



TRACK TEST:**Honda
CR125R
Elsinore**

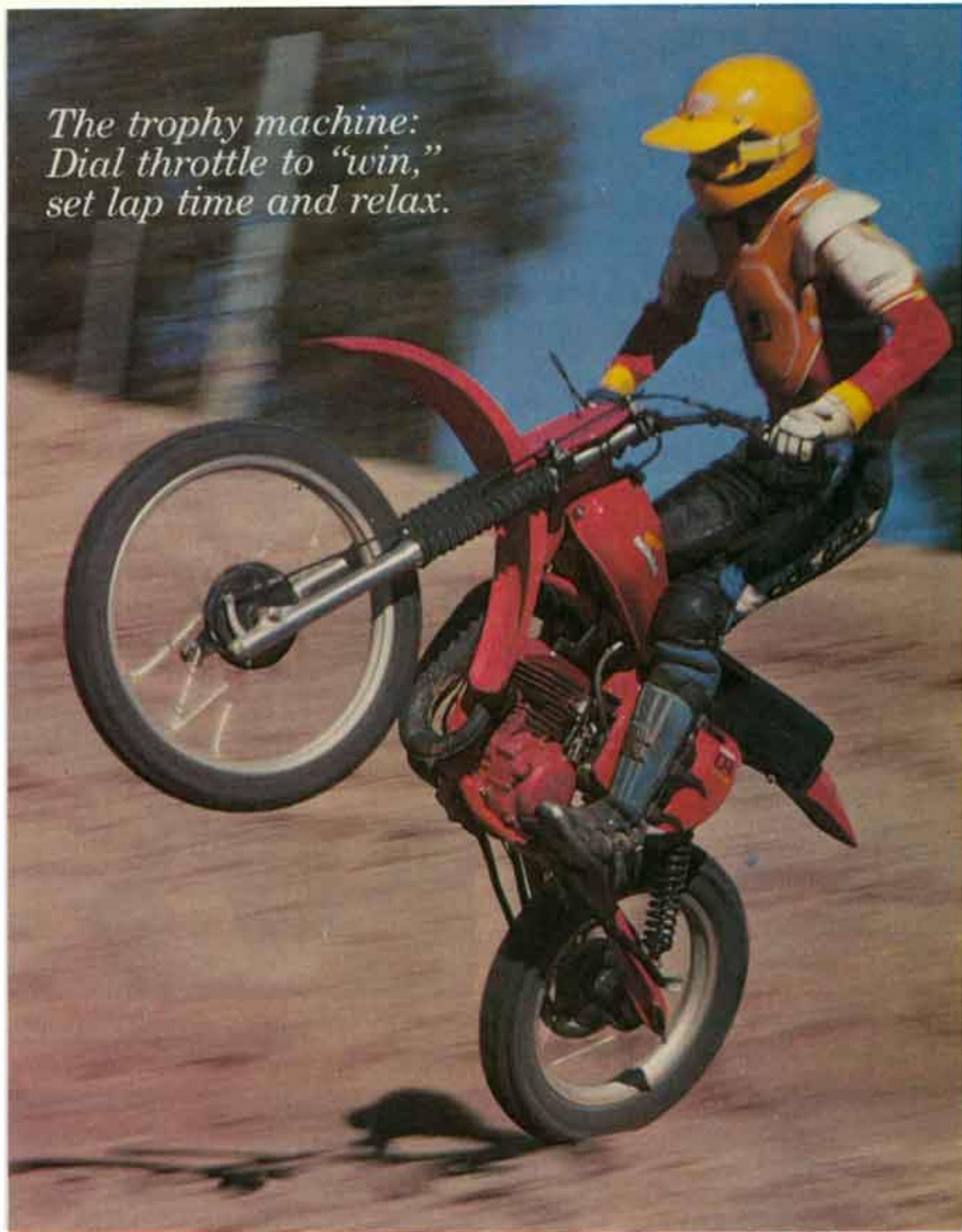
BY JEFF KARR

According to hearsay, the harder a 125cc motocross bike is to ride, the better it must be. So the ultimate 125 would, at least by *those* standards, be a 30-horsepower rocket scaled to fit a junior-high flyweight, have a powerband that begins at 11,216 rpm and ends at 11,221, and would require continuous WFO operation by a glassy-eyed, hyperactive adrenaline-junkie just to keep from fouling its own sparkplug.

Well, whoever is perpetuating that old wives' tale must not have ridden a good 125 motocross bike lately. Yes, some one-two-fives of years past were that dicey, especially the radically modified ones. But no more. A superfast modern 125 obviously requires more attention to lines, engine rpm and gear selection than a 501 Maico or a Yamaha TT500, but dealing with small-bore machines nowadays really isn't all that big a deal.

As a matter of fact, there's a new 125 dirt racer that doesn't take much more high-intensity riding effort than an average 250 motocrosser. It's Honda's totally new CR125R. Functionally mean-looking on the outside and remarkably competent on the inside, this Honda still is about as friendly a mount for the non-berserker rider as some 125cc trail bikes.

As far as any one of Honda's 1700 U.S. dealers is concerned, the CR125R has been much too long in coming. While 125cc Suzukis and Yamahas have been selling like Quarter-Pounders and winning all the local races, Honda dealers and followers were stuck with the same old outdated CR125M Elsinore year after year. The only updates the bike ever got were some really *important* things like new red fork boots or a detachable spark arrestor. But all those bleak Sundays at local races are over for Honda. The factory has finally cut loose with the new Elsinore, and it shares virtually nothing with the old one. More important, its pieces work together in such perfect harmony that even the dealers will feel it was worth the wait.



*The trophy machine:
Dial throttle to "win,"
set lap time and relax.*

Honda's little red racer revisited

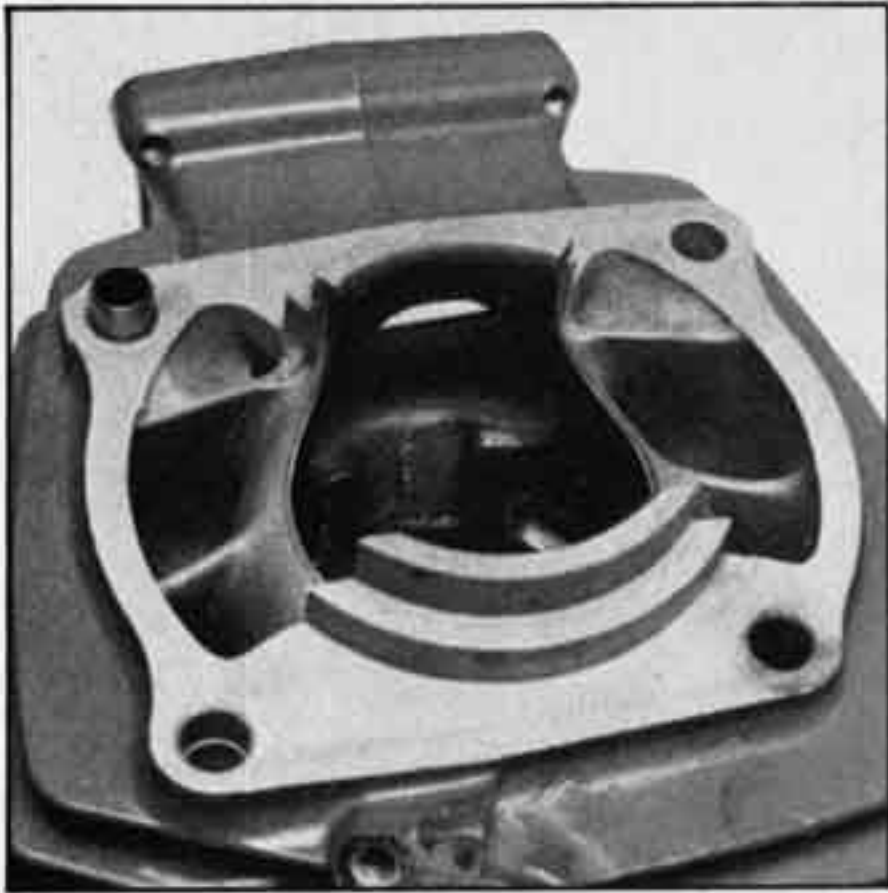
The legendary Elsinore stops being a legend and starts being a winner.

Some unique design ideas have found their way onto the CR, the most obvious oddity being the 23-inch front wheel. The Elsinore is the first production motocrosser to be fitted with the big hoop as standard equipment. The theory is that the larger wheel effectively makes all bumps and holes smaller in relation to the tire's radius, therefore providing a smoother ride. Honda also claims improved steering characteristics due to a longer tire contact patch. The CR *does* steer with uncanny precision and it absorbs bumps superbly; but since the rest of the chassis was designed around the 23-incher and the steering geometry numbers are pretty conventional, we could find no concrete evidence that the big wheel either was or was not the cause. A definitive conclusion would be possible

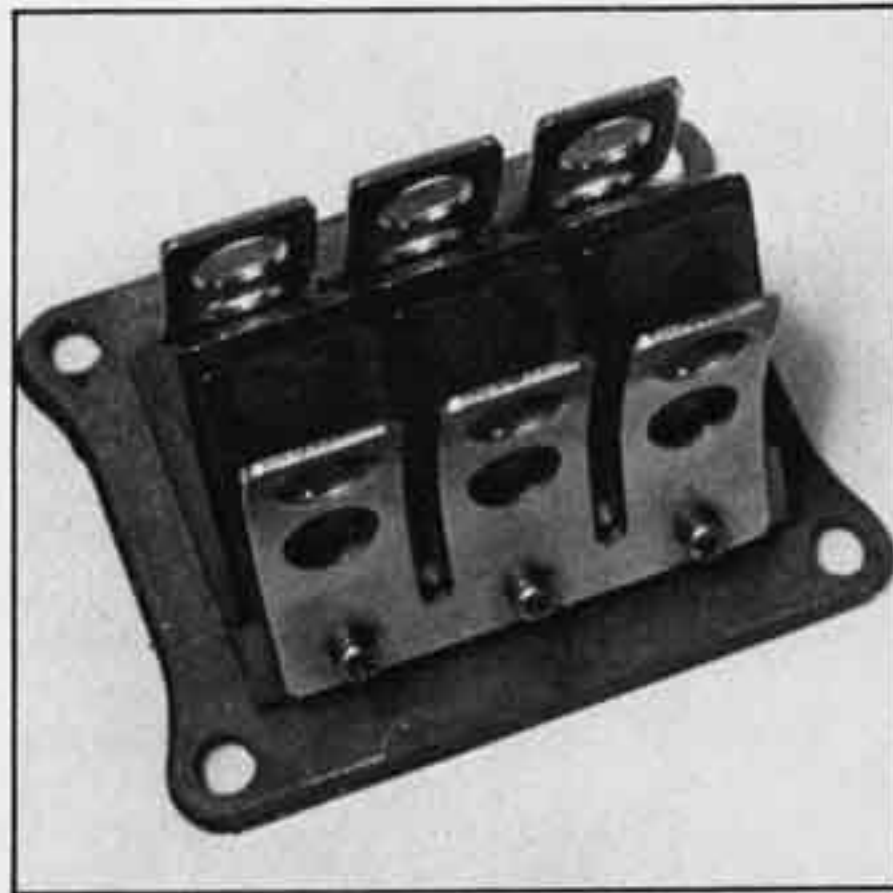
only after comparing a stock bike to another one outfitted with a 21-inch wheel, but retaining the same steering geometry.

Further complicating any meaningful evaluation of the 23-incher is another one of Honda's innovations—the patented Bridgestone claw-action motocross tires. The novel-looking tread pattern is claimed to literally “pinch” the dirt under the weight of the motorcycle so as to deliver better traction than normal knob-bies. Again, it's impossible to be conclusive without making that same comparison, but sometimes the Bridgestones seem better, sometimes they're worse. The rear tire is exceptional on hard, dry terrain as well as on tacky, loamy dirt, but it is not as effective as a good knobby in deep sand or gooey mud. The front end, too, sticks incredibly well on all but the

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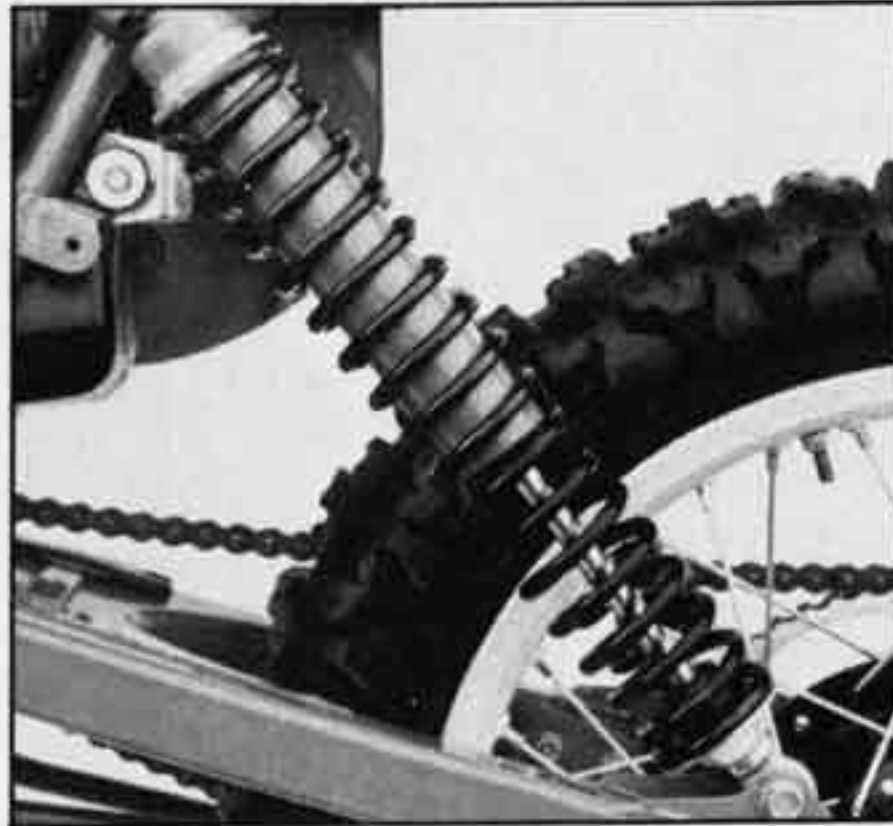
The CR's multiplex-transfer port system
The racetrack says it works superbly.



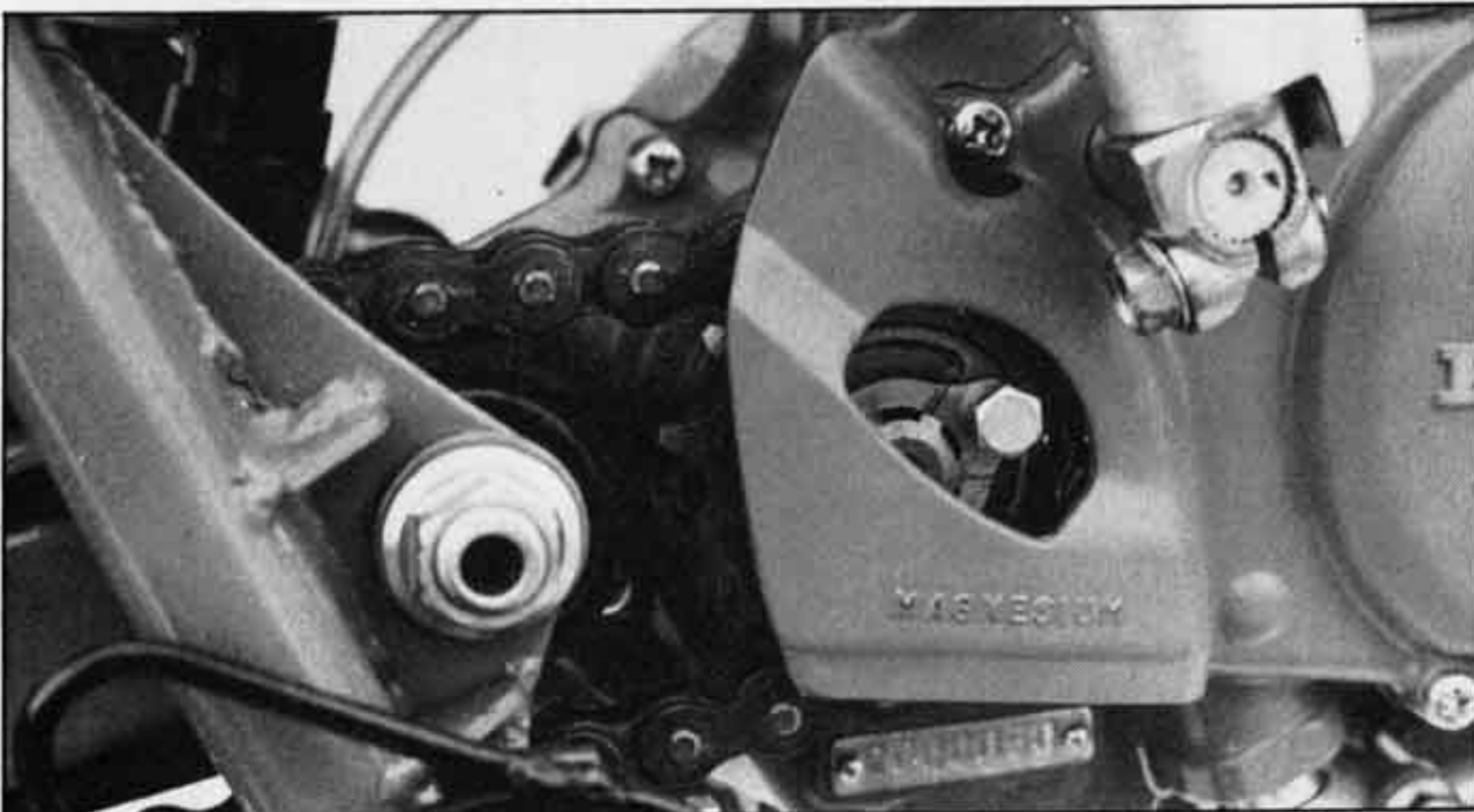
Patented "grid-pattern" reed petals
Thinner, stronger for high-rpm running.



Light, unusually short six-speed engine
Not a wasted scrap of alloy anywhere.



Showa unreservoired gas-emulsion shocks
Dialed in for sub-160-pound riders.



Close proximity of countershaft sprocket and swingarm pivot
The right way to eliminate spring-loaded tensioners and floppy drive chains.

mushiest terrain. But there's just no way of telling if the main credit should go to the tire, the 23-inch front wheel or the Elsinore's basic steering geometry. One thing is for sure, though: All those things work together to make it one of the best steerers in the 125 class and a motorcycle that is happy to oblige the rider's every cornering whim.

Like the factory Hondas it is patterned after, the 125 Elsinore has a Husqvarna-style chromoly frame that is very nearly as large as the CR250R's. This spaciousness makes the R-model particularly big for a 125 and unusually comfortable for tall riders. Our over-six-foot testers had plenty of space for their arms and legs without feeling awkward or being worn

out by enduring a cramped riding position. Average-height and shorter riders will be faced with the customary high-seat blues, though. (Another Husky feature Honda *should* have copied is the uncomplicated airbox design. Adequately servicing the Honda's foam element requires fumbling with as many as three hose clamps, four bolts and one rubber strap.)

The similarities between the CR125R and the Honda CR250R are more than just external. The incredibly compact 125cc powerplant is basically a scaled-down version of its bigger brother. It, too, breathes through a six-petal reed cage and has the same type of port layout as used on the 250. It also shares the same non-boreable chrome-plated cylinder lining that has proven durable in the bigger CR. Some accessory companies will undoubtedly provide steel replacement sleeves for the stock cylinders, but because of potential heat transfer problems, Honda strongly advises against their use. The six-speed transmission also is equipped with an anti-overshift device similar to the one on the 250.

Honda went to great pains to keep the CR125's engine light, even though all engine-castings are aluminum except for the one-piece magnesium ignition/countershaft cover. Pins and shafts are drilled out wherever practical. Unnecessary case material has been machined away or deleted in the casting process. Even the countershaft sprocket has been milled to reduce its weight. This concern pays off with a tiny engine that weighs just 41.9 pounds with its 32mm Keihin carburetor in place.

Weight-saving efforts didn't stop at the engine, though. Both brake backing plates are magnesium; the fork stanchions are turned down at their upper ends; the shift lever and kickstarter are both forged aluminum; and, unique to Japanese bikes other than the CR250R, the drive sprocket and the brake drum are both on the same side of the rear wheel. This permits a lighter conical hub that only needs to be so heavily reinforced on one side instead of two. Certainly not a new idea, but one that has proven effective and reliable on several European off-road bikes.

At 197 pounds dry, the CR isn't particularly light for a 125. It has close to 11 inches of wheel travel at both ends, however, and serves to illustrate how being the class leader in suspension stroke can penalize a motocrosser on the scales, even when a conscientiously applied program of weight reduction has been religiously

followed. Showa gas shocks mounted on an incredibly long steel swingarm deliver 10.6 inches of rear wheel movement, .6 inches more than on the closest contender, the Husqvarna 125CR. The springing is just about right for an average rider in the 130-to-160-pound range, while the damping is a bit firm. The Showas keep the wheel on the ground effectively enough, but are a little harsher on choppy ground than the Husky's big-body Girlings. The Honda's rear end stays straight through whoopers and on jump-landings, and only the hardest impacts will make it bottom solidly.

Those same impacts aren't going to bottom the fork, though. The leading-axle unit works well throughout most of its stroke, but the last few inches of compression are sprung so stiffly that some riders may *never* use all 10.8 inches of available travel. Ideally, any fork should bottom lightly once or twice each lap, but the Honda's doesn't unless ridden by an unusually large or uncommonly fast rider on a brutally rough track.

Closely spaced stutter bumps pose a problem for the fork, particularly during braking. The loaded front suspension takes the initial impact smoothly enough, but rebounds a little too slowly to be sufficiently extended and ready for the next bump, making succeeding impacts feel progressively harsher. This "pumping down" helps to create an oscillation in the Elsinore's front end that all of our testers experienced. The CR wanted to wag its handlebar on many types of small ripples unless a conscious effort was made to keep the front end steady. The wobble never got out of control, but the thought of the consequences was enough to make everyone keep a tight grip on the bars over the ripples. Lighter rebound damping might possibly effect a cure, but that would require drilling out the rebound damping holes inside the fork, since 5-weight oil is already installed upon delivery.

Snake-dance tendencies aside, the Honda's fork and shocks perform about as well as any standard-equipment suspension that has come from Japan. Sharp-edged bumps are handled smoothly, as are whoopers and bigger ripples. Both ends are up to the rigors of sky-shot jumps—the front with plenty of travel to spare.

There may be a flaw in the suspension, but the semi-radially-finned engine is just about perfect. Much like the Suzuki RM125 powerplant, the little red Honda motor has a satisfying helping of mid-range power. And though the CR can't quite match the RM pony-for-pony at

high rpm, it's more responsive when *off* the pipe, and the Honda builds its power more predictably. The mid-range is even strong enough to let the rider maintain smooth, controllable powerslides in the lower gears with the engine spinning *below* the real powerband. So there's no need to keep the CR shrieking in order to get usable power, though the really competitive punch is at high rpm.

With a talented hand on the clutch lever, second-gear starts are easy and fast. The smooth power guarantees the Honda good position in Turn One no matter what the traction.

Stopping is done in much the same way as accelerating—smoothly and controllably. The front brake, for instance, will do all the stopping you'll ever need with just two fingers. It's powerful enough to lock the wheel if you wish, but progressive enough to keep you from locking it accidentally. The rod-operated full-floater in back is more sensitive than the front brake, but it is almost totally chatter-free, even on choppy ground.

Slowing down or speeding up, the CR125R is living proof that small-bore motocrossers need no longer be hard to ride. The Honda's smooth, readily accessible power keeps beginners out of trouble but still helps the experts go fast. The steering is nimble and precise, and the suspension is unequalled in quantity, if not in quality, on a production 125. Only a little front-end wiggle casts a shadow on an otherwise brilliant motorcycle, and hopefully, a 50-cent drill bit will make that problem go away.

That the CR was a long time coming can be partially justified by the deep thought that went into it. Honda wanted a motocrosser that would not have its basic design obsoleted the very next model year; and to do that, the engineers needed the time to first research and then develop a racer that would not fade into obscurity after just one season in the sun.

Those designers have succeeded, it seems, for the CR125R stands tall right now as the best overall 125 available—the surest, easiest ticket into first place. The question is how long it will remain there. A whole batch of impressive-looking green or yellow '79-model 125s is waiting in the wings for a turn in the spotlight, and only at that time will we know just how good they really are. But unless they all are substantially faster, surer-handling, better-suspended motocrossers that are considerably easier to ride than the CR125R, the worst that could happen to the Honda is to end up in a four-way tie as The Best 125 money can buy. ●

Ride Review

• Larger riders aren't supposed to like 125cc motocrossers, nor are 125s real fond of having NFL-sized hamfists flopping around on their fragile little backbones. But the CR125R and I developed an intimate working relationship right from the start. I got about as insanely crazy on that bike as I'll ever care to, doing enough one-wheel, wrong-wheel, *no-wheel* antics to qualify me as a Black Belt dirt squid, yet the CR took it all in full stride. In fact, I swear I heard it yawn once while I was in the midst of a sideways landing following a near-terminal crossed-up fifth-gear jump. My whole life flashed before me right then, but for the CR it was just another day at the plant.

Unquestionably, there is little you can ask of this remarkable motorcycle that it won't do. Maybe some CR owners who compete on hard, fast tracks will soon be flipping through hop-up catalogs or visiting the local speed tuner in pursuit of the RM125s, but the CR offers more ways to win than just with sheer speed. And the cobbler the track, the better this little jewel responds. That's why I can't think of any 125 I'd rather ride on the muddy off-cambers of the East or the deep sand of the South. I usually don't keep 125 motocrossers long after they're tested, but if the Honda guys want this CR back, they're gonna have to come and get it. —Paul Dean

• I must be getting crabby. It seems that I've run out of patience with motocrossers that are hard to ride. It may be that I'm getting older and less aggressive, but high-strung dirt bikes don't help me ride faster. That's why I think the Honda CR125 is the answer to a grumpy guy's prayer. Not only is this motorcycle a winner, but you can relax while you're winning.

Sorcery must be responsible for the Honda's suspension, for while the tires are battling with bumps for traction, the rider feels as if he's skimming over the ground in a hovercraft. Ordinarily, it's a mortal sin in 125 motocross to get lazy with your bike's gearbox and fall out of the engine's narrow powerband. But the Honda's motor isn't demanding. If you want to coast into a corner in a gear that's too high, the engine will provide tractable power and then rev cleanly until it gets on the pipe again and the afterburners cut in. Furthermore, the Honda is easy to steer. It'll cut a new line around some turkey backmarker as quickly as you can decide whether to pass the fellow on the inside or outside.

This Honda is one motorcycle that's so good that it can make riders too lazy and cranky for the hypertense world of 125 motocross look good. And any bike that can make even *me* a winner earns my respect.

—Michael Jordan

Honda CR125R Elsinore



SPECIFICATIONS:

IMPORTER: American Honda Motor Co.
100 W. Alondra Blvd.
Gardena, California 90247

CATEGORY: motocross

SUGGESTED RETAIL PRICE: NA

ENGINE
Type two-stroke vertical single
Port arrangement one reed-valve-controlled intake,
four main transfers, one booster, one bridged exhaust
Bore and stroke 56mm x 50.7mm
Displacement 124.9cc
Compression ratio (corrected) 8.4:1
Carburetion one 32mm Keihin slide/needle
Air filter two-stage washable oiled foam element
Lubrication pre-mixed fuel and oil
Starting system primary kick
Ignition internal-rotor magneto CDI
Charging system none

DRIVETRAIN
Primary drive straight-cut gears
Primary drive ratio 3.15:1
Clutch wet, multi-plate
Final drive type \approx 520 chain (1/2-in. pitch, 1/4-in. width)
Final drive 13/51: 3.92:1
Gear Internal Overall MPH per
gear ratio gear ratio 1000 RPM
I 2.54 31.44 2.4
II 1.87 23.23 3.3
III 1.56 19.28 4.0
IV 1.30 16.11 4.8
V 1.14 14.07 5.5
VI 1.00 12.39 6.2

SUSPENSION / WHEEL TRAVEL, IN.
Front 37mm-diameter stanchion
tubes/10.8 in. (274mm)
Rear Showa gas-charged, 3-way adjustable
spring preload/10.6 in. (269mm)

BRAKES
Front drum, single-leading shoe
Rear drum, single-leading shoe, rod-operated

TIRES
Front 3.00-23 Bridgestone Motocross-M15
Rear 4.00-18 Bridgestone Motocross-M16

DIMENSIONS AND CAPACITIES
Weight 197 lbs. (89.4 kg)
Weight distribution 47.7% front, 52.3% rear
Wheelbase 56 to 57.1 in. (142.2 to 145cm)
Seat height 37.5 in. (952mm)
Handlebar width 33.5 in. (851mm)
Footpeg height 16.1 in. (409mm)
Ground clearance 14 in. (356mm), at frame
Steering head angle 28 degrees from vertical
Front wheel trail 5.2 in. (133mm)
Frame tubular chromoly, single front downtube
Fuel tank aluminum, 1.7 gal. (6.5l), no reserve
Instrumentation none
Top speed (calculated) 62 mph (99 kph)

All weights and measurements are taken with machine
unladen and fuel tank empty

COMPARATIVE TEST DATA:

Make & Model	Horsepower	Wheel Travel Front/Rear, in.	Weight (fuel tank empty), lb.	Weight bias Front/Rear percent	Transmission, number of speeds
Honda CR125R	19.1	10.8/10.6	197	47.4/52.3	6
Husqvarna 125CR	16.3	9.6/10	209	44/56	6
Kawasaki KX125-A4	17.7	9.2/8.8	186	46/54	6
Suzuki RM125C	NA	9.1/8.8	199	NA	6
Yamaha YZ125E	15.9	9.3/9.1	198	48.7/51.3	6

PERFORMANCE:

