HONDA'S BIG 4

BY BOB GREENE

ABOVE Even on a wet, slippery road, the Honda felt reassuring. Unfortunately due to conflicting deadline and Honda release schedule, our road test was brief and took place after this story had been sent to press. Just hours before captioning time we got a chance to test the Big Four in the rain, found engine truly silky and capable of being pulled down to 1000 rpm in fifth gear without bucking smooth as anything I've ever ridden. And despite pre-ride rambling, that big front disc hung on far outside of wheel brought bike down straight and true good. CENTER PPC Book Division Tech Editor Tony Murphy discovers electrics behind press-on side panel (no tool needed to remove a clever gimmick. RIGHT — The illusion of a racer was maintained, despite the fact that bike is full-blown touring machine.

The major-domos of American Honda's service department were exhausted; they had spent days in the New Mexico desert trying in vain to burn down Hamamatsu's ultimate brainchild, the 750cc four, immediately prior to its first public showing. And yet, every time you would ask one of them how that big dude ran, the drawn lines of facial exhaustion would quickly give way to expressions of satisfaction and enthusiasm. The performance of the machine was *that* strong, that the mere recollection of it many hours later would have an almost narcotic effect.

The occasion was the national dealer and press preview in Las Vegas, and in attendance were over 2000 interested parties about to blow their minds in anticipation of a look, a listen, and a feel of the big one Honda was about to drop on them and the world. How they ran their hands over it and the careful way in which they blipped the throttle revealed their appreciation and respect of their latest champion. Even the usual grousing that typifies all dealer previews to one extent or another was noticeably absent. They were tickled you know whatless.

Lost in the crowd, it was a while before I could work up to one of the impressive machines, but when my time came I had to go along with their enthusiasm on all but a few counts. The four is near perfectly proportioned for its size, and beautifully rendered. Aesthetically it's right, with the possible exception (and this is strictly personal but based on past experience) of the overly fat five-gallon gas tank, when viewed from the top. From the straight side view the tank is right on. Of course this evaluation depends strictly on one's point of view; the practical traveling cyclist will welcome its capacity on a cross-country trip where, with a probable 40-plus miles per gallon, the bike's range will no doubt crowd the 200-mile mark. But many a city slicker will undoubtedly opt for a skinny little two- or three-gallon accessory job that will provide more fuel than he cares to endure at a single sitting and simultaneously show off more of that four's broad skull.

Aside from the engine, the second most futuristic feature of the four is its hydraulic disc front brake, hung on the extreme left side of a small spool hub, with the master cylinder located on the right handlebar immediately adjacent to the control lever. While reportedly extremely effective, I feel that some will like its appearance, others will not. It's a bit huge and appendagelike for my taste, almost having the look of an afterthought. Personally I've only experienced front brake failure due to heat on one occasion and that in road race competition and there are many drum brakes of extremely high efficiency including simple single-cam designs, so I wonder to what extent appearance should be compromised for marginal extremes of dependability Another thought: Thinking back many years to the noticeably straighter front wheel braking achieved with Phil Vincent's dual. front drum setup, whereby swerve due to heavy application was absolutely eliminated because of the even disposition of braking force on each side of the wheel and an even pull right and left, I wonder why Honda didn't incorporate two smaller discs, one on each side of the wheel, for the same purpose. Higher cost? True, but it could mean straighter stopping under panic circumstances, and perhaps less conspicuous appearance. How can anyone be so cruel as to even think about faulting such a technical breakthrough? Truthfully I'm not faulting it, merely thinking out loud, so to speak. The idea is ultra-modern.

And regardless of anyone's superficial notions about the appearance of this or that, when you reach for that handlebar starter and light-off this single overhead cam screamer, you forget all but what you hear and feel. From a bore and stroke of 61 x 63mm (2.40 x 2.48 inches) comes a note that makes you want to swing, and this from four trombones that pretty well muffle the engine's 9-to-1 compression. I want to be there the first time someone uncorks this rascal with a set of reverse-cone meggies out back. But it's not all noise; Honda rates crankshaft power at 68 hp at 8500 rpm. And although I suspect they like to fudge a little on the weight (they claim 452 pounds curb weight), their top speed figure for the four seems fully credible at 125 mph. Their standing quarter-mile claim is just as mean at 12.6 seconds.

Technically the engine is an in-line four with integral five-speed gearbox of the constant-mesh type. The overhead cam is chain-driven from a central sprocket attached to the crankshaft, operating conventional rockers and coil valve springs. Chains also figure in both the primary and secondary drive systems, with gear ratios of 13.391-, 9.150-, 7.142-, 5.875-, and 4.869-to-1, respectively, first through fifth. Primary reduction is 1.708-to-1, while final reduction at the rear wheel is 2.688-to-1.

Immediately behind the engine is the electric starter, accessible through a steel top cover. Carburetion is handled by four individual units of 26mm venturi. And contrary to what you might suspect, they are not the constant-velocity vacuum-controlled types such as on the 450 Honda, but simple slide-controlled models comparable to the 160 Honda. We might better describe them as of the old British Amal type simplicity itself. All four carburetor slides are actuated by a common shaft that is connected by a single cable to the throttle grip (à la Triumph Trident), assuring more positive actuation and simple adjustment. Air filtration is accomplished by a common cleaner element that is easily removed by dropping the unit out from below. The air cleaner consists of a two-piece box, the upper half of which is a still-air chamber into which are ducted four individual molded rubber velocity stacks from the respective carburetors, while the bottom half contains the element proper. Another excellent feature of the engine is the placement of an automotive-type replaceable oil filter in the front face of the crankcase exceptionally easy to service as opposed to the former very efficient, but less easily maintained, centrifugal type used on the 450 Honda.

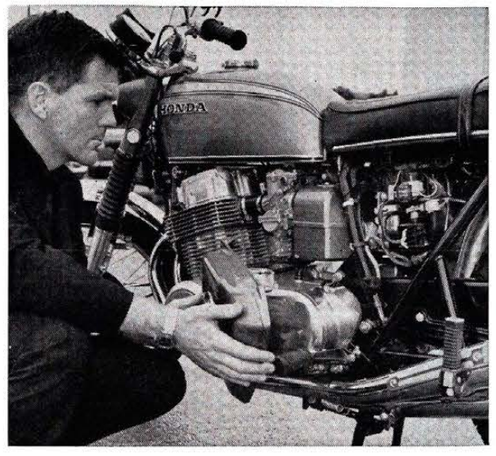
A new feature is that of an oil-pressure indicator light incorporated in the tachometer face. The electrical system is 12-volt alternating current with rectifier.

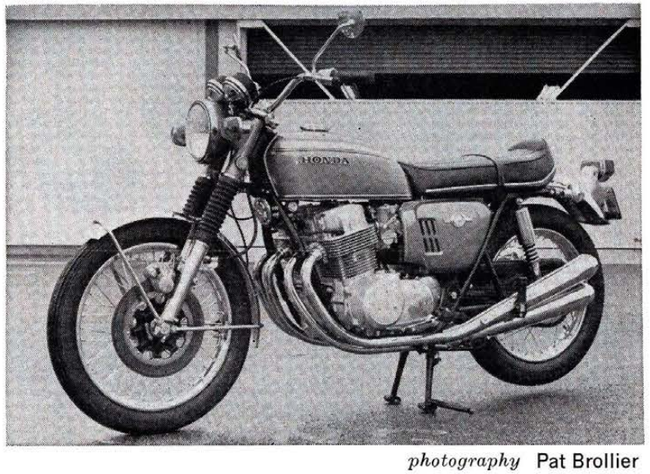
In typical Japanese fashion, the engine cases are split horizontally, with the crank's plain main bearing caps bolting to the upper half of the crankcase, automotive style. Again, automotive-type rods with split big ends and inserts are used, with piston pin bushings up top. Full pressure lubrication is of the circulating type, with remote oil tank rather than wet sump. The remote tank lessens sump depth, and this, along with a slight forward inclination of the engine, reduces engine height, favorably lowering the machine's center of gravity for better handling.

The Honda four's double-loop tube frame is extremely well-designed and especially heavy-braced in several directions around the steering head. The two tank tubes are laterally parallel rather than one above the other, with still a third tube running forward from a crossbar at about mid-frame to the top of the steering head! You're going to have to hump to bend this one! It's a veritable tank from steering head to seat post tubes, and perfectly triangulated in the rear section as well. Overall length of the bike is 85 inches; overall width, 34.8 inches; overall height, 42.7 inches; wheelbase, 57.3 inches; and ground clearance, 6.3 inches. Tire sizes are 3.25 x 19 front; 4.00 x 18 rear.

The Big Four is a thrilling, exotic piece of machinery, sensibly sized, smoothly executed, powerfully endowed, and reasonably priced at around $1400. Some people have been waiting for it all of their lives. ■■

The long-awaited dream engine is here at last, an in-line four of 45 cubic inches





photography Pat Brollier