

honda

By the Staff of DIRT BIKE

At one time or another, you've sat around with your friends and jabbered about the mythical "composite" motorcycle. You know the one—it's got the peak horsepower of a breathed-on Pursang, combined with the low-end grunt of a Stiletto. It's got the plush forks of a Maico, turns like a CZ and tracks like a cut-frame Husky. It weighs less than a good 250 and has the punch of a 400. And the best part—you don't have to do anything to the bike. Just ride it like it was a 350 Honda pseudo-scrambler.

We've all dreamed about that kind of a machine, but up until now, it never existed.

A quick look around at the competition mounts of the Staff of DIRT BIKE shows what has to be done to make a motorcycle "right" for competition. No one but a fool rides a Maico in stock trim. Different filters, rims and assorted bozos are a must for the serious rider.

Same with the CZ. Shocks, seals, filters, light components, spokes, etc. Hell, we know what we have to do to our own bikes, and we do it because that's what must be done.

But we'd rather not.

Not really.

If we never had to relace another wheel with a trick rim, we would do a dance of joy. Only the Sprocket Spirits know how many stock shocks are gracing the DIRT BIKE garage,

gathering dust like an unopened can of FE Plus.

We know that the *only* way our bikes perform to our satisfaction is to modify them ourselves. Or con a friend into the job under the guise of a tech article.

But, like we say. We'd rather not have to do it.

Now, take a deep breath and sit back. You don't have to do anything of consequence on the new 250 Honda two-stroke racer. Oh sure, there are little things that can be jiggled around to suit the rider, but the package is there and it's right from the beginning.

No shock changes needed.

Forks are top quality.

Ditto for bars, grips, filter, pegs, controls, etc.

This is really one of the most frustrating goddamn motorcycles we have ever tested. It is so *stunningly right as-is* that the mind wobbles.

And the most important two things to any racer are there: It handles and it's fast. Faster than anything else in the 250 class. That's right—faster than your buddy's Pursang and your other pal's CZ. The only bikes that are going to stay with it (rider skill excepted) are highly modified top-of-the-line 250s. It will pull right alongside most 400s and beat many of them in a point-to-point drag race.

Quite frankly, we started off on the wrong foot with Honda on get-

ting the bike for a test. Some time ago, they called us and asked us if we wanted to test ride the new trick racer. Tell us when, where and how, etc. It turned out that the "test" was to be an hour or so of riding at Indian Dunes, and that's it.

Many magazines jumped at the chance to be in print early, and accepted the bike on this basis. We refused, because we feel that we must have a machine and ride it for a number of rides—not just a few hot laps around the Dunes—to fully understand what the bike is about.

So, Honda was mad at us and we were mad at Honda. Not the best of situations for testing the most newsworthy machine in years.

One cooler head prevailed. George Ethridge, the honcho at American Honda R&D, eventually got it set up where we could have the Honda Elsinore for an extended period of time and get to know the bike on more intimate terms. The perverted Staff of DB takes nothing for granted.

We met George at the Dunes for the first riding session and our tentative deflowering of the Honda. We were skeptical—even more so when George hovered about the bike like a Mama Quail protecting her brood. As time went on, we found out that George is like that all of the time with the Honda. He loves it. Dearly. Every time we sat down to

CR250M



You beat the nicest people on a Honda

MINDTWEAKER!

talk about the bike, he became misty-eyed. It's sort of understandable. What the bike is stems largely from George's enthusiasm and unyielding attitude. George and Mr. Sato (the engineer-dirt freak in Japan) got together and decided to make a no-compromise racer. They both felt that the market would retch if one more street/dirt racer was introduced.

After the usual briefing/familiarization/question/answer period, we lit the Elsinore up. It started quickly and made us jump back several feet. Even then, we could tell it was a for-real engine. Revs built quickly with the merest tweak of the right hand. Super-sensitive. Much like a 400 Suzuki. We let the bike sit and idle for the warm-up.

This took a long time, as the Honda is ultra-cold-blooded. Attempt to ride it before it's completely warmed up and the bike will either stall or turn into a freaky monster; we'd say that at least a *full* five minutes are required before the bike will run clean and smooth.

But it actually did sit there and idle while warming up. Just like their 250 four-stroker. And that's about all the two bikes had in common. Other than some bits and brackets.

Seat height is so low that it is possible for a 5'8" rider to stand flat-footed on the ground and still have a gap between his crotch and the saddle.

As you sit there waiting for the bike to warm up, you'll notice that everything is well thought out. Controls are shaped right and easy to actuate. Pegs are tucked in close and have the proper saw-toothed serrations. Bars feel good, and at 33 inches, should be wide enough for most everybody.

Squeeze the clutch in (lightest pull we ever experienced on a 250) and step on the left side mounted, down for low gear shift lever. No crunch.

Unlike other Hondas, the clutch





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starts to engage about halfway out in a progressive manner. By contrast, the 250 four-stroke does nothing until it's almost out, then slams home. Either in or out; reacting like a sticky light switch.

Revs build so quickly, it's hard to tell much about the torque characteristics at first, and the machine feels spooky light. First impressions are not good.

On that first, very first, lap around a course, one feels that the Honda is skittery and overly responsive. Acceleration is staggering. As the shift lever is prodded and the throttle turned, the rider is slammed with huge thrusts of forward motion. Shift up and do it again. Before one realizes what is happening, the bike is in fifth and the bike/rider combination is approaching 70 miles an hour. Frightening.

A stab at the brakes to calm the

bike down results in smooth, powerful stopping. Your sweat will pass you up. Fifteen minutes of hard riding will have you talking to yourself. "Whew! The damn thing is fast, but man, I'm all over the place. One correction after another. Sure wasn't a smooth ride—bounced around a lot, but the shocks and the forks felt good."

Most of the test riders came away with this initial impression. But after they rested a while, then put some more time on the bike, they started to understand the machine. And when they understood it, the bike began to work. It will take a motocross rider of better than average skill several hours of hard riding before he begins to ride the bike as it should be ridden. If the rider takes the time to do this, he usually comes back babbling good words about the machine.

Key to making Honda work was proper weight transfer.



Strangely, this is the same way most riders react to a "works" machine. It takes time to get used to the responsiveness. Here at DIRT BIKE, we've had the opportunity to ride a number of factory bikes, including the 450 Kawasaki of Brad Lackey. This machine was even harder to get used to, because of the tremendous power output and the light weight.

The more you ride the Honda, the faster you go. And the faster the bike goes, the more stable it feels. Even in the corners.

With an outrageously long 57-plus-inch wheelbase, one would expect the Honda to be ponderous through the turns.

Not so.

Directional changes are ludicrously easy. Perhaps much of the ease of turning comes from the light



Grant recovers from a slide with both feet on the pegs.

weight of the bike. Add 30 pounds of garbage to the Honda and it might, indeed, turn sluggish. But this is of little matter, because the machine works just fine in the corners as is.

The rider can actually change his line while ripping through a turn under full power. All it takes is a weight shift, and a tug at the bars. Once the rider gets used to the light weight of the Honda, he'll find that he's snubbing the bike in tighter and tighter on the turns, and driving out earlier.

If the bike is snubbed in too far and the rear end swings out, it does so predictably. Most efficient cornering on bumpy turns is accomplished by getting far forward on the tank and letting the rear end do what it wants to do. It will waggle and hop some, but rarely get out of shape. As soon as the rider is ready to push hard out of the turn, a shift of weight to the rear and heavy

throttle straightens the bike out and gets the front end light. Too far back and the bike will get vertical. Weight shifts are very critical and are the key to riding the Honda quickly.

If you insist on just planting your butt down and staying in one spot, the handling of the bike will not impress you. It will be necessary to clamber all over the motorcycle. A successful Honda rider will look like he has a bad kidney, diaper rash and bugs—all at the same time.

At first, some of the riders thought the Honda was peaky. Ethridge told them to ride the bike like they were attempting to load the engine up. Make it blubber in the taller gears, if you can. This proved to be the secret to riding the CR250 properly. Shift early and make the engine torque.

After we learned to do this, it was possible to take most corners at least one gear higher than we had previously. Some of them two gears



higher. Then we would sit back smugly and watch new (first Honda ride) riders over-rev the engine, while we knew the big secret.

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Light weight made cornering much easier.



Three Hondas lead a Yammie into the first turn at the Dunes. Grant in the lead, Ethridge in second and Hockie flattracking it through in third.



The spread of power is astounding, rivaling that of a decent 400. In fact, the Honda can be ridden much like a big bike. With none of the weight of a 400, however. Still, one must remember that the powerplant is a 250cc unit, and we were able to find its limitations in very deep sand. Here, it was necessary to buzz hell out of the engine to initiate movement. Once moving, it was then easy to keep moving and shift relatively early. If the rider was on harder ground, then the spread of power was beyond reproach. As long as the rider had any forward motion worth talking about, second gear would do the job out of the tightest turn on either course at the Dunes. Once speeds got over 35 to 40, most of the riding could be done in the upper two gears in the five-speed box. You could tell just by listening whether or not the rider was making the Honda work right—if the machine moaned with an off-the-pipe baritone pitch, it was pulling at the right rpm. You simply don't have to rev the machine to get results. If you insist, it will pull to 8,500.

Honda extracted this power with a careful combination of computer-designed porting and pipe, rather than opting for reed valving and carb trickery. As it stands, they have the fastest engine in the 250 class, without any modifications needed. Danny Hockie, professional scrambles rider, thought he could win at scrambles with the machine in stock trim. Just as we tested it.

George Ethridge told us that even

more horsepower was there for the asking, but that none of the standard two-stroke trickery would work on the Honda. Most of the horsepower people do it with the grinder and radical ports. On the Elsinore, the hot setup is to bore the carb out 2 millimeters and change the ends of the finger ports' shape. And that's it. No pipe cutting and hacksawing at the piston skirt. You'll pick up another thousand rpm at the top and maybe 4 or 5 horsepower. Some power will be lost down low, but for a scrambles rig, this doesn't make any difference. None of the shoes are using the modified engine for MXing, though. They like the flexibility of the stock motor.

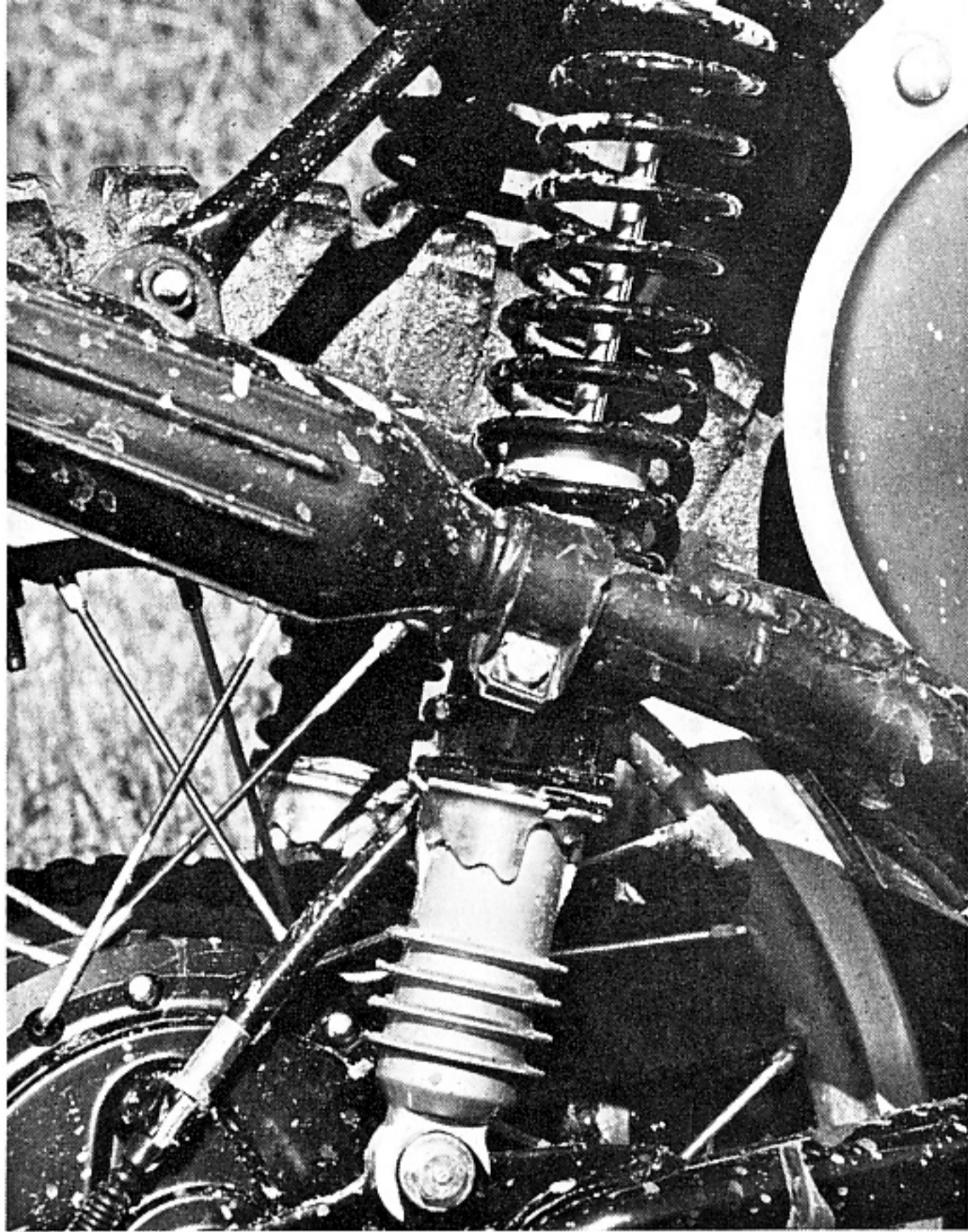
As geared, the Honda would pull about 65 miles per hour, enough for most motocross courses. We feel that almost any rider could run taller gearing and the engine would pull it. At least one tooth more on the countershaft sprocket would be no sweat. Which might mean the rider would have to occasionally use low gear on tight sections. But lordy, would that top end be ferocious.

Speaking of available horsepower, we recorded slightly over 28 at the rear wheel on the dyno. We've seen other 250s that put out this much occasionally, but none of them had a decent motocross powerband. Of particular interest is the fact that the Honda pulled nearly nine hp at only 4,000 rpm. That's about what a 125 Honda pulls at three million rpm. With nitro. We also might add that the bike was put on the dyno *after* we rode hell out of it, and we did not even clean the air filter.

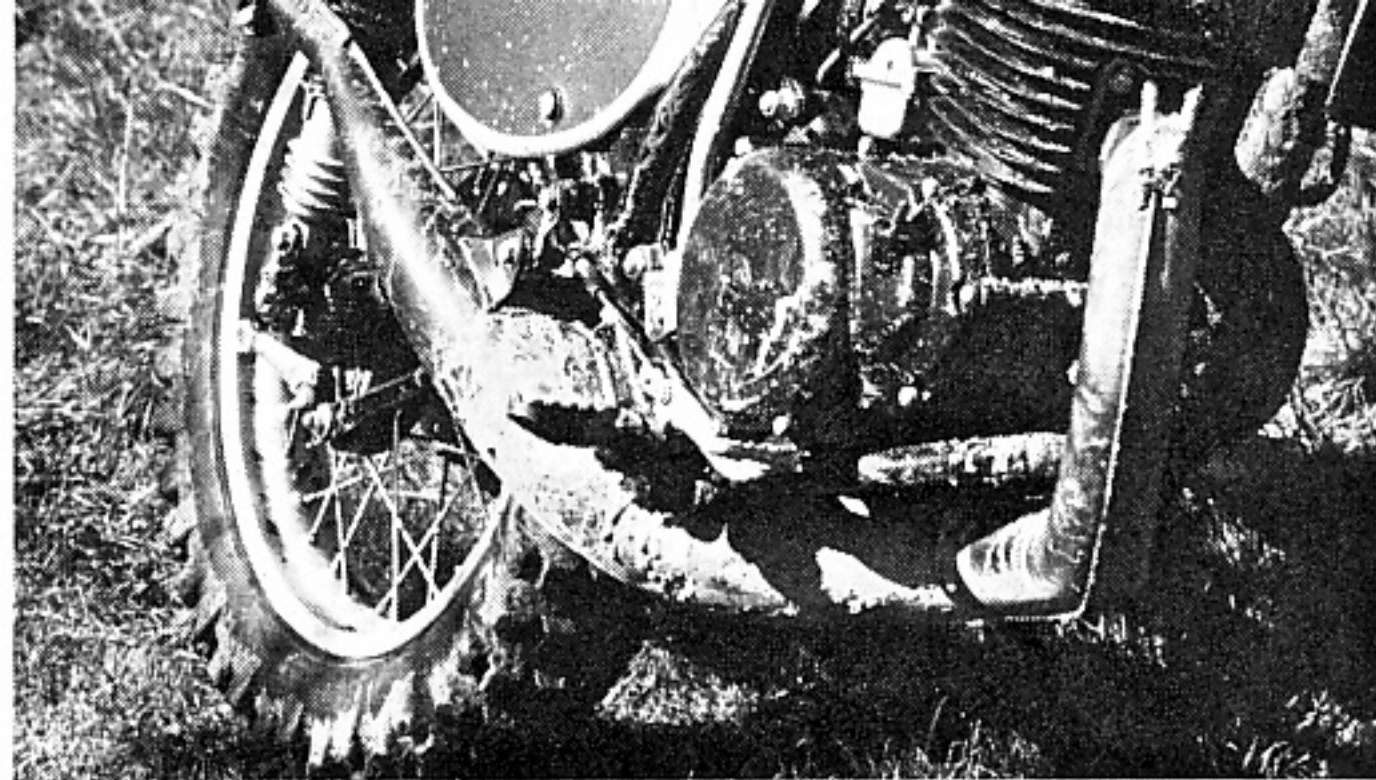
Combining a bunch of muscle with a very light package demands the absolute in frame design. We detected no flex in the chrome moly chassis and found no faults in handling. Huge gussets beefed up the critical joints and frame triangulation was good. No one will be selling lowering kits or accessory frames for this machine.

Cornering technique was up to the rider. If you're one of those sliding freaks, then you'll have no trouble slithering through the turns. If you would rather "blue groove" the sweepers, then do that, by all means. The bike will track cleanly. Cut-and-thrust cornering is also possible, but this takes more work on the part of the rider.

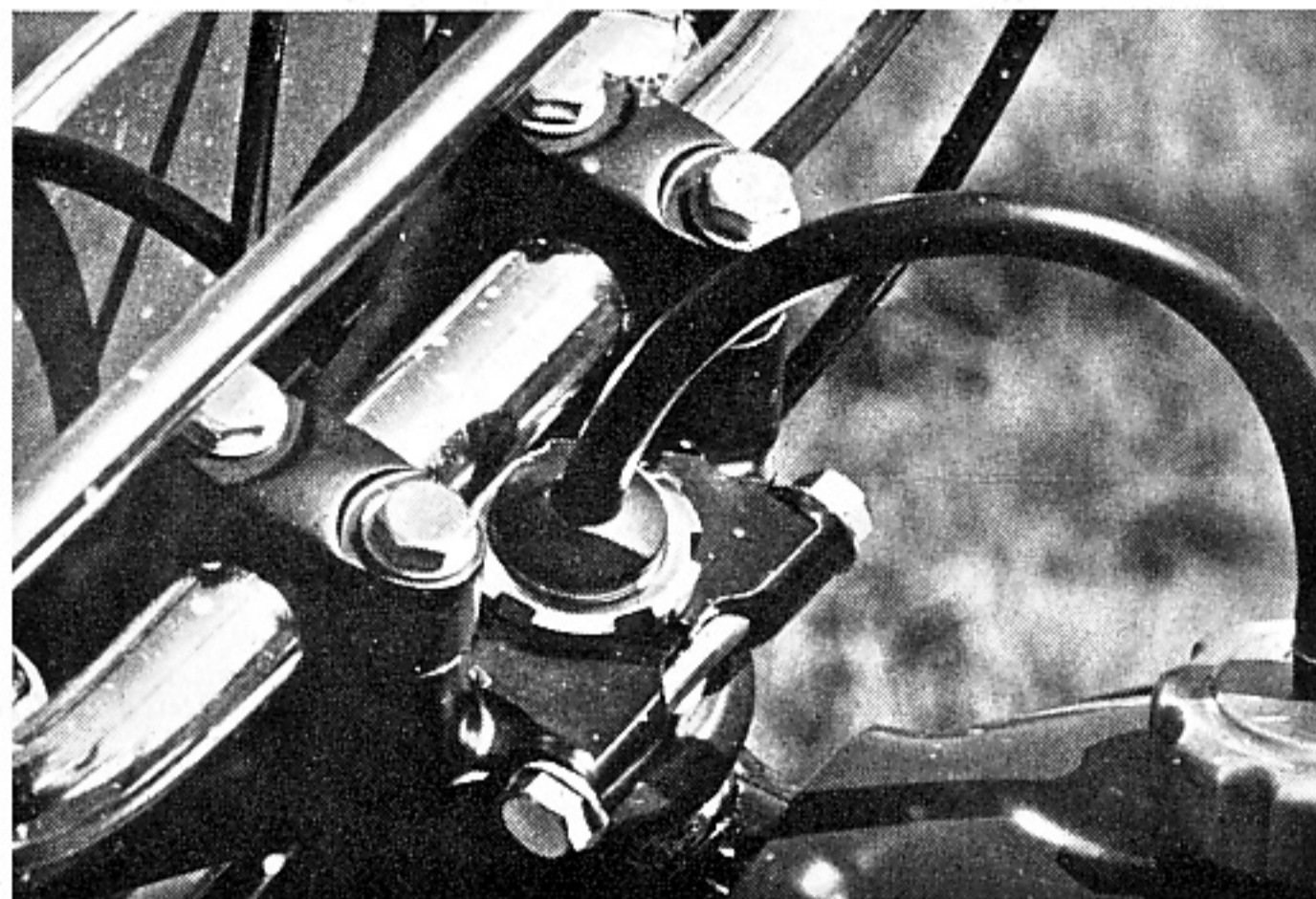
The most efficient all-around tech-



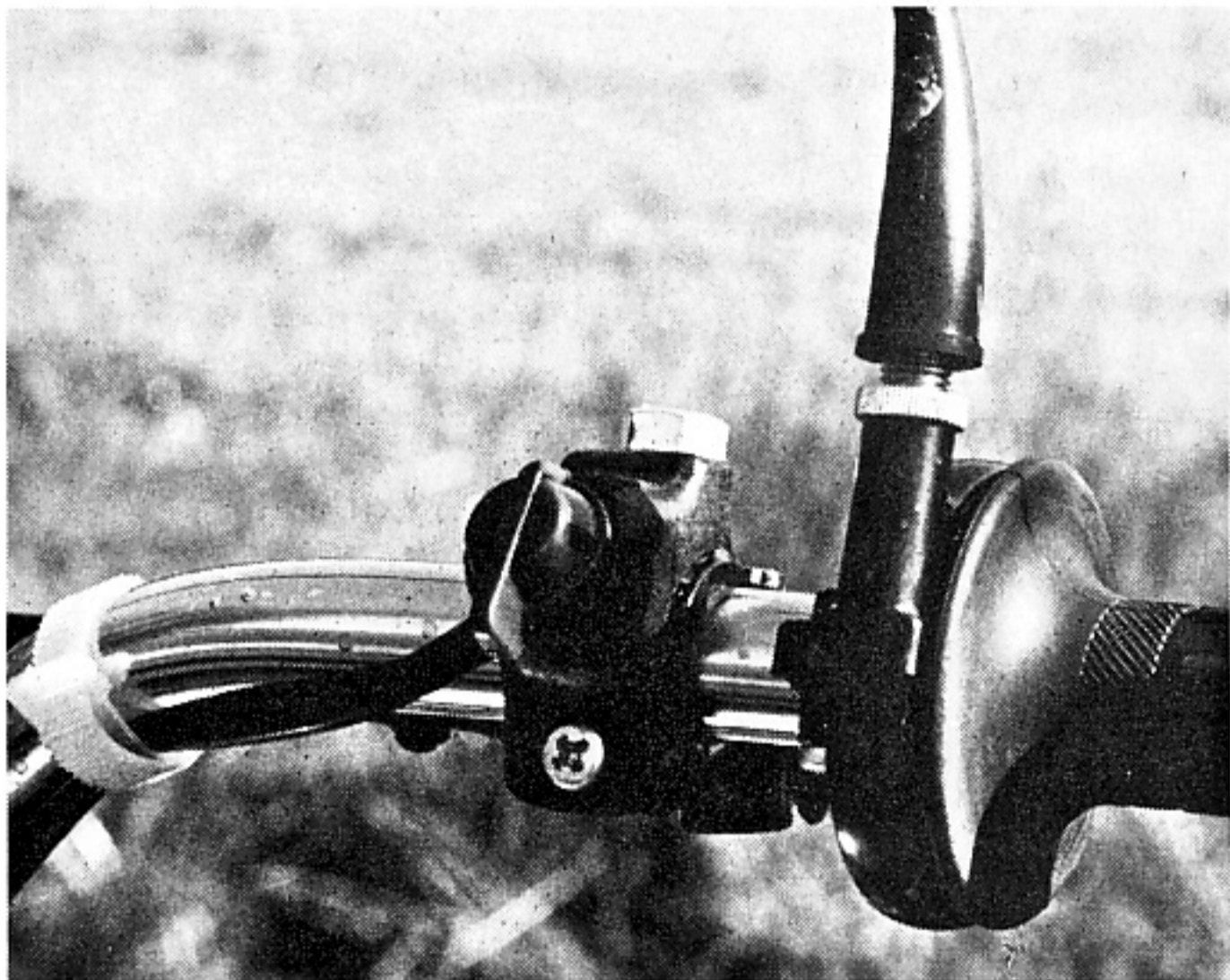
Shocks were superb; fins were for cooling.



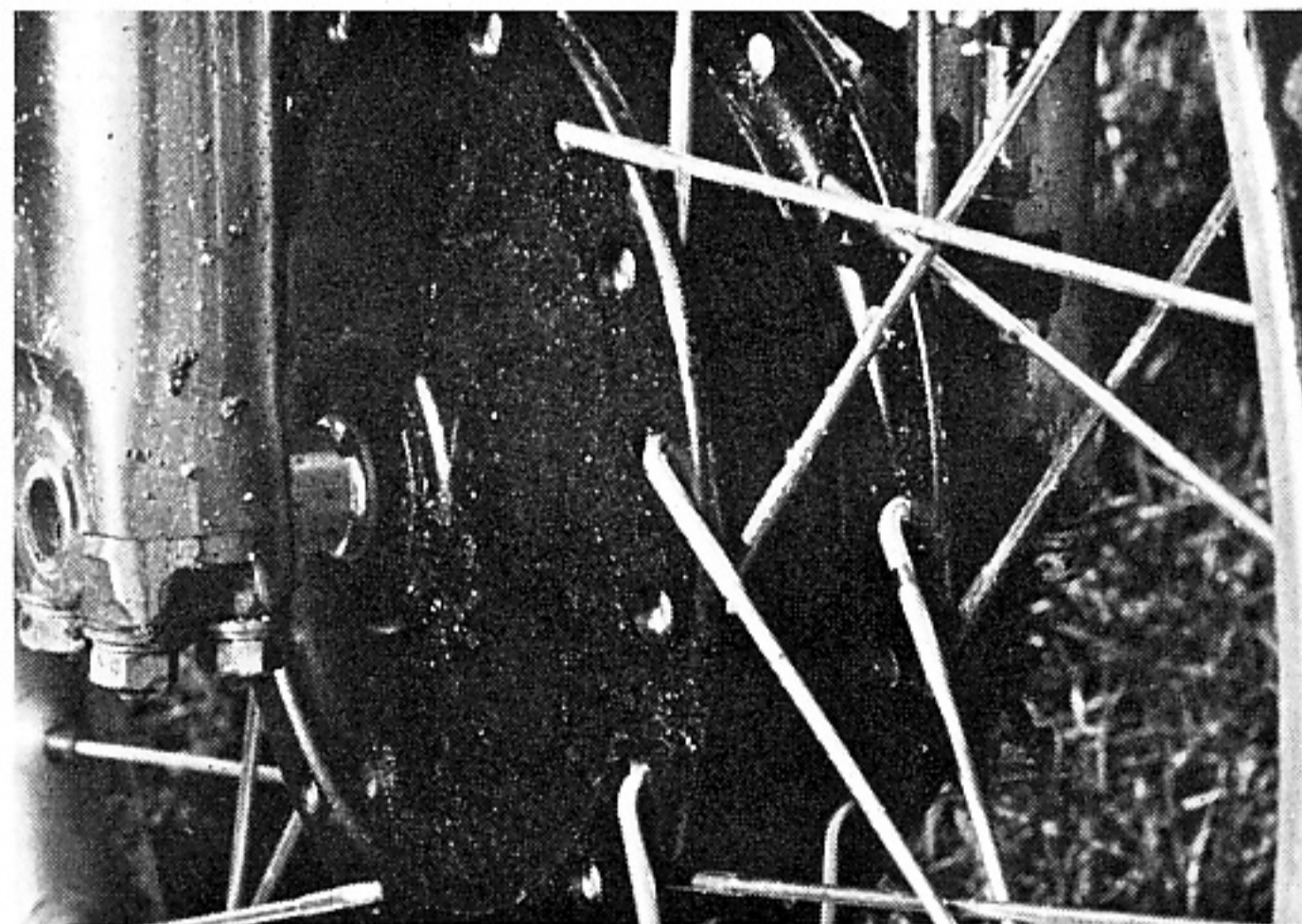
Low pipe was spring and rubber mounted.



Forged triple clamps were strong and light.



Attention to details was first-rate—except for kill switch.



Spokes were reinforced at shoulder.

nique on the Honda seemed to be to go in deep, brake heavy, do a tight pivot with the bar near the ground and drive out early.

This was especially easy because of the superb brakes. That front handle was a one-finger-only instrument, with a nice, progressive feel. It was possible to lock the front wheel up completely with two fingers, even at high speeds. Even though the rear brake was strong, it was far less sensitive than the front—which is as it should be. This prevents dangerous locking up of the

rear wheel and subsequent stalling of the motor and trampoline-like flights of the rider. Are you listening, Yamaha?

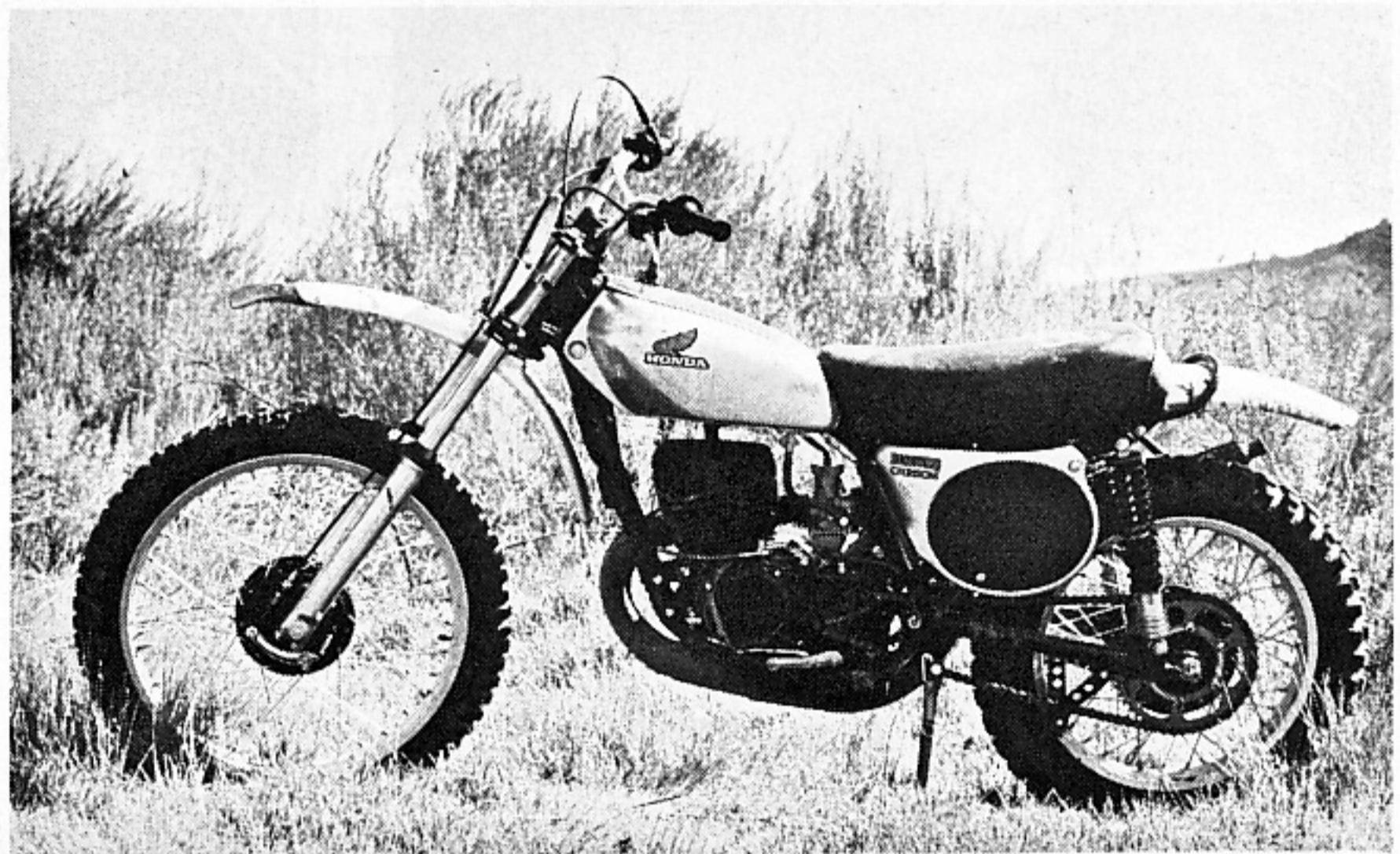
No rear end chatter was experienced, even though the Honda is equipped with a cable-operated brake. This is the first cable-operated rear brake that we have ever liked.

Shifting was perfection. Even Dave Swift, who could miss a gear with a Buick Electra, didn't do too bad with this transmission. Crisp, short throw shifts with no audible

sounds were the rule and neutral was relatively easy to find, even with the engine running. Up until now, Yamaha has been the standard of good shifting—we now have a new standard. It didn't seem to make any difference if we used the clutch or not—although the unit will surely last longer if the rider makes a habit of using the clutch.

Suspension components are one of the hardest things to get right on any bike, even more so when the bike is ultra-light. We talked to Ake Jonsson some time ago, and Ake told

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HONDA CR250M ELSINORE

PRICE:

Suggested retail, approx. \$1145

ENGINE TYPE:

Two-stroke air-cooled, piston port, single cylinder

DISPLACEMENT: 248cc

BORE & STROKE: 70mm x 64.4mm

COMPRESSION RATIO: 7.2:1

CARBURETION: 34mm Keihin

HP & RPM: (claimed) N/A

(actual) 28 @ 7,500

CLUTCH: Wet multi-plate

PRIMARY DRIVE: Gear, 3.30:1

FINAL DRIVE: Chain, 14T/47T (3:36.1)

GEAR RATIOS: 1. 2.05:1

2. 1.57:1

3. 1.25:1

4. 1.04:1

5. 0.86:1

AIR FILTRATION: Oil-wetted foam

ELECTRICAL SYSTEM:

Flywheel magneto

LUBRICATION: Pre-mix

RECOMMENDED FUEL:

91-octane low-lead or higher

RECOMMENDED OIL: Castrol R 20:1

FUEL CAPACITY: 1.8 gallons

FRAME:

Chrome moly single downtube splitting to full cradle

SUSPENSION:

(Front) Honda forks w/7.1 inches travel

(Rear) Honda shocks w/4.1 inches travel

TIRES: Front: Dunlop 3.00x21 knobby

Rear: Dunlop 4.00x18 knobby

WHEELS: Front: DID alloy

Rear: DID alloy

DIMENSIONS:

Wheelbase: 57.1 inches

Ground Clearance: 7.5 inches

Seat Height: 32 inches

Weight: (claimed) 214 dry

On front wheel: 45.3 percent

On rear wheel: 54.7 percent

BRAKES: Front: Single leading shoe internal expanding

Rear: Single leading shoe internal expanding

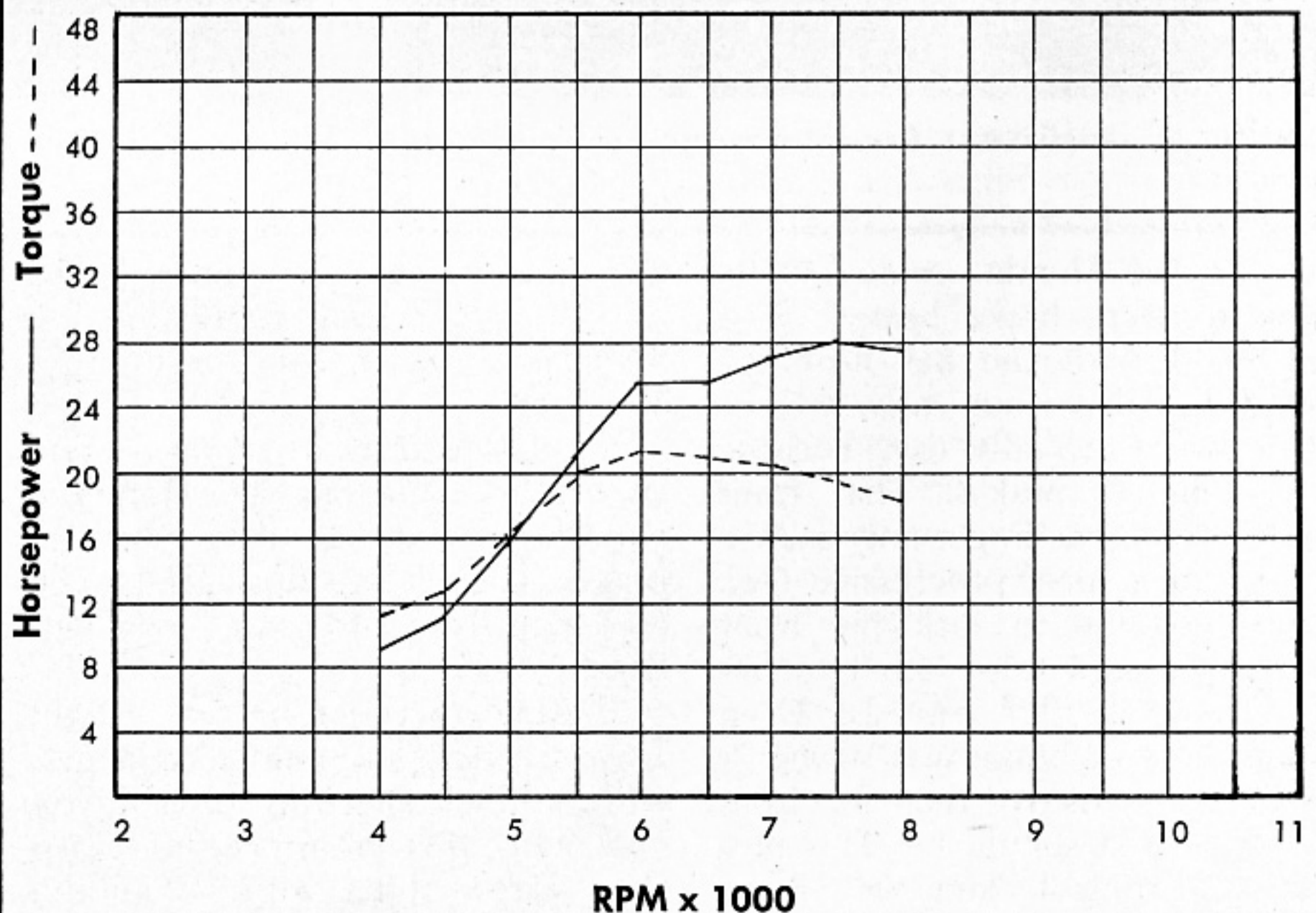
INSTRUMENTS: None

SILENCER: Yes

PRIMARY KICK: Yes

PARTS PRICES NOT AVAILABLE AT PRESS TIME

Official DIRT BIKE Horsepower/Torque Curves



us that the lighter the machine, the more critical damping and spring rates are. What works easily on a 250-pound bike becomes harder to adjust on a 230-pound bike, becomes tough on a 210-pound bike, and becomes a nightmare on a 190-pound bike.

Most of the test riders had no complaints with the suspension on the Honda, even though the forks had automatic transmission fluid in them. A few said they were not as plush as Bultaco or Maico forks, but perfectly acceptable. No one had a word of complaint about the super shocks. Some of the heavier riders noted that the front end dove somewhat under heavy braking due to the use of the light ATF, but none of the light or medium-weight riders noted this. Oil can be changed easily to suit the rider—a nifty side drain plug is at the base of each fork leg. Are you listening, CZ?

Overall, the machine bristles with niceties. The alloy tank is something you'd expect to pay a hundred bucks for at an accessory house, and it's designed to let the rider tuck his knees in tight. Everything feels right, including the shape and width of the bars. Footpegs are in close and are just long enough to hold the foot—not one iota longer. If you miss the shift lever or brake pedal, you should not be allowed to go to the bathroom alone. The bike is that well laid out.

Overall finish is not all sugar-and-spices — candy-apple-metal-flakey, like you'd expect from Honda. Nope. This one is functional and clean, with a minimum of decals and decorations. They don't even have the typical "Preserve nature and always wear a helmet" stickie on the gas tank, that all Hondas are blessed with. They do, however, have a decal that informs you that this bike is meant for heavy-duty racing only, which is only fair.

BITS AND PIECES ON THE CR250M

Forks and gas cap did not leak one drop of anything. That gas cap is a vented, screw-on type and was on the small side. Most spouts from most gas cans will prove too large. You'll have to carry a funnel. While this could be a hassle in cross-country or desert events, this is not really what the bike was designed for. It's

Even the grips are first-rate. They're close copies of the famous Doherty grips, but are made of a softer material. Nestled next to the right-hand grip is the only stupid thing on the entire bike—one of the Honda three-way kill switches. You

can move it to the left side yourself (a two-minute job), but it still should be a button type. You can stab at a button, but have to think about a switch. Most throttles stick open when the bike falls on the right side grip, so it's sort of silly to place the kill switch there, where you'll have to hunt for it.

The throttle cable has a neat boot and adjuster on the housing. Nice touch.

Controls are light and also have their own accordion boots at the juncture.

Triple clamps are a work of art, made of forged aluminum and having long, strong bolts holding everything in place.

Nothing hangs out too far on the engine, and even the kickstarter is tucked in out of the way.

Spark plug can be reached with ease and most components are equally accessible for servicing.

That 34 millimeter Keihin carb is a dead ringer for a Mikuni, which ought to tell you something right there. It has to be treated the same way when the bike is started, too. Choke on and don't touch the gas at all—or the bike won't start. When the engine is warm, half throttle does the trick.

Rubber mounting at both ends of the carb keeps the float bowl from frothing.

A simple fuel tap is supplied to a rubber gas line. We'd rather see two taps and two lines, both of the lines clear plastic. A common problem on many racing machines is the float chamber running out of gas. Many sound engines have been ruined because of this. However, our Honda lived through an extended full load on the dyno without exhibiting starvation, but it still never hurts to play it safe.

Rubber mountings also keep the chamber from the all-too-common cracking blues. Springs hold the head pipe in, and flexible mountings make up the rest.

Even the silencer has rubber grommets on the mount. It doesn't do such a great job of quieting the bike down, though. At best, the noise is borderline. And not much of the noise is mechanical clatter, either. More work is needed here.

Wheels, front and rear, deserve special mention. They're the trick alloy DID rims, but don't collect mud like the high-ridged Akronts.

Spokes are heavily built up at the flange ends for strength, and we never had any hassle with spokes even getting loose, let alone with them breaking.

Tires are Japanese Dunlops and rate as average—no better. Surely top-line tires like Metzlers, Trelleborgs or Barums would make the bike even better handling than it is now. Still, the Dunlops work well on soft or wet courses.

At first, the saddle felt strange to many of the riders, but after some time on the bike, they no longer noticed it. Which means it's doing the job. Transition from standing to sitting position is a full shift, and nothing gets in the way for the change. Because of the low saddle, the legs work a little harder to achieve a change in position, but not as hard as a Bultaco rider's legs would, for example.

Fenders are flexible plastic with a good shape to them. That flap on the front did a good job of keeping mud off the face. The mud shield on the frame downtube is an optional extra. Eastern riders will want it, western riders won't.

Fork legs are quite narrow, and should not be turned down on a lathe for lightness. They are already at the limit.

Honda recommends a 20:1 mixture with bean oil for use in the engine, with low-lead regular of at least 91 octane rating. We find this a tad strange, but it seems to work for them.

A pinging sound was always present in the Honda's engine at mid-range under hard acceleration, and we can't help but wonder that it might be because of their preference in gas/oil mixtures.

Care must be taken when kicking the Honda over. While it's an easy starter, the kickstarter has a tendency to flop at the bottom of the stroke, creating the possibility of lodging your pelvic structure next to your eyebrows.

Reaching the air filter is accomplished by removing two bolts that hold the saddle in place. It's one of the new fuzzy filters that are claimed to resist water penetration. Good protection for the filter itself is provided by a sensibly designed still air box.

Oh yeh, the bike even has a kickstand that's well out of the way.

Good lord! Is there no end?

SUMMARY

As we said earlier, it's difficult to write a test on a motorcycle that has so little wrong, and so much right. Clearly, the Honda emerges as not only the BEST bike in its class, but also the best dollar-for-dollar bike a racer can buy.

Perhaps it was best summed up by George Ethridge, when we asked him the musical question . . . "George, are you guys trying to put everyone else out of the racing bike business?"

"Nope," he replied, "we're just going to make them get a whole lot better." ●