

RACE TESTING HONDA'S 125

POPULAR

34120 OCTOBER 1976 \$1.00

CYCLING IND

**RIDING THE
PRO RACE
CIRCUIT
ON \$300**

**WORLD MX
COVERAGE!**

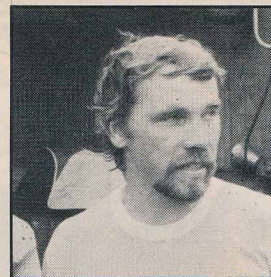
**DO IT
YOURSELF
WHEEL
CHANGING!**

**4 MINUTE
TIRE CHANGES!**



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J TIMM
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VOLUME 9, NUMBER 10
OCTOBER 1976



Cover:
Action from the U.S. Grand
Prix at Carlsbad, with Adolf
Weil and Tommy Croft.
Shot by Steve Reyes and
Ektachrome, loaded in a
6x7 Pentax.

Centerspread:
More race action from
Carlsbad—this time at the
start of the second moto.
Steve Reyes again doing
the honors.

POPULAR CYCLING

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STAFF

Editorial Director
George Elliott

Editor
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Graphic Director
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CORONADO BOOK
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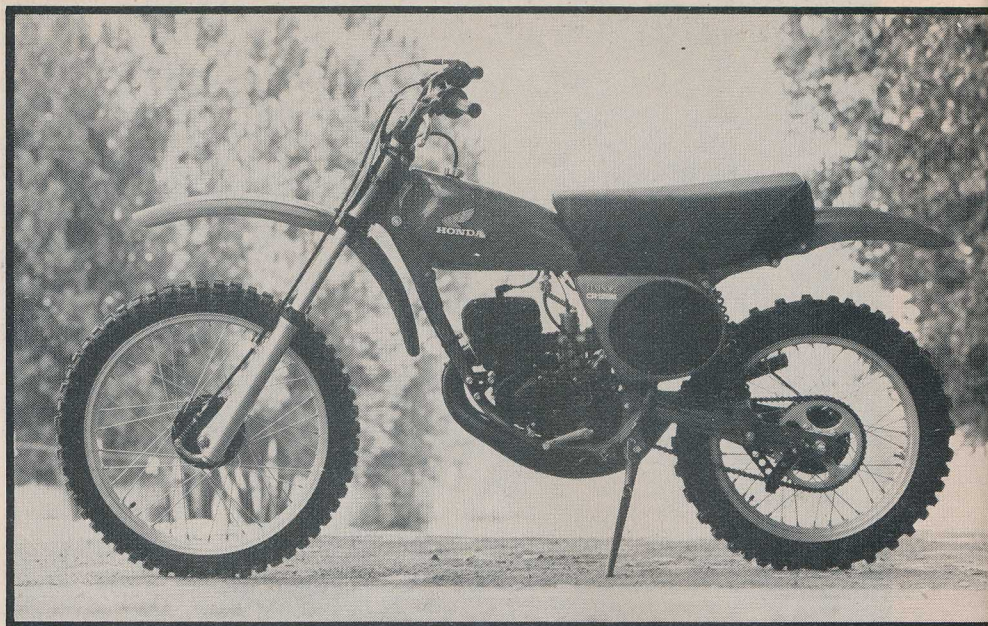
Advertising Coordinator
Gail A. Litt



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The rear frame loop has disappeared, the seat is taller. Wider fenders, a different pipe and moved-up shocks are all debuted on the '76 model.

The CR takes a giant leap backward to third position—or did the other guys just move ahead while the red rocketship remained stationary?



When it first showed up, the Honda CR 125 Elsinore so totally dominated its class that it wasn't even fair. In those first few months of glory, stomping everything in sight, the Elsinore was the machine to have.

Then both Yamaha and Suzuki kicked their engines into high gear, started to really draw with those pencils and eventually joined the crowd. But the Honda was still at the top of the heap.

But times change, and with them, the Honda has fallen from King of the Hill to a distant third. Before we explain why, we'll give you the good points of the machine.

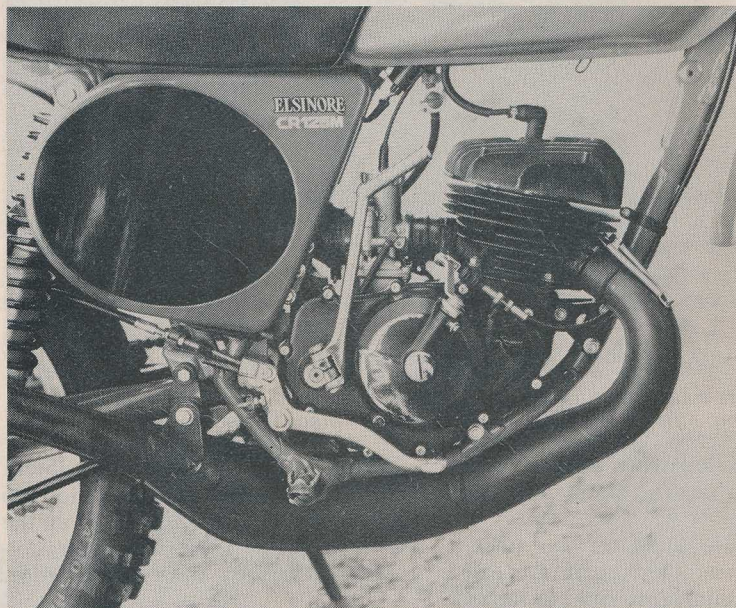
First of all, it's light. It's one of the most maneuverable 125cc motocross machines available. Just about anyone, regardless of size and height, can throw an Elsinore around the track with the grace and style that the machine deserves.

It also turns well. If you go into a corner and want to come out in *exactly* a particular spot, you can. It will turn on a dime, run over a dime, and basically do what's asked.

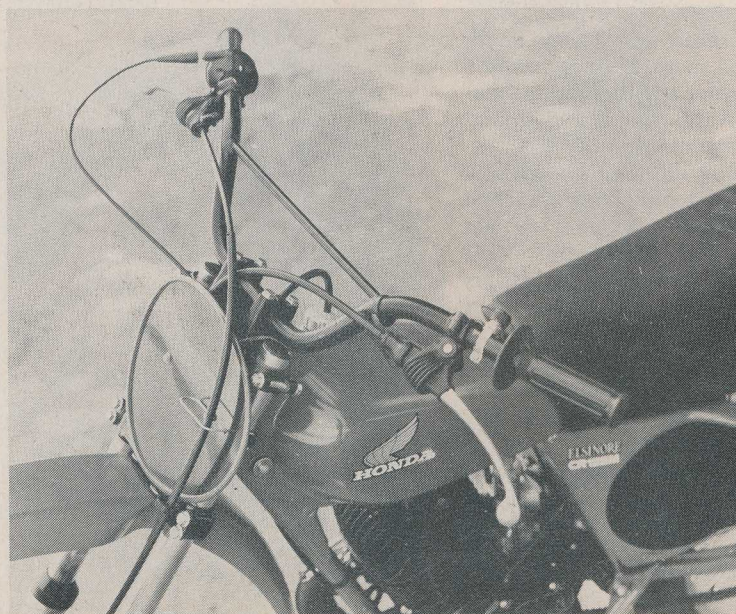
With the exception of the top end, the engine has remained basically the same since its inception. You've still got to change clutch plates every so often. The gearbox is perfectly suited to just about any track. With six speeds to choose from, you can't complain that there isn't a gear for every occasion.

One drawback of the engine is the lower end bearing. Today you just can't race a stock 125 and be really competitive unless your name is Marty Smith. So everyone pumps additional horsepower out of the little engine. Which is fine.

But it puts a lot of stress on the lower end bearing, and eventually if you're not always on top of it, or if you pump out too much horsepower, the bottom end is



The engine has remained virtually the same since the first model Elsinore came out. The only difference is internal cylinder design, which gets pipey and narrower each year.



Stock Honda bars and grips are acceptable. You can even live with the levers and cables for a long time. The kill button cap will probably fall off and you'll have a heck of a time getting fuel into the new gas tank.

THE 1976 HONDA ELSINORE



going to go south.

Normally this would mean splitting the cases, popping the crank halves apart and getting a new bearing for about four dollars. But the Honda company didn't go that route.

Instead you've got to shell out about \$70. You see, you can't just buy the lower end bearing. You've got to buy the entire crank assembly. There are a few places where you can get the halves split and a new bearing put in without going through the expense of the crank, but for the majority of us, those places are few and far between.

The original engine, the one housed in the silver tanked, black-framed unit, was and still is the fastest. There are a lot of reasons for this, the main one being the cylinder. In the '74 cylinder, the porting was different. You had a little more low-end, a semblance of mid-range and the ability to put in a boost port.

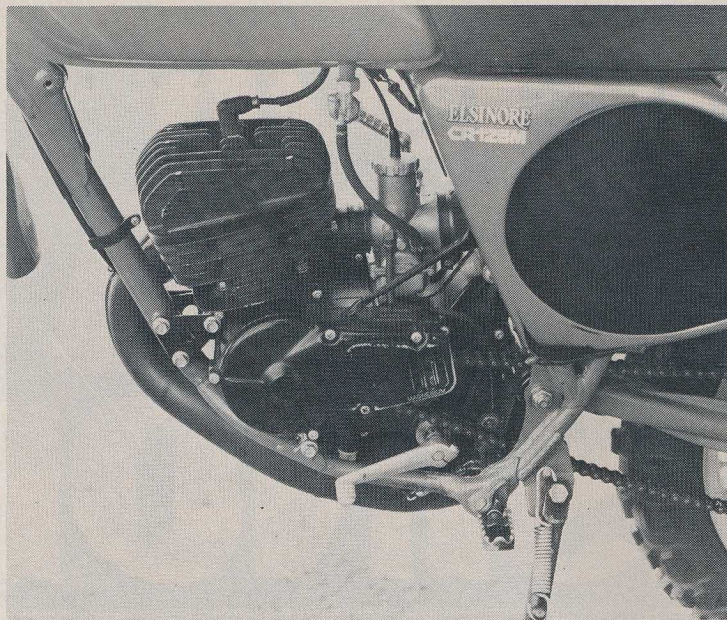
In the '75 cylinder you can still get the boost port tucked in there, but it isn't as efficient. Same holds true with the new engine. If you really want a fast 125 Elsinore, one that you know will give you the most horsepower for your hard-earned dollar, you've got to hunt down a '74 cylinder.

The ignition system remains the same, and for the most part, it is substantial. For those who have money running out of their pockets, a Motoplat or Mototek ignition system will give a little better result. The stock unit, easy to time, dependable and not susceptible to breakdowns, works excellently for the masses.

In the tranny you shouldn't have to touch a thing. Just have fresh oil in the gearbox every four or five races, and you'll be in good shape. The Honda shafts and accompanying gears are usually shimmed very tightly, thus you don't get partial gear engagement while riding. Neutral is still a bear to find when you want it, but after you've lived with the machine for a while, you discover the trick.

Brake hubs at both ends are the same as those on the original bike. The rear is operated by a cable brake system, so far the best bet going. Unfortunately, the brake anchor arm is mounted to the rear swing arm, thus you don't have a full-floating brake system. If you were to extend that stay arm past the swingarm and mount it to the frame, you'd have a full-floating brake. It isn't hard, and it's well worth the money.

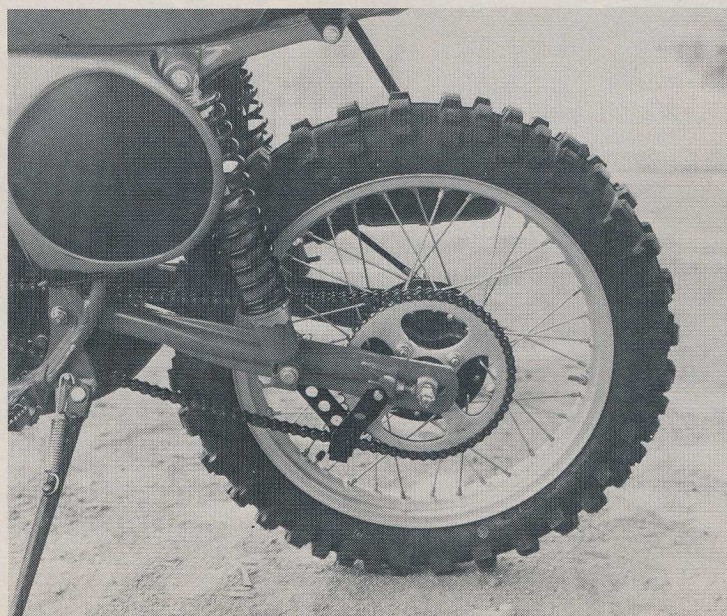
The front brake works very well. Although neither binder is waterproof, they do clear out quickly after a water crossing. The progressive feel of the front brake is good, but there is a slight problem with the adjusting bolt on the backing plate. On occasions the two 12mm nuts like to vibrate loose, allowing the brake to go out of adjustment, leaving you to stop the machine with the



Shifting is beautiful, but the chain is too small, footpegs break and many owners have had that trick magnesium cover break in the filling area.



Here's the culprit. A cheap, skinny rim, along with some very tiny spokes laced in a cross-two pattern. We don't suggest that you race this machine in this condition.



You would be wise to get different shocks for the rear, along with a chain tensioner. Both the front and rear tires are excellent.



rear only. Keep an eye on them.

As with last year's machine, the airbox on the new CR M-2 is improved. The filter element is larger, easier to get to and harder to submerge under water. Make sure it's cleaned and well greased after every race. Because of its design, the element is susceptible to seepage and should be well greased to eliminate the possibility of getting dirt down in the cylinder.

The frame design is slightly altered, mainly due to the placement of the rear shocks. This year Honda opted to again move their shocks vertically forward and install the new nitrogen units. If you're planning on seriously racing the machine, you'd better start looking around for a set of rear shocks.

So that the shocks would clear, the side panels have been mashed out and have air slots (nonfunctional, but trick-looking) towards the rear. The side panels very rarely fall off, but when you put on your numbers, you'd be wise to spray a couple of coats of clear lacquer over the top.

The gas tank is a little different, the seat is a little taller. Now if you slide forward on the seat and up on the tank, you've got a drop of about one inch. The tank opening is still too small, won't

accept your average size nozzle and you can't easily see how much fuel you've put in until it overflows out of the opening and all over the tank, your leathers and boots.

The frame, tank and side panels are red this year. Looks like a skinny firetruck.

Okay, so you're probably wondering how all of this stuff works when you're out assaulting a track. First we'll start with the powerband. As mentioned before, each year the Honda has been losing more low-end (of which there was little in the first place) and mid-range. Usually it's gained a few more rpm on the top end and an extra pony or two.

This year's engine is lacking even on the top end. The powerband is drastically narrowed, and there is a very pronounced flat spot when it starts to peter out at high rpm. The Yamaha and Suzuki both come on the pipe long before the Honda does. It's a little harder to start this year and runs just a tad hotter. The '74 barrel is still the best.

Shifting was clear, crisp and smooth. You have to let off the throttle just a tad to enable the tranny to grab the next gear. Because of the powerband, starts in second gear are a little tricky and require a lot of assistance from the

clutch department.

Throttle response, when the bike is up on the pipe and buzzing, is almost instantaneous. When you wick it, the engine revs. No stutters, no split-second lag. As fast as you can turn the throttle, the engine will cooperate.

The rear suspension on the Honda, although it's a good idea, isn't up to par with the Suzuki or Yamaha. Moved-up vertical shocks just aren't the hot set-up. In rough sections of a course, the rear wheel has a tendency to skip across the ground, allowing the rear wheel to spin while you wick on the throttle watching the other guys go past.

It's also a little on the harsh side. Vertical shocks just don't have the cushy feeling that you get with laid-down units. When you're accelerating, the rear wheel is always spinning.

When landing off a jump the rear end cooperates—up to a point. When it gets close to the bottoming-out point, those rubber stoppers compress. Unfortunately, the stoppers are a tad too long and way too stiff. If you were to cut about an inch off the bottom of the stopper you'd get a little more travel, a little rubber on the inside of the fender (which has been widened along with the front) and a better ride.

But when that suspension gets to the rubber stopper, it's going to quickly stop soaking up the bumps. Other shocks, preferably inverted gas shocks, would be a great improvement.

We honestly don't know what they did to the front forks on the bike, but whatever it is, it's wrong. Honda Elsinore forks used to be such a good pair of units, but lately they're not performing. We're not sure if it's a case of the other guys getting better while Honda stayed stationary, or if Honda made some alterations and blew it.

In any case, here's what happens. On a usual course, down the straightaways, coming out of corners and so forth, the forks work beautifully. But when you come off a jump they bottom out (or more likely, experience hydraulic lock) with such a resounding clunk that you'd think somebody hit the front end with a sledgehammer.

At first we thought it was the fork oil, so it was dropped from the original fish oil to a good quantity of Bel-Ray 10-weight. Still the clinking and bottoming out was experienced. The compression dampening is good, but not as good as that found on the Yamaha. Rebound is almost non-existent, way too retarded and vague-feeling.

We suggest that even before you go riding the machine, you plunk down a few extra bucks and get a S&W fork kit. It will take all that harshness out of the front end. Also change the springs. They're not working in conjunction with the rear shocks.

There is one problem, and a major one, that we experienced that just can't be ignored. The front wheel. Many of you Honda owners who have the totally red rocketships in your garage are probably sitting out there nodding your heads. You already know about the problem.

On our first test session, after the photos were shot, we brought the bike back to the pits, checked spokes and headed out for a 40-minute moto. At just about the 15-minute mark, when the bike came off the first of a two-jump section, it broke seven spokes in the front wheel.

Instead of coming out of the rim, the spokes broke away from the hub. When we hit the second jump, the Honda did a series of exciting tank-slappers, bounced the wheel left and right from fork leg to fork leg and finally came to rest while the rider was trying to regain a somewhat normal heartbeat.

At first we thought this was a fluke. Maybe the spokes were too tight in the first place, didn't have enough give and gave out. We also noticed that the spokes that broke were in the general vicinity of the front rim lock.

Another front wheel was installed on the bike (same year wheel) and we went out again. Once more, after about 20 minutes this time, we had six spokes



Just after this photo was taken, the first of our front wheels came apart. We weren't putting excessive demand on the bike—just normal racing situations.

break away from the hub. Same place too.

Now it was getting serious. In all honesty, we were riding the bike very hard. We have to, if we want to find out how it's going to stand up. But there are surely other riders out there who are heavier (160 pounds) than our test riders, ride harder, and go faster. How do they get around the front wheel problem?

We went around to find out. The first red Honda rider we found was questioned about his bike. "It's all right," he said, "but it needs rear shocks and it keeps breaking spokes out of the front wheel." After a little prying, we found that he was on his third wheel. His also had broken the spokes out directly across from the rim lock.

Another Honda rider was found. He had put the S&W kit in his machine before riding it, and although it worked better, he was still breaking spokes. So it appears as if it isn't a problem of the front end bottoming out badly, putting all the pressure on the wheel. The problem lies in the wheel itself.

At a Friday night race we saw one of the new Hondas with a different front wheel. The rider had taken the stock rim, spokes and nipples and thrown them away. Then he went to a cross-four-eight gauge spoke pattern up front. Before this setup he had broken two wheels. Since he put in the heavier spokes, thicker and wider Sun rim and the steel nipples, he hadn't even had a hint of problem.

So it appears that there is a cure. The culprits are the narrow rim, ridiculously tiny spokes and very unsteady, not-right-for-racing, cross-two pattern that it's laced up with. By all means, get a

sturdier wheel on the front of your bike before going out to race. From the info we gathered and from our own experiences, that wheel is going to give you problems. Depending on how fast you're going at the time, and if you're landing from a jump, it could get very hairy.

Another thing you're going to have to watch is the steering head bearings. Because of the wheel abuse and the forks' tendency to bottom out, the steering head and its bearings are under a lot of strain. Check them periodically along with the triple clamps for bends. While you're at it, take the forks off, stick them under a dial indicator and check them for straightness. They have a tendency to bend backwards slightly (nothing to worry about really, just a bit) and should be re-straightened.

There are a lot of things that we'd like to see on the Elsinore that haven't appeared yet. A beefier #520 chain would be a good idea. All the racers have to buy the kit nowadays. Beefier footpegs would solve the breakage problem. A larger brake pedal would be easier to find.

Over all, the Honda isn't a bad bike. But is it still the best? No. Both the Yamaha and Suzuki are better in suspension and powerband departments. The Honda needs too much work on the suspension, that nasty front wheel and various odds and ends. Honda could easily have updated their machine to stay in the lead. A faster cylinder with a wider powerband, laid-down shocks, good fork action and sturdier wheels would have done the job. But as it stands, you've got to do that yourself. With the other two leading brands, those things, and more, are already done for you.

HONDA CR 125 ELSINORE

ENGINE

Engine type	2-stroke single
Bore and stroke,mm	56 x 50
Displacement,cc	123
Horsepower/rpm (claimed)	n.a.
Torque/rpm (claimed)	n.a.
Compression ratio	7.6:1
Air filtration	foam element
Carburetion	Keihin
Lubrication	in fuel
Ignition	C.D.I.

DRIVE TRAIN

Transmission	6-speed
Clutch type	wet multi-disc

CHASSIS

Chassis type	single downtube
Overall length, in.	80.3
Seat height, in.	34
Peg height, in.	8.9
Ground clearance, in.	7.7
Wheelbase, in.	53
Weight as tested, lbs.	184
Tires, front	2.75 x 21
rear	3.50 x 18

Max.

Pts. NUMERICAL EVALUATION

10	Power	7
10	Powerband	8
10	Acceleration	7
10	Transmission	
	(5) Ratios	5
	(5) Operation	5
10	Suspension	
	(5) Front	3
	(5) Rear	4
10	Brakes	
	(5) Front	5
	(5) Rear	5
10	General Handling	9
30	Miscellanea	
	(5) Starting	4
	(5) Rider comfort	5
	(5) Quality of craftsmanship	4
	(5) Riding maneuverability	5
	(5) Tires	5
	(5) Noise level	4

100 pts. Overall Rating 85 pts.



Over all, the Honda looks and runs like a rocketship. There are about four million things you can buy for this bike to make it even better.

