears the screen in super-fast time (the air is simply channelled from the engine's turbo fan, so it hits the screen with force), but who wants to roast in the process?

While the Honda's styling is a matter of personal taste, and very much love/hate, its finish is unquestionably good.

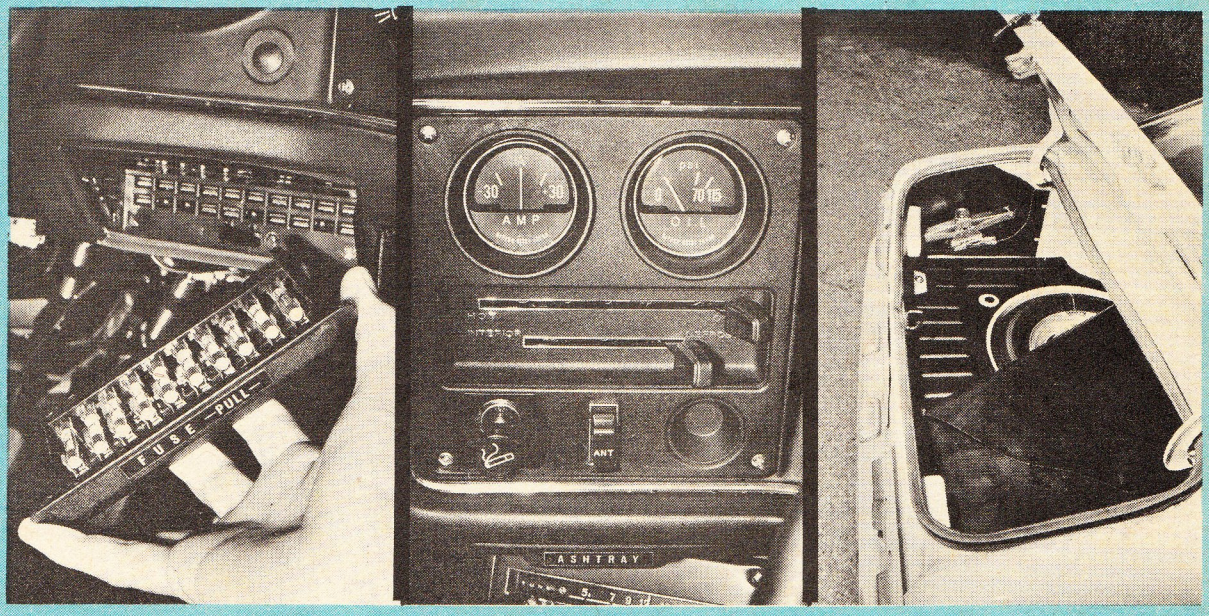
All nuts and bolts in the car are tightened to correct torques, it is proof-coated throughout (this also helps excellent sound deadening) and the trim and paint work are superb.

We were able to run the Honda through a very tough water test in which it was doused from *all* directions by very high pressure water jets. It did not leak one drop — a feat which a top local motor executive says most Australian cars cannot emulate.

Honda says the car will carry three adults comfortably in the rear. Sorry. It might take two Australian kids in comfort, but any distance in the back would necessitate a crash course in yoga for an adult. Nonetheless, the seat itself is very comfortable, as are the front reclining buckets.

Bennett-Honda ambitiously intend to import 1000 Coupes in the next year — probably at the rate of five 7s for every 9. We found the 9 a more pleasant car for drivers than the 7, because of its better handling and performance. Even though the 9 develops its power at higher rpm than the 7 it is still smoother and more able down low, and a lot more potent at the top end.

The 9 costs $3180 and the 7 $2984 — and that's damned good value in Japanese or Australian.—END




*Mr Honda excelled himself with thoughtful points like these clip-in, clip-out fuses. Slide them into your pocket for instant anti-theft device.*

*The left and right hand ends of the instrument cluster slope back towards driver for maximum efficiency. Judge degree of wrap-around from radio below dash.*

*The boot is quite big, but is spoiled by ridiculously small opening. Jack clips neatly into its own bracket. Tools pack into space on other side of boot.*

# TECHNICAL DETAILS

| | |
|---|---|
| MAKE | Honda |
| MODEL | 1300 Coupe 9 |
| BODY TYPE | Coupe 2-door |
| PRICE | $3180 |
| COLOR | Red/black trim |
| MILEAGE START | 693 |
| MILEAGE FINISH | 1097 |
| WEIGHT | (905 kg) 1991 lb |

### FUEL CONSUMPTION

| | |
|---|---|
| Overall | 24.5 mpg |
| Cruising | 30 mpg |

### TEST CONDITIONS

| | |
|---|---|
| Weather | Fine, hot |
| Surface | hot mix |
| Load | 2 persons |
| Fuel | premium |

### SPEEDOMETER ERROR (mph)

| Indicated | 30 | 40 | 50 | 60 | 70 | 80 |
|---|---|---|---|---|---|---|
| Actual | 28.8 | 37.6 | 46.6 | 55.5 | 64.8 | 73.8 |

## PERFORMANCE

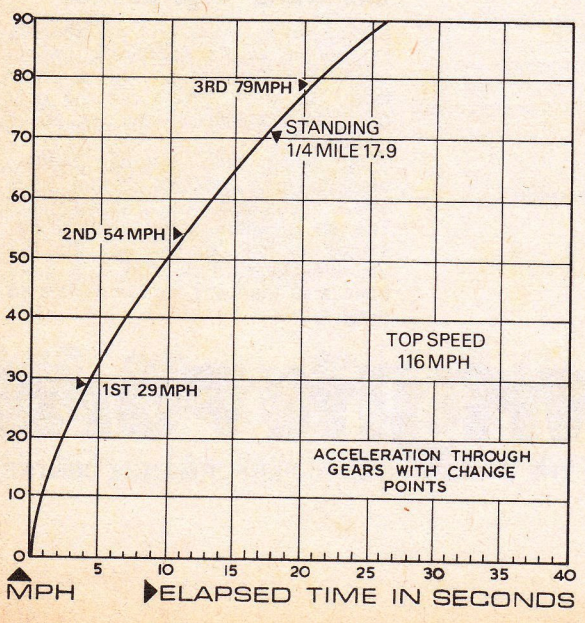
| | |
|---|---|
| Piston speed at max bhp | 3567 ft/min |
| Top gear mph per 1000 rpm | 16.6 |
| Engine rpm at max speed | 7000 |
| Lbs (laden) per gross bhp (power-to-weight) | 17.1 lb |

### MAXIMUM SPEEDS

| | |
|---|---|
| Fastest run | (160 kph) 100 mph |
| Average of all runs | (See Text) |
| Speedometer indication, fastest run | (173 kph) 108 mph |

### IN GEARS

| | |
|---|---|
| 1st | (46 kph) 29 mph (7500 rpm) |
| 2nd | (86 kph) 54 mph (7500 rpm) |
| 3rd | (126 kph) 79 mph (7500 rpm) |
| 4th | (185 kph) 116 mph (7000 rpm) |




### ACCELERATION (through gears)

| | |
|---|---|
| 0-30 mph | 4.1 sec |
| 0-40 mph | 6.1 sec |
| 0-50 mph | 8.6 sec |
| 0-60 mph | 11.7 sec |
| 0-70 mph | 15.7 sec |
| 0-80 mph | 20.8 sec |

| | 2nd gear | 3rd gear | 4th gear |
|---|---|---|---|
| 20-40 mph | 3.1 sec | 5.8 sec | 11.8 sec |
| 30-50 mph | 3.4 sec | 5.8 sec | 9.5 sec |
| 40-60 mph | | 5.4 sec | 9.6 sec |
| 50-70 mph | | 5.8 sec | 9.6 sec |

### STANDING QUARTER MILE

| | |
|---|---|
| Fastest run | 17.9 sec |
| Average all runs | 17.9 sec |

### BRAKING

| | |
|---|---|
| From 30 mph to 0 | 1.7 sec |
| From 60 mph to 0 | 3.0 sec |

## SPECIFICATIONS

### ENGINE

| | |
|---|---|
| Cylinders | Four in line |
| Bore and stroke | (74 mm x 75.5 mm) 2.92 in. x 2.98 in. |
| Cubic capacity | (1298 cc) 79.2 cu in. |
| Compression ratio | 9.3:1 |
| Valves | overhead single cam |
| Carburettors | four Keihin sidedraught |
| Oil Filter | full flow |
| Power at rpm | 116 bhp @ 7300 rpm |
| Torque at rpm | (11.5 kg/m) 75.9 lb/ft @ 5000 rpm |

### TRANSMISSION

| | |
|---|---|
| Type | 4 manual, all syncro |
| Clutch | sdp |
| Gear lever location | centre, floor console |

| Ratios: | Overall | Direct |
|---|---|---|
| 1st | 3.446 | 12.705 |
| 2nd | 2.014 | 7.426 |
| 3rd | 1.367 | 5.047 |
| 4th | 1.000 | 3.692 |
| Final drive | | 3.692 |

### CHASSIS and RUNNING GEAR

| | |
|---|---|
| Construction | Unitary |
| Suspension front | McPherson struts, A-Arms |
| Suspension rear | Gross beam swing axles, leaf springs |
| Shockabsorbers | telescopic |
| Steering type | rack and pinion |
| Turns l to l | 3.8 |
| Steering wheel diameter | 15½ in. |
| Brakes type | disc front, drum rear |

### DIMENSIONS

| | |
|---|---|
| Wheelbase | (225 cm) 88.6 in. |
| Track front | (124.5 cm) 49.1 in. |
| Track rear | (119.5 cm) 47.1 in. |
| Length | (414 cm) 13 ft 7 in. |
| Height | (132 cm) 4 ft 4 in. |
| Width | (149.5 cm) 4 ft 10.9 in. |
| Fuel tank capacity | (45 litres) 9.9 galls |

### TYRES

| | |
|---|---|
| Size | 155 SB13 (Japanese) |
| Pressures | 24 lb front/20 lb rear |
| Make on test car | Japanese Dunlop SP 68 |

### GROUND CLEARANCE

| | |
|---|---|
| Registered | (17.5 cm) 6.9 in. |