

Cycle World Road Test

Designing motorcycles must be the most thankless task on earth. Last year Honda introduced the 750A, the old reliable Four with a torque converter and two-speed transmission replacing the hand-operated clutch and standard gearbox. The press was fascinated and impressed by the sheer skill of the design, wondered a bit as to how the enthusiast public would react to the loss of manual dexterity, and otherwise reckoned the 750A to be sort of a humdrum touring bike. Those first reports mentioned the overall concept and listed a few faults here, a weak spot there.

That was less than one year ago. Since that time Honda has sold a fair number of 750As to the public and has been making changes big and small, some as running modifications and some as model year attention getters. Their development has been greeted by silence. Questions from the men in charge about reactions to the new bits have gone unanswered, to the extent that Honda has made some semi-public inquiries: "You guys care or not? Anybody out there wanna know what's been done? Hey!?"

Something of an injustice, in other words. If we feel free to carp about new models—nobody could feel more free—there must be an obligation to report in turn on what gets done in answer to those carps.

Here is that report.

With some additions. While Honda is listening and reading about what people say they like and want, Honda's men are also paying attention to what people actually do want, that is, what they spend their money on. This isn't always what they say they want. As we'll see, that isn't always a good thing, for seller or for buyer. >



HONDA 750A

The Automatic Transmission Works, the Engine Has Been Improved, but the Custom Seat is a Pain in the . . .



Begin with the mechanical changes for the 750A in its second model year. (This is the best news.) Our test 750A for 1976 had one major flaw, a shortcoming of that bike and not of the model in general. At a steady 50-60 mph, when properly warmed up, the test bike fell into fits of bucking and lurching, as if the fuel supply had dried up or been baffled or something. Drove us wild. The factory said that wasn't a normal part of the bike. Reader mail showed that our test bike wasn't the only 750A with this bother and Honda's service department replied that a fix was underway. At the same time, we passed along some tips as to how this stumble had been cured by other people.

Our 1977 750A ran like a clock, from first day of the test to the last. Never missed one beat. How this was done, we don't know. Our guess is that the fix mentioned above, changing the vent tubes in their relationship to the float bowls, or the float levels, or some link in the chain of fuel mixture and delivery, has been made right.

Next improvement down the line is more general. As with the 1977 750F2, the 1977 750A will start quickly when cold and needs only a minute or two on partial choke before it can be driven away. The choke also serves as a hand throttle, keeping the cold engine on a fast and smooth idle while required. (Side credit also to Honda for putting the choke handle on the

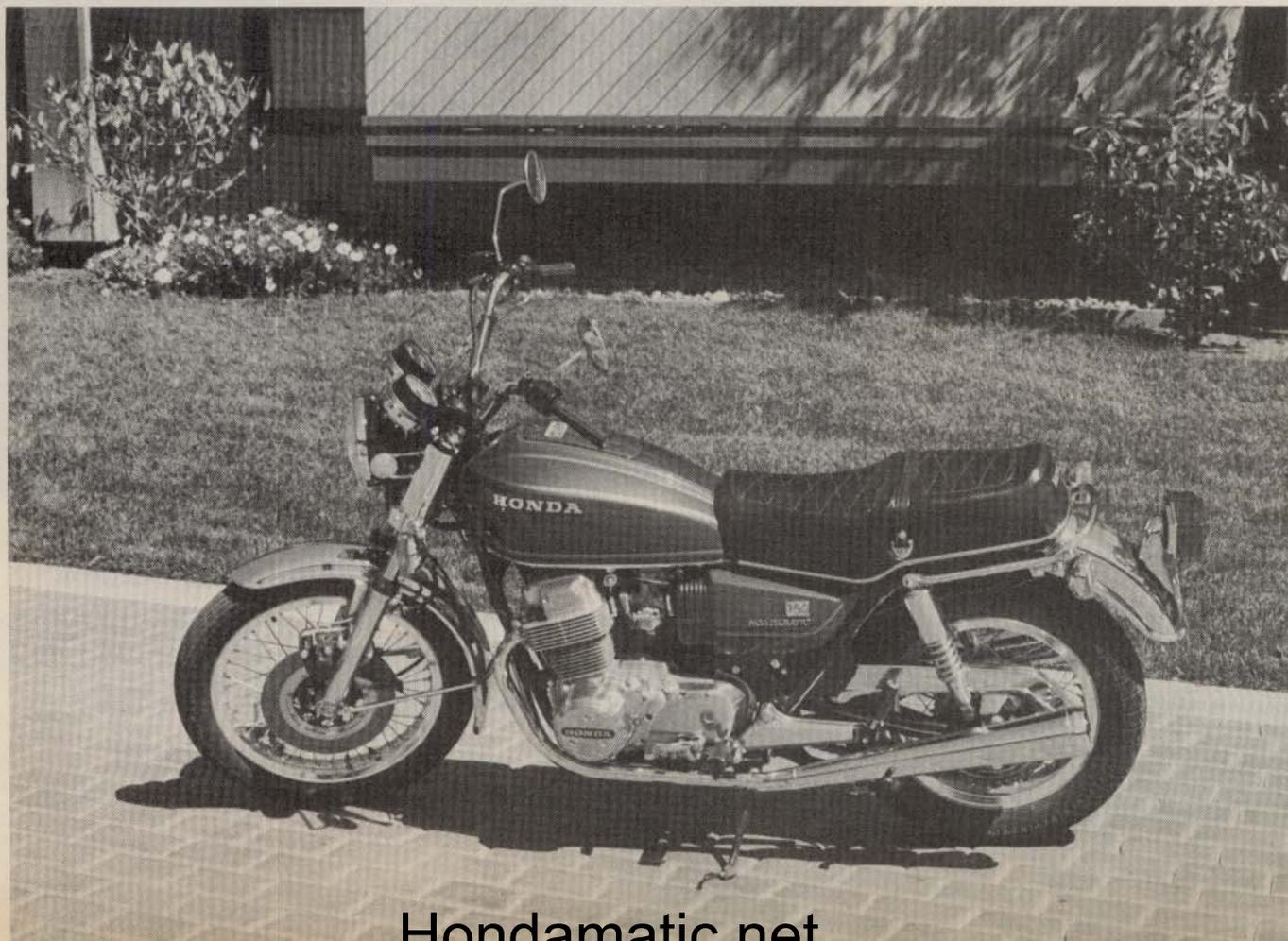
instrument cluster, while the other factories tuck the lever way down beneath the seat. This from the people who persisted in hiding the ignition key down there for all those years. Get their attention and Honda listens.)

A change whose effectiveness is difficult to assess as a separate function is the exhaust system. Last year it was a 4-into-1 collector, rather like the 750F. This year the 750A has a 4-into-2 system, one muffler per side. This may have something to do with the improved driveability. It may affect miles per gallon and acceleration. It may have been done because traditional motorcyclists prefer the symmetry and balance of exhaust pipes on each side. The newer guys here didn't notice the change until it was pointed out to them, while the older hands spotted the dual pipes first thing and were glad to see them.

Compression ratio remains 8.6, although the owner's manual recommends low-or no-lead now, while premium was the suggestion last year. The final gearing has been changed, resulting in a slight reduction in engine speed. RPM at 60 mph is now 4521, against 4560 rpm at 60 last year. Curb weight with half a tank of fuel is a heavy 559 lb., two lb. more than for 1976.

Little of this is headline stuff. In a way, it's the reverse of news. The lack of major change is a pretty good sign that the maker and the public approve of the 750A . . . in

Cycle World photos



HONDA 750A

its mechanical sense.

Odd choice of words? Refer to the pictures of the 1977. First thing that catches the eye is the seat, a two-plane affair styled to match the old-style tractor seat now reborn in the guise of aftermarket touring saddles. Next comes the handlebars, which are higher and wider, shaped like the high-rise bars from years ago.

What appears to have happened is, while making various adjustments to the actual machine, Honda was also looking at what the touring market sells. What do the long haul guys put on their bikes? Like Harley-Davidson and Norton before them, Honda has seen fit to go one step ahead of the accessory people, letting the factory sell the parts first.

This is not always a good move. The touring saddle, nice and wide and shaped to conform to the human backside, can be the rider's best friend during a week on the road, which is why you see them on full-dress touring bikes and on police bikes.

Honda's example, though, has the look but not the fit. The rear ridge is nearly straight across, and the transition between horizontal and vertical planes is too abrupt. None of the test riders liked it. The aft section has not been carried to as much of an extreme but none of the passengers liked that part, either. More correctly, they didn't mind it, but soon as they got on the 750F2, they reported it was more comfortable.

The reaction to the handlebars was much the same. Width wasn't remarked on. The height was. They do give the rider a certain attitude of command, sitting tall like that, perhaps leaned back just a degree or so with the lady all snuggled up close, king and queen of the road. But after a few miles at touring speed one gets the urge to lean into the wind and it isn't easy to do unless the arms are bent at an awkward angle.

Now, Nowhere in the review of that first model was there a request for changes to the bars and seat. We were strongly in favor of the old seat. Nor were the other reviewers critical of these two areas. Thus, we judge that the changes were made in response to what other people are advertising, not to what people who actually tried the 750A said, and we believe Honda has made a mistake in fiddling with seat and bars.

Back to the technical results, the latest 750A cuts a bit of time off the standing quarter mile, 15.62 sec. against 15.90. As weight was virtually unchanged, this is proof of more power. Miles-per-gallon dipped, from 43 to 41. This could be a sign of more power. It might also be that because this year the mph run was done in company with the F2, the 750A was pushed harder than before and used more fuel. No big thing, either way.

The quarter-mile time deserves com->

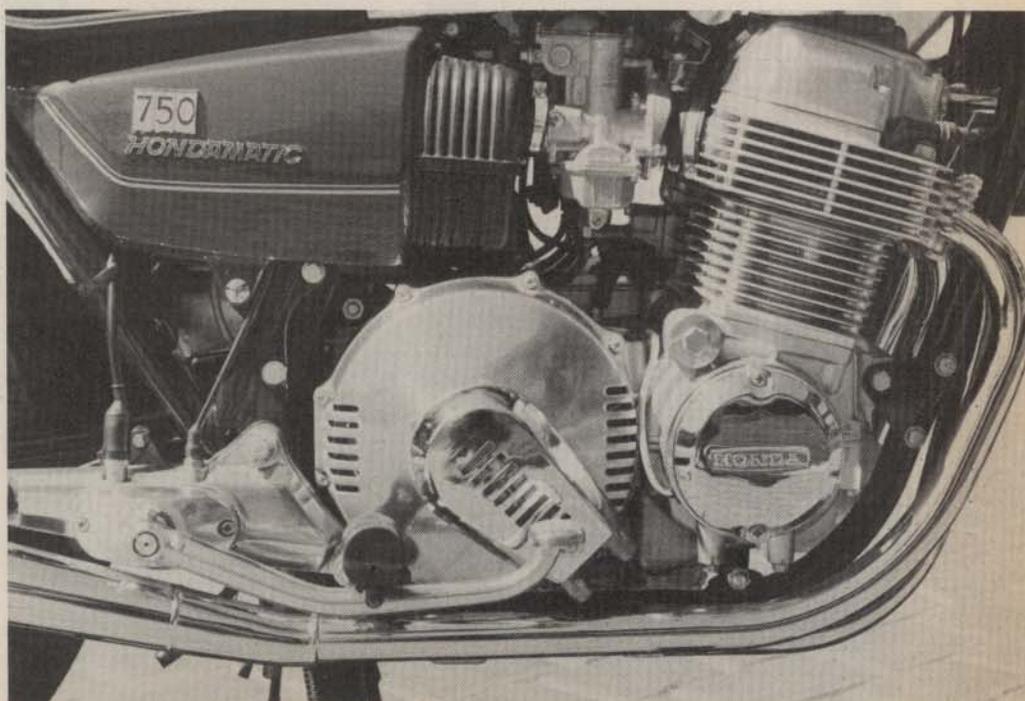
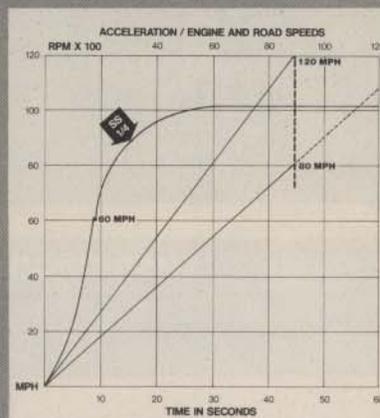
SPECIFICATIONS

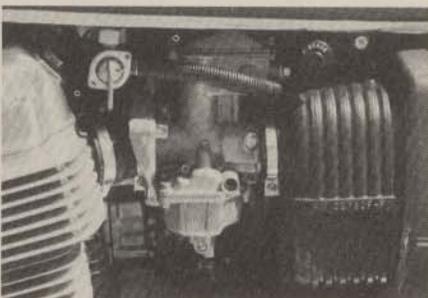
List price	\$2198
Suspension, front	telescopic fork
Suspension, rear	swing arm
Tire, front	3.50-19
Tire, rear	4.50-17
Brake, front,	
dia. x width, in.	10.8 x 1.625
Brake, rear,	
dia. x width, in.	7.1 x 1.6
Total brake swept area,	
sq. in.	129.4
Brake loading, lb./sq. in.	
(160-lb. rider)	5.56
Engine, type	sohc four-stroke Four
Bore x stroke, in.,	
mm	2.40 x 2.48, 61.0 x 63.0
Piston displacement, cu. in.;	
cc	44.9; 736
Compression ratio	8.6:1
Actual bhp @ rpm	na
Actual torque @ rpm lb./ft.	na
Carburetion	(4) 24 mm Keihin CV
Ignition	battery/points
Oil system	wet sump
Oil capacity, pt.	11.6
Fuel capacity, U.S. gal.	5.1
Recommended	
fuel	regular or low-lead
Starting system	electric;
	emergency kick
Lighting system	12V alternator
Air filtration	treated paper
Clutch	none; hydraulic
	torque convertor
Primary drive	Morse Hy-Vo chain
Final drive	630 single-row chain
Gear ratios, overall:1	
High	5.750
Low	8.560
Wheelbase, in.	58.3
Seat height, in.	32.0
Seat width, in.	12.0
Handlebar width, in.	32.0
Footpeg height, in.	13.0
Ground clearance, in.	6.0
Front fork rake angle, degrees	27.5
Trail, in.	4.5

Curb weight (w/ half-tank fuel),	
lb.	599
Weight bias, front/rear,	
percent	45.6/54.4
Test weight	
(fuel and rider), lb	719

PERFORMANCE

Engine rpm @ 60 mph	4521
Piston speed (@ 8500 rpm),	
ft./min	3513
Lb./hp (160-lb. rider)	na
Fuel consumption, mph	41.0
Speedometer error:	
40 mph indicated, actually	38.5
50 mph indicated, actually	48.4
60 mph indicated, actually	58.8
Braking distance:	
from 30 mph, ft.	31
from 60 mph, ft.	134
Standing one-quarter mile, sec	15.62
terminal speed, mph	87.97
Top speed (actual @ 7610 rpm)	
mph	101





ment. Performance is relative. The 750A is a match for, say, the latest Corvette. It will lose a drag race with most any sporting 400 Twin, witness the test results of the Suzuki GS400 and Yamaha XS400 elsewhere in this issue. The 750A is handicapped by having only two speeds, by the need for those two speeds to provide strain-free starts and cruising, and by the torque converter refusing to allow high rpm at the starting line. The 750A takes a long while to cover the first few feet. Once under way, as revs build as the engine catches its breath, the bike gains speed at a respectable rate. The rider is seldom conscious of not having a normal gearbox, or of not having 750-style push, on the road or in traffic.

The transmission itself is a marvel, at least the equal of the better automobile automatics. With part throttle and a gentle nudge of the toe, the shift from Low to Drive is almost imperceptible. At full power and revs, a sharp poke and the trans snaps into Drive, with no hesitation. The linkage which prevents selection of a forward gear with the side stand down, and pops the lever into Neutral if the rider pushes the stand down, is appreciated as a good piece of work even by those who don't need help. We all liked the fuel gauge, even. If the automatic transmission becomes popular for motorcycles, it will be because this first road-bike attempt is so well done as much as because the public demands it.

Oh, and after one or two gropes for the missing lever, we didn't miss the clutch. Somehow the mind keeps track of these things without effort.

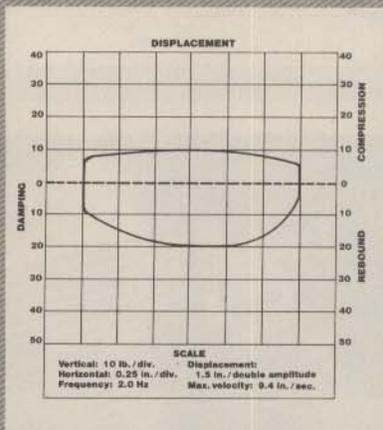
For the rest of the motorcycle, the ride is stiff, especially on initial jolts. The grips are hard, indeed, the 750A grips are the only way we could tell that the 750F2 grips are softer than before. As always the throttle spring is damned stiff.

The 750A is not an especially sporting motorcycle. Transmission aside, the 750A is heavy and wide. The bars do give leverage in traffic and tight sections, and the 750A is stable on the straights, but on a fast turn the comfortable technique is to pick the wide line at a steady speed and ride on through. HoJo to HoJo, so to speak, rather than café to café.

All the above may not be what Honda expected when they asked for reactions to the changes in their pioneer. We respect and appreciate the engineering. We are intrigued by the concept and a bit unsure as yet as to which way this will go. Once the idea has been worked out, an automatic Twin would be better at bringing new riders into motorcycling and an automatic GL1000 would be more suitable for the cross-country man and wife. Meanwhile, bars and seat excepted, the 750A was a good touring mount when new and it's better now.

SUSPENSION DYNO TEST

FRONT FORKS



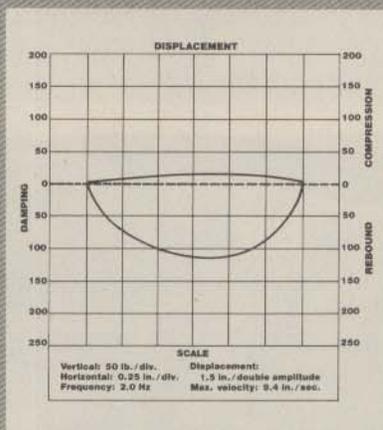
Description: Showa fork, HD 315 oil
Fork travel, in.: 5.25
Engagement in.: 6.0
Spring rate, lb./in.: 40
Compression damping force, lb.: 10
Rebound damping force, lb.: 20
Static seal friction, lb.: 16

Remarks:

Unlike the F2, the Honda 750A uses last year's forks. Excessive seal friction and spring preload cause an otherwise good fork to feel harsh. For details on a proper fork fix, see the August 1976 issue of *CYCLE WORLD*.

Tests performed at Number One Products

REAR SHOCKS



Description: Showa shock, gas/oil mix, non-rebuildable
Shock travel, in.: 3.25
Wheel Travel, in.: 4.0
Spring rate, lb./in.: 100
Compression damping force, lb.: 10
Rebound damping force, lb.: 115

Remarks:

Damping and spring rates are fine, but solo riding is harsh because of excessive spring preload. Some preload may be relieved by removing the spring covers. The top eye may be backed off the shaft 2-3 turns, and the locknut tightened.