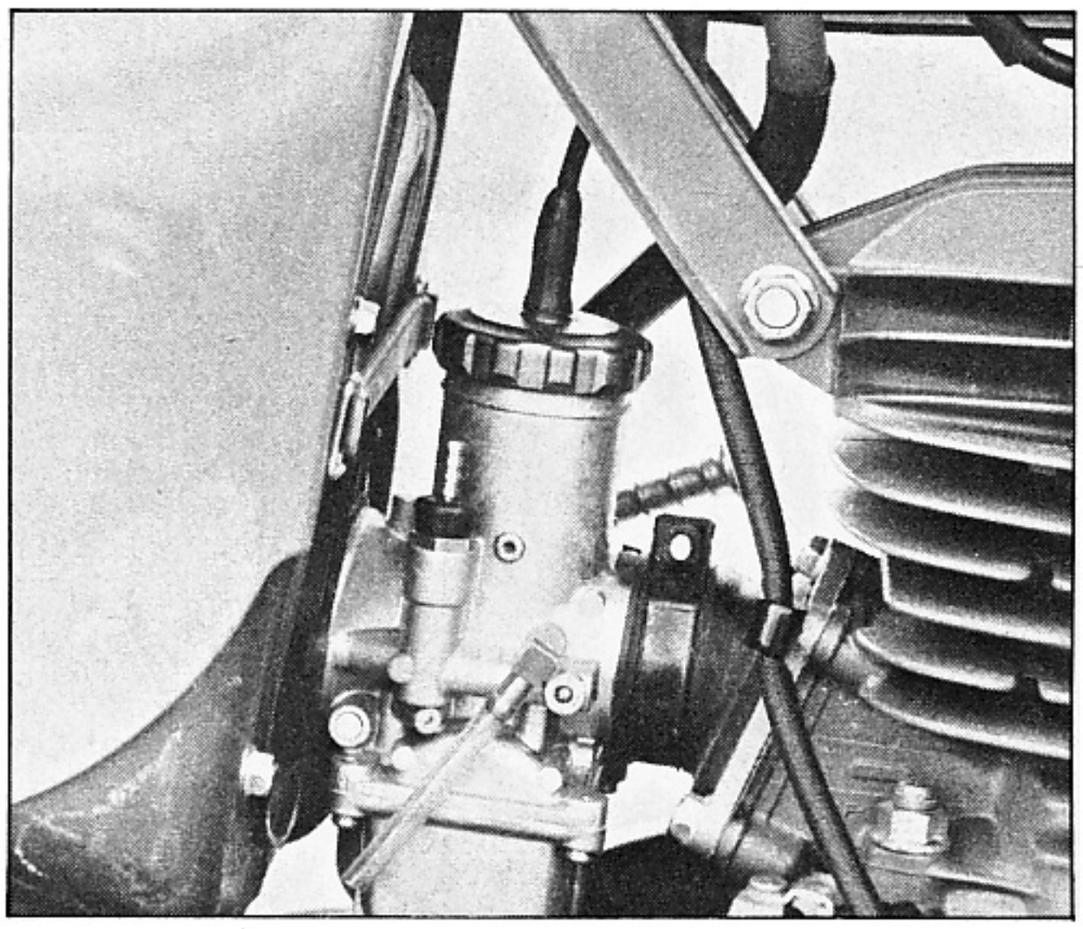
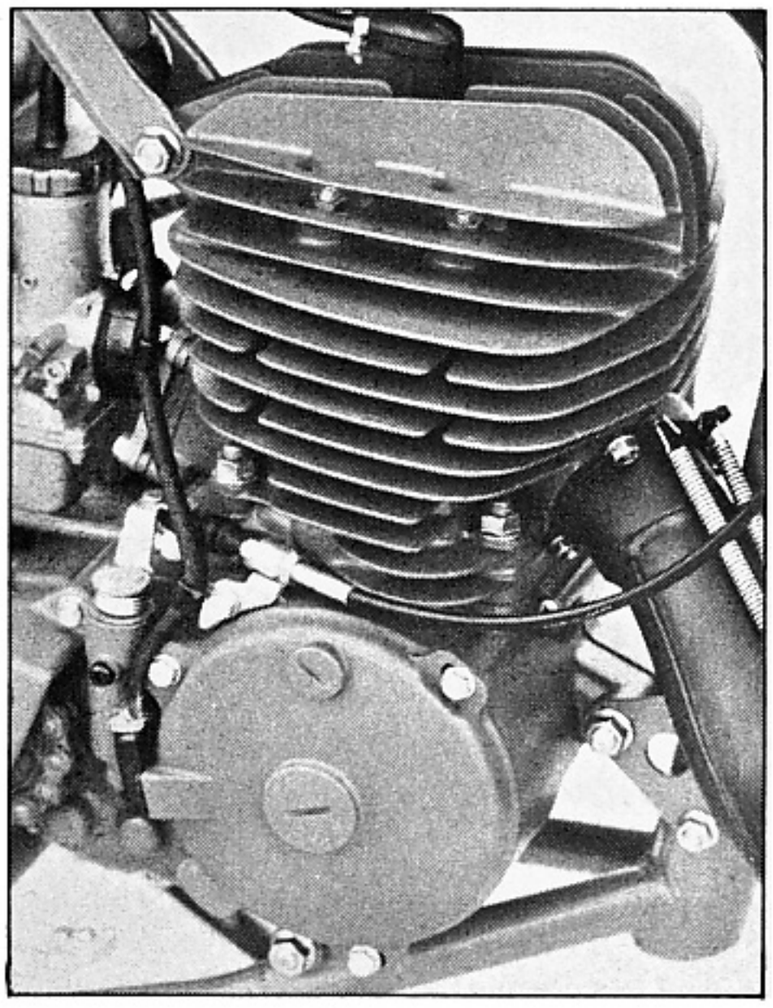
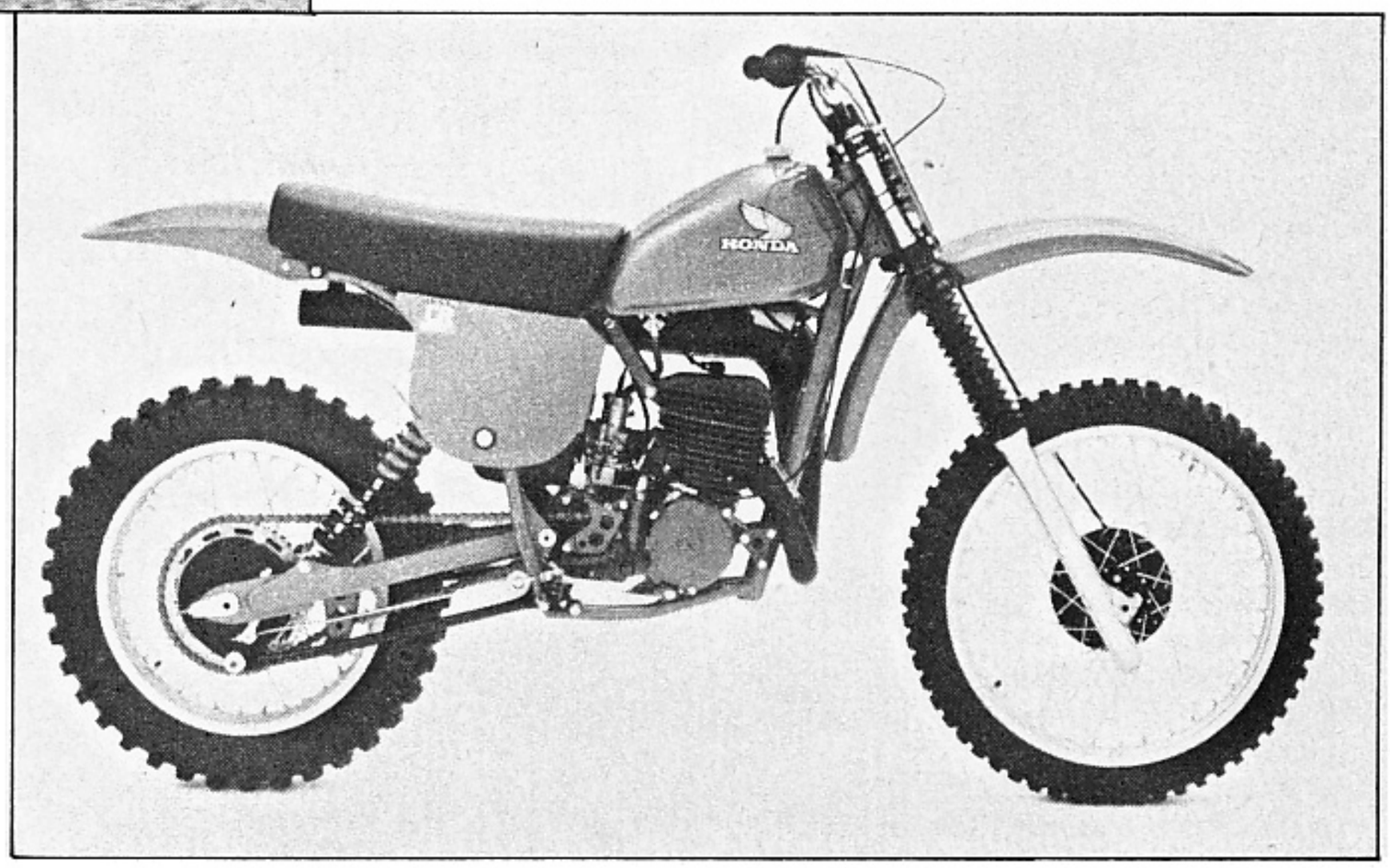
HONDA CR250R

The REAL Red Racer is here!

By Tom Beesley







Photos by Alan Schlappy, Steve Reyes & Tom Beesley

WE'VE ALL been waiting months and years for this motorcycle. Months because since American Honda formally introduced the machine to the motorcycling press, we've been on tenderhooks to get our hands on one. It's been hard to have to wait so long.

It's been years of waiting, because we know that with their vast resources, development talent and technology, the machine has been possible for a long time. We knew that this motorcycle would eventually arrive from the giant Honda factory, but these last several years we've puzzled over what was taking them so long.

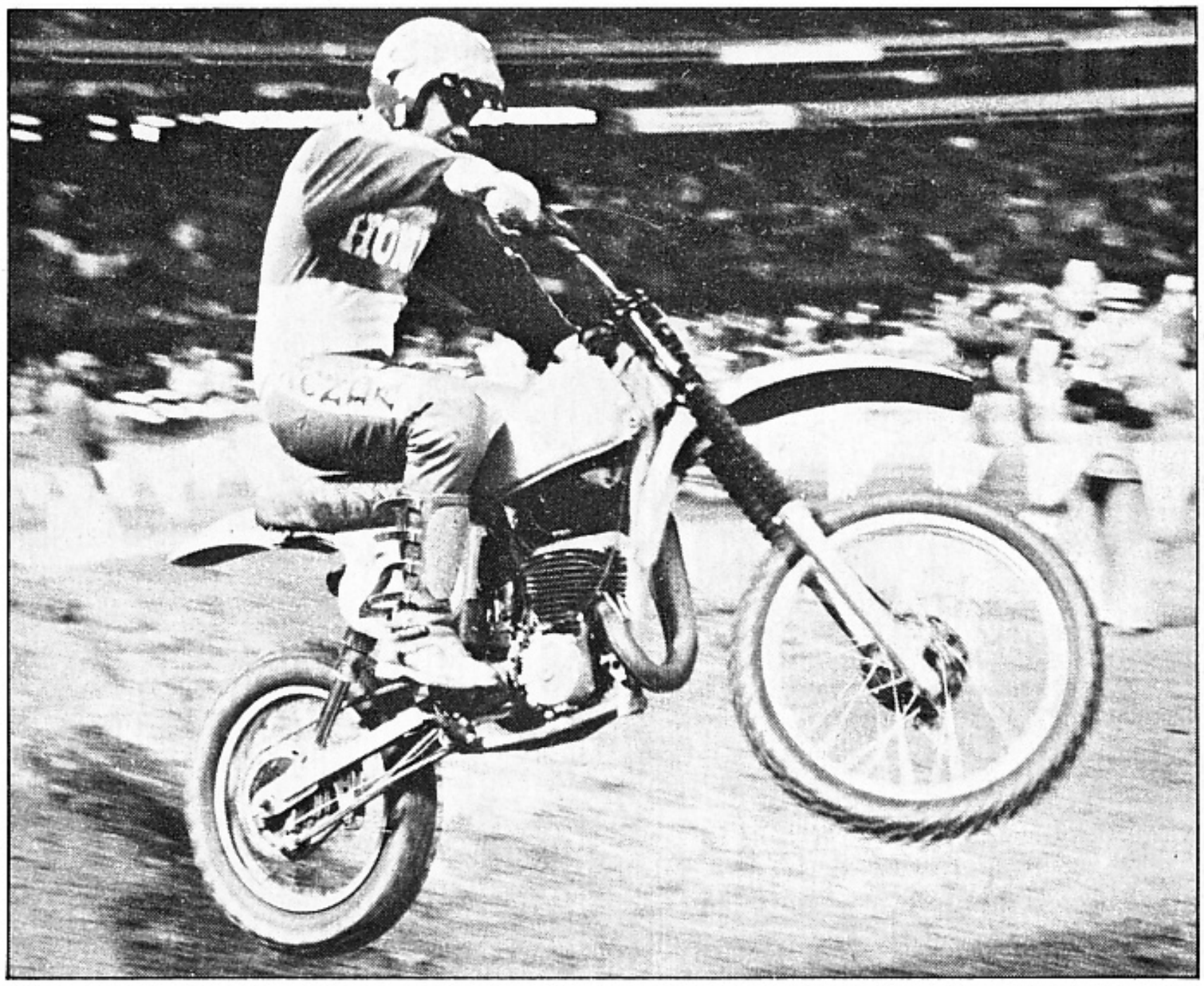
Anyway, it's here . . . the long-awaited (what an understatement!) *all new* Honda CR250R motocross machine. Similarities between the "R" model and the standard machinery we've been fed every year are virtually nonexistent. The standard quote for such occasions is that only the decal on the gas tank is the same, but you can't even say that in this case. Even that relatively trivial feature is improved on the CR250R. That's for a start, now let's take it from there . . .

Leave it to Honda to indulge in some good old "one-upmanship" on the rest of the industry. After all these years of piddling around with the same old reworked (slightly), different-colored (but basically unchanged), Elsinore models, wouldn't you just know that they'd introduce a motorcycle that it's very easy to rant and rave about.

Way back when, Honda started the whole ball rolling with the introduction of the first 125cc CR Elsinore model. At the time, it was unbeatable. Along came their first 250 and it wasn't bad. But that time, Suzuki had started coming with RM racers, and Yamaha was introducing YZ models; both of which were more competitive than those Elsinores. After all this time, Suzuki and Yamaha just about have the market cornered. The two rivals sell far and away the bulk of motocross machinery sold in this country. But both factories had to have been looking over their collective shoulders all the while, knowing full well that when Honda finally made the move, it was going to be a big one.

Boy, was it ever! In a day and age so filled with outstanding production but race-ready motocross motorcycles, it's very easy for all magazine articles to begin sounding alike. After all, there are only so many superlatives that can be used to describe a racer.

In the case of the CR250R, we'll quote none other than Rolf Tibblin, former World Motocross Champion (twice) and renowned off-road racer. Said Rolf, after a lengthy riding session on the Elsie: "I love it! I want one. Seriously, this motorcycle is perfect. I don't want to change anything on it. The chassis is perfect, the suspension is very, very good, and the engine has plenty of horsepower and it's very manageable. I'm very tempted to buy one of these motorcycles."



Team Honda racer Marty Tripes used a slightly modified (Fox AirShox being the chief difference) CR250R to put himself in the points lead of the '78 Supercross Series. This photo is from the Houston round of the series.

If you can tell the difference between the CR250R and the works RC models, you deserve a prize. Ain't it pretty?

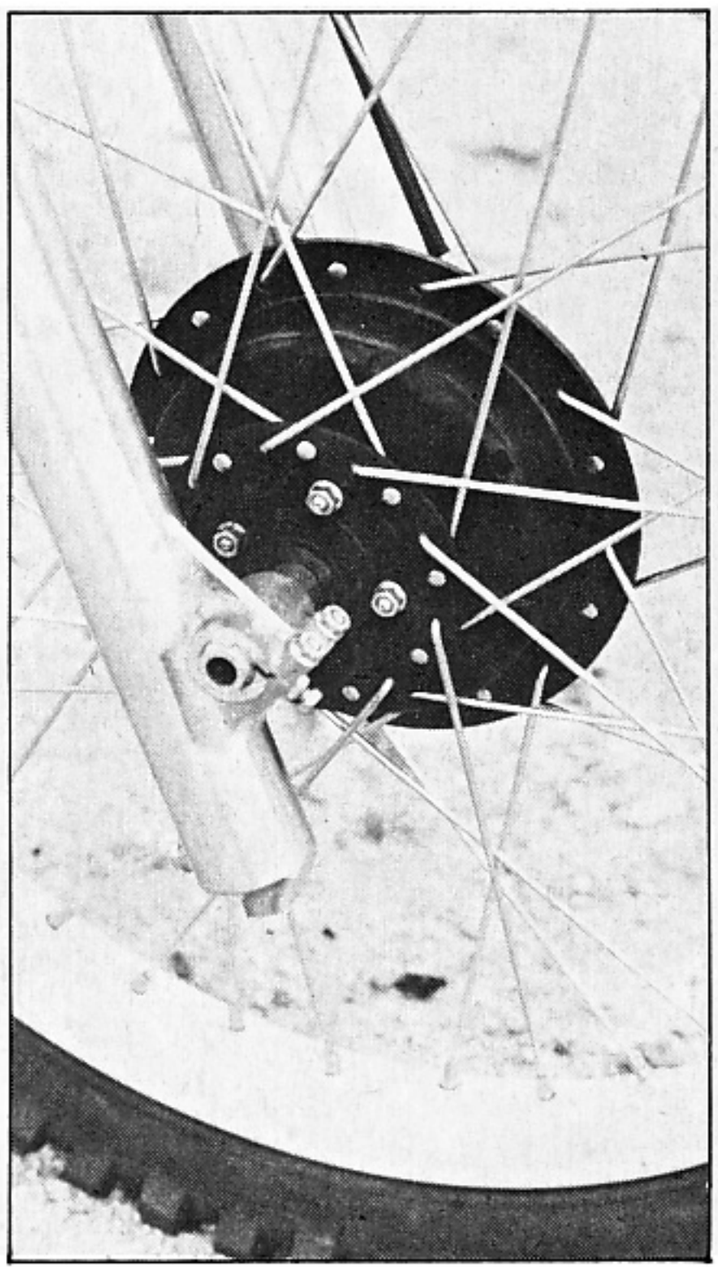
Okay, we second that, Rolf. Really, the motorcycle very nearly *is* perfect. Anything marginal about the bike is vastly overshadowed by its outstanding attributes. The bike, getting down to the bottom line of it all, is exactly what the world knew Honda was capable of building. Now, it's "Look out yellow motorcycles."

Let's cut out the honeyed phrases and get down to the nitty gritty. You probably want to know all about the Honda CR250R Elsinore.

This motorcycle really is as close as

production line technology and limitations can get to a full-on works racer. Hey, if Marty Tripes and Jimmy Ellis can win Supercross events on this bike, you and I should be able to win the local events. Probably the most startling statistic about the new bike is that there is more than 11 full inches of suspension travel on both ends, making the bike the king of the mountain in that department. Heretofore, only the trickest works machinery had anywhere near that much travel. To instill that much suspension on production bikes used to be far too much trouble, for the factory *and* for the consumer (you).

Suspension is by Showa, with rebuildable gas shocks on the rear and "conventional" oil/spring (not air) forks on the front. Both components are outstanding, but the forks are slightly better (as compared to other units) than the shocks. The works riders (Tripes, Ellis and Wise have been Supercross racing on CR-Rs, with the rest of the team on RC works bikes) all use Fox Airshox, but we think you'll find the stock units satisfactory for anything shy of a National event.

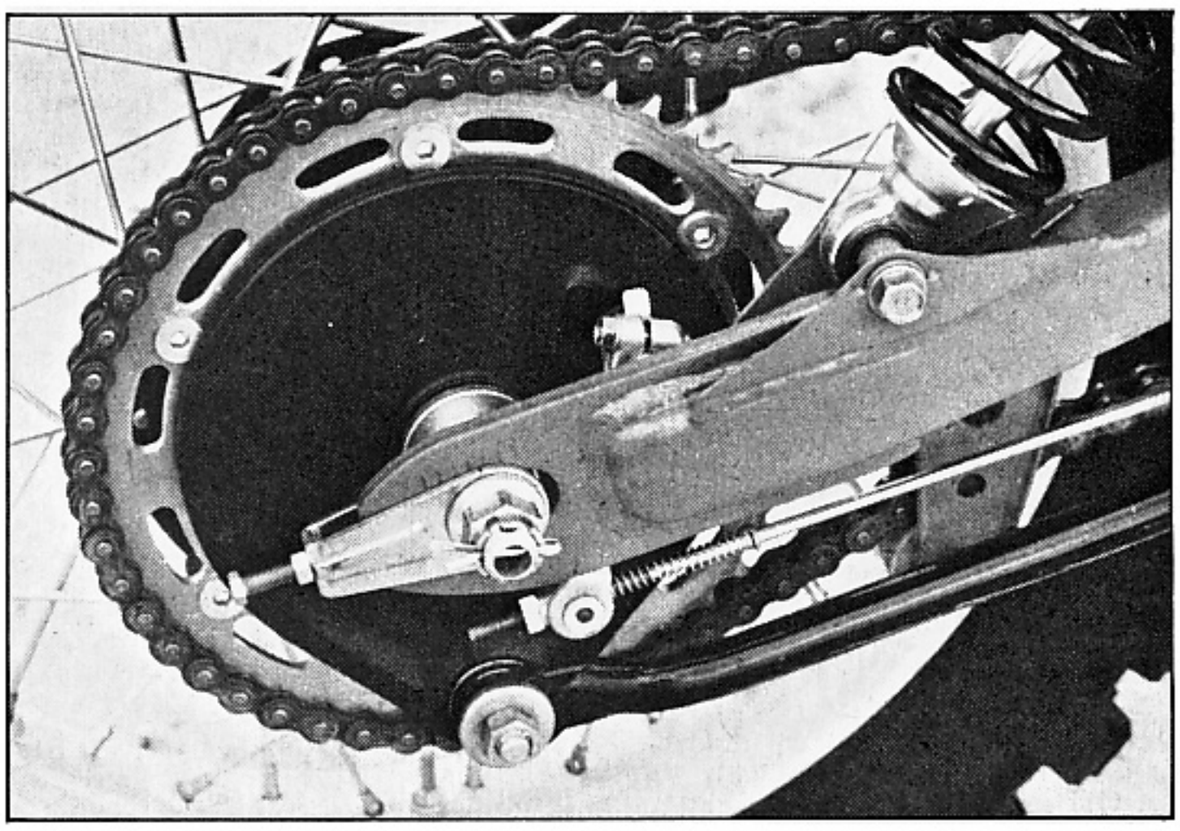


Very efficient front forks are by Showa, give you 11.5 inches of travel.

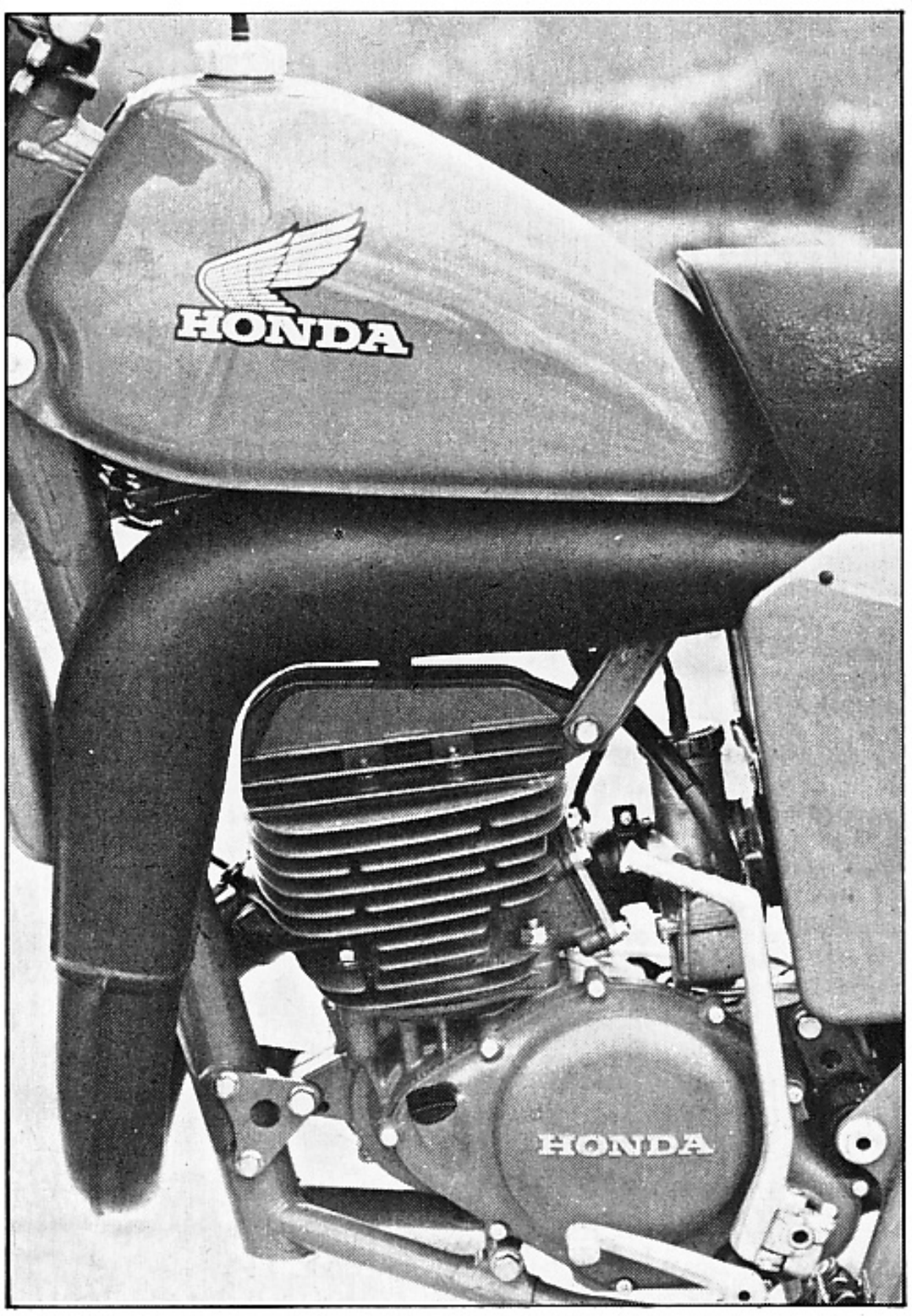
We ran the Honda against a Yamaha YZ250E at three different race tracks and we definitely got around quicker, smoother and more comfortably on the Honda, even though we admit a slight preference for the monoshock Yamaha suspension in most of the typical SoCal terrain conditions. The main advantage to the Honda is in the engine department, and we'll get to that shortly.

The Honda has a chrome-moly frame, which helps keep the weight down to a competitive 234 pounds (wet). The swingarm remains chrome-moly, even though Suzuki and Yamaha have both gone to alloy units. Alloy isn't necessarily better than steel. To get comparable strengths, the two materials would weigh the same anyway.

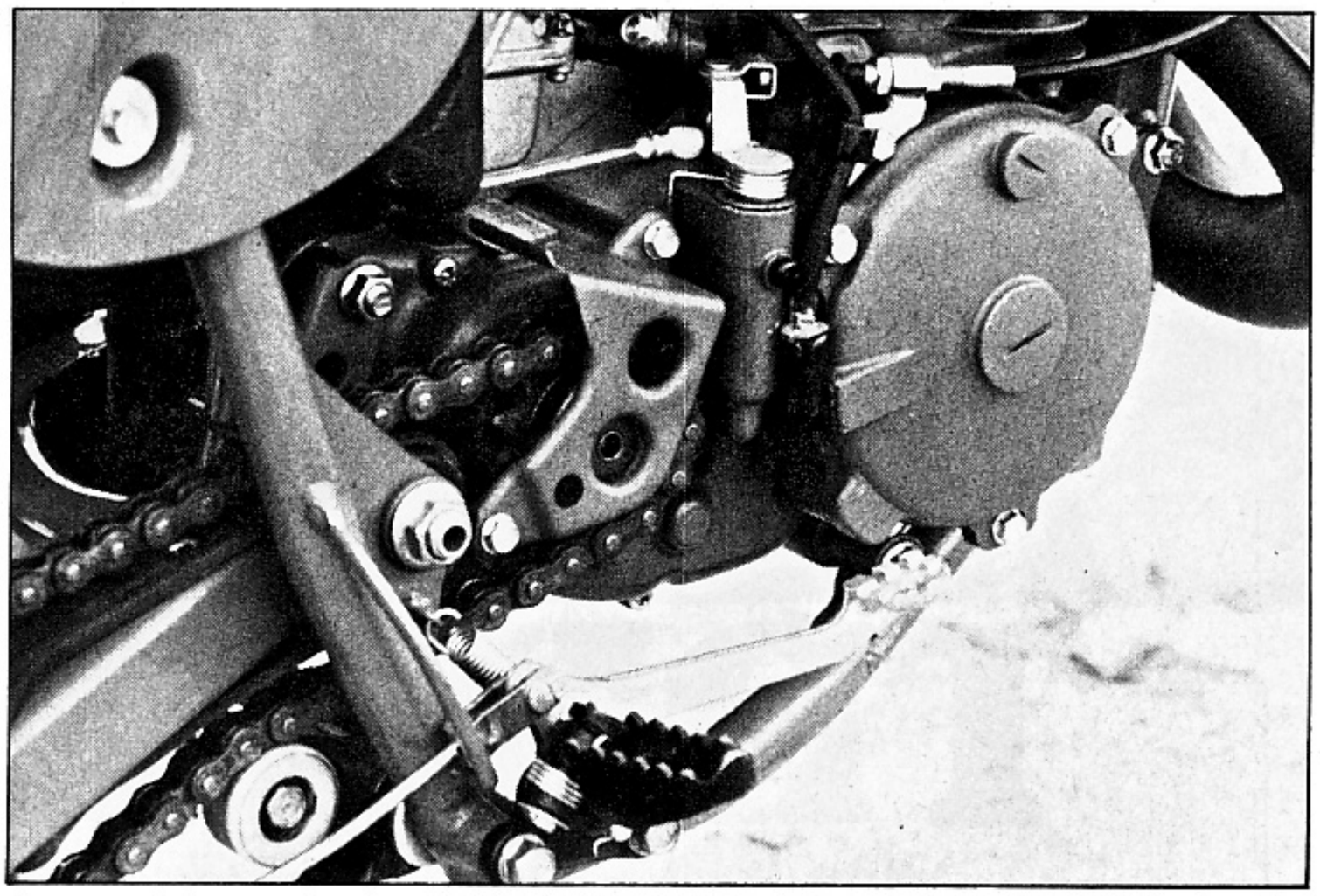
Honda has made a number of concessions to lightness, including axles and swingarm pivot, the smallest engine cases on any 250 we've seen, magnesium full-floating rear brake backing plate, forged aluminum kickstarter (on the left



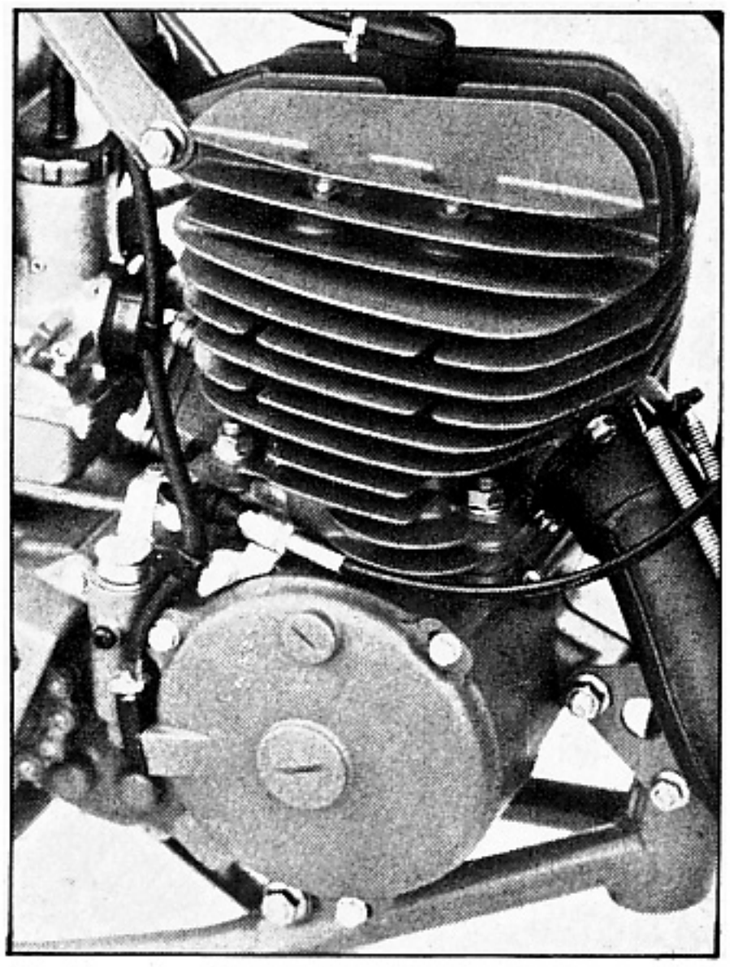
Rear end of "R" model has full floating brake (Excellent!) and chain on same side for lightness. Also note hollow axle and more-than-sufficient gussetting.



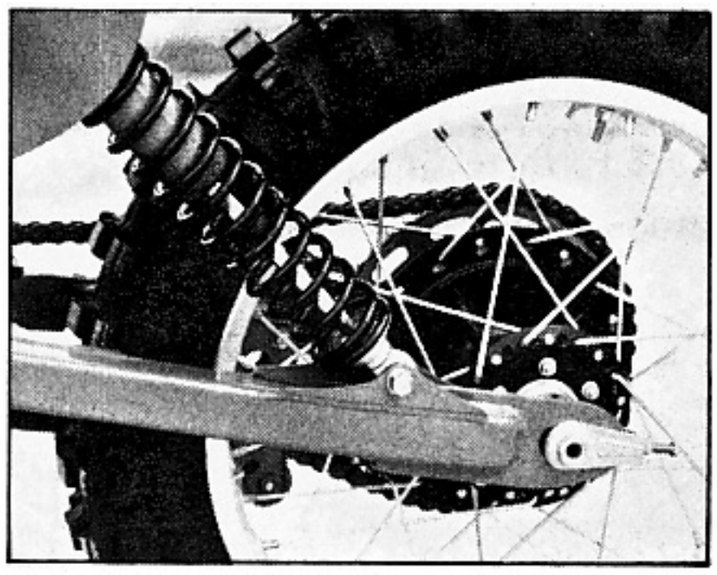
Our favorite part of the "R" model . . . engine is powerful, has surprisingly wide powerband. Pipe is well tucked in. Note left-side kickstarter, unusual for Japanese bikes. Steel tank holds 2.2 gallons.



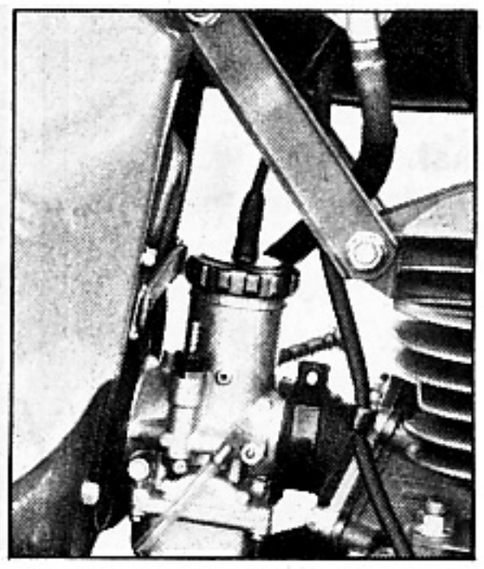
Countershaft sprocket is only 3¼ inches from swingarm pivot, thus eliminating the need for chain tensioner. Neat little "loop" welded onto frame protects brake pedal linkage from foot interference. Note nylon roller for chain.



Engine is all new and is very, very close to what the works riders are using. All in all, the Honda CR250R comes closer to closing the gap between production and works bike than anything ever built.



Honda has elected to stick with smaller chrome-moly swingarm, rather than go to aluminum a la Suzuki. Shocks are by Showa (they're rebuildable gas units), travel is 11 inches.



Closeup of engine headstay and 36mm Keihin carburetor.

side, for a change) shifter and brake pedal.

The full-floating back brake is another of the Honda's more outstanding attributes. And it's another feature that Rolf Tibblin praised. Might even be the best motocross brake in the business.

Back to the chassis for a minute... It's a modern technological work of art. Well, maybe not art, but... It's functional, strong and very efficient, but just about the only concession to beauty is the red paint job. Welds are strong, but ugly, tubes are trimmed, but not polished and smoothed, and there are welds and gussets everywhere. Race bike engineers don't much care what the bike looks like, just as long as it works. That's probably how most of you feel as well, so let's not sweat the small stuff. The swingarm is fairly long, rides on roller bearings and pivots only 80mm (3¼ inches) from the countershaft sprocket. Chain tensioning is via a rubber pad on the swingarm itself and a pair of nylon rollers, which will wear out fairly quickly. Fortunately, they're easily (and pretty cheaply) replaced. One roller is forward, just

Continued on page 60

TECHNICAL SPECIFICATIONS
HONDA CR250R

ENGINE

Engine type	2-stroke reed valve single
Bore and stroke, mm	70 x 64.4
Displacement, cc	247
Horsepower/rpm (claimed)	30/7500
Torque/rpm (claimed)	22.92/6500
Compression ratio	7.3:1
Air filtration	Oiled foam
Carburetion	36mm Keihin
Lubrication	Pre-mix
Ignition	CDI

DRIVE TRAIN

Transmission	5-speed
Clutch type	Wet, multi-plate
Primary drive	Straight cut gear
Final drive	#520 chain

CHASSIS

Chassis type	Single downtube
Overall length, in.	84.5
Seat height, in.	37
Peg height, in.	14.3
Ground clearance, in.	11.6
Wheelbase, in.	56.9
Weight as tested, lbs.	230
Tires, front	Dunlop 3.00 x 21
rear	Dunlop 5.00 x 18

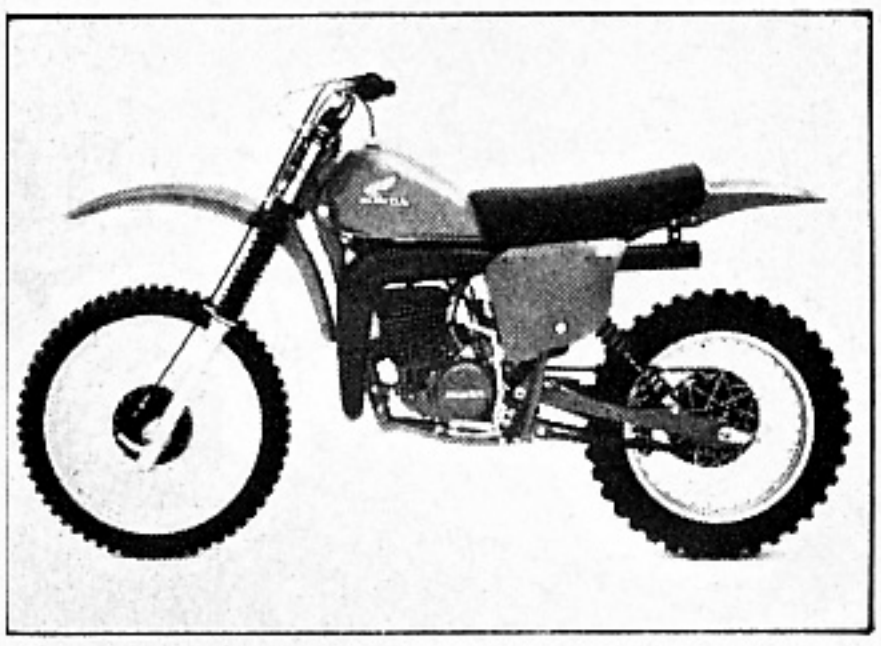
SUSPENSION

Front	Showa leading axle forks
Travel, in.	11.5
Rear	Showa gas/oil shocks
Travel, in.	11

MOTOCROSS

Max. Pts. Poss.		
10	Power	10
10	Powerband	10
10	Acceleration	10
10	Transmission	
	(5) Ratios	5
	(5) Operation	4
10	Suspension	
	(5) Front	5
	(5) Rear	5
10	Brakes	
	(5) Front	5
	(5) Rear	5
10	General handling	9
30	Miscellanea	
	(5) Starting	5
	(5) Rider comfort	5
	(5) Quality of craftsmanship	4
	(5) Riding maneuverability	4
	(5) Tires	4
	(5) Noise level	4
100 pts.	Overall Rating	94 pts.

HONDA



behind the swingarm pivot point, and the other is located further aft in the chain protector/guide. A floating chain tensioner is unnecessary, because of the close distance between countershaft and swingarm pivot.

Sitting nestled between the frame tubes is our favorite part of the CR250R—the engine. First, it's red, just like everything else made of metal on the bike except the handlebars, forks, pipe and shock springs. Next, it's powerful (more powerful than the Yamaha, maybe not quite as much so as the latest Suzuki) and it's a much more manageable kind of power than any other bike in its class. Whereas the Yamaha is far too pipey, the Honda has a surprising amount of low- and mid-range horsepower. It pulls all the way from "ground level" on up to the extremes. Maximum horsepower is just about 30, at a peak of 7500 rpm. The exhaust pipe (partly responsible for the broad powerband) is well tucked in and is available with an optional spark arrestor/silencer to make the bike desert-legal. In stock (loudest) trim, the Honda is still somewhat quieter than the Suzuki.

The engine is slightly unusual in that it's an oversquare configuration. That means that the bore dimension is greater than the stroke (70mm bore, 64mm stroke). Compression ratio is a not-too-radical 7.3:1.

Of note is the chrome cylinder bore, which will bring a mixed reaction, most likely. The cylinder cools better and quicker, and tolerances can be run closer, but reboring the cylinder is impossible. Replacing the cylinder is gonna be pretty expensive at around $180 for a new one, but Honda engineers feel strongly that you'll be able to get a full season out of a barrel, *provided* you take care of the engine.

That means that air cleaner maintenance is an absolute must! Failure to keep the air cleaner clean, AND seated right in the airbox, will allow garbage to get into the cylinder. *Bang*, you've just bought yourself a brand new cylinder. And while we're talking about the air filter, we suggest that you *very closely* follow the instructions for removing/installing it given in the comprehensive owner's manual. *Don't* do it in what might seem like the easiest, quickest way. Do it right, and save yourself grief sooner or later.

That's just about all we'll say on the subject of the Honda cylinder, except that it's very well ported and constructed. That's one of the advantages of hard-chrome cylinders—you can make the ports much more precise and have them stay that way.

Ignition is CDI, so you don't have to worry much about electrical tuning and tweaking. Transmission is constant-mesh five speed, and gear spacing is perfect. At first, we tended to miss shifts with the forged alloy shift lever, but we soon got used to it and that problem went right away. There was no problem with the tranny, it was just a matter of getting that size-11 Malcolm Smith boot to work together with the shift lever.

The factory has installed a head stay from the top of the engine to the frame; a feature which reduces engine vibration (and thus aids component life) by transmitting it to and through the rest of the chassis. Don't worry, the frame can handle the extra load, and the head stay doesn't make the bike vibrate so much that the rider notices it.

What else is there to talk about? How about all the little things on the new bike. Handlebars . . . chrome-moly, black finish, Brad Lackey replica. Good bars. Seat is longer than former models, which makes it convenient to slide fore and aft while cornering. Red color rubs off the steel (2.2-gallon) gas tank and side panels. Side panels and fenders are good plastic. (What's Preston Petty doing now that such good fenders come as standard equipment on most modern race bikes?) We'd like to see an adjustment screw on the rear brake lever, but that's probably not a real critical point. The Dunlop tires that come on the bike aren't ideal for SoCal, but probably not bad for the rest of the country. Japanese OEM tires aren't the same as the Made in England "real racing" variety, so you might plan on a set of tires not too long after purchase of a new Honda.

It's strange to see a left-side starting lever on a Japanese bike, but this one folds in well and the engine is easy to start. Reed valve induction is very similar to the Yamaha, with six metal pedals. Carb is a 36mm Keihin.

What else is there to say? Only that we strongly recommend the Honda CR250R for the aspiring racer. After all, look at how well Marty and Jimmy have done with theirs. Just be ready to take good care of that air cleaner and look after the basic maintenance.

That, and get a new dust rag for the trophy shelf. You just might need the space. ●