



# DEUCE-AND-A

Japanese Smorgasbord: Honda

□ Nineteen eighty-two is the best year yet for deuce-and-a-half (250cc) motocross bikes. The American rider is offered a wide variety of choices, powerbands, suspension systems and handling traits; and for the first time all four Japanese 250s are on equal footing.

Whether you favor the complicated Power Valve technology of Yamaha or the

simplistic air-cooled Kawasaki KX250, the Big Four have served up a *smorgasbord* of delectable delights.

#### WHICH IS THE FASTEST?

In the specific world of quasar speed and hyper space, the Suzuki RM250Z is outstanding. Making a works bike powerband available to the public means that the RM is too much of a handful for riders of lesser tal-

ent, but is *tops* (technically demanding but super fast) for skilled riders. Suzuki's power is hard-hitting, quick-revving and blessed with the best top end of the Big Four quarter Liters. There is a crispness out of the crate that normally can only be achieved with razor-sharp tuning and borderline jetting. Suzuki's water-cooled deuce is the fastest, crispest and hardest



## -HALF CLASH

Kawasaki, Suzuki and Yamaha

hitting.

Honda runs a decent second place, and for the average rider the Honda has an easier (less explosive) style of power. The CR250R doesn't rev out as far as the Suzuki or Yamaha, but hits hard in the middle and has a good solid low end. More versatile than the RM250Z's vibes, the Honda is the best of both worlds — manageable and fast.

Yamaha almost tied for second place with good mid-range power and a willingness to rev. Meanwhile, the KX has gobs of low-end power, and would be the best bike for junior-level riders. The KX hooks up in every gear, and rarely snaps or bucks as the throttle is cracked open. Each shift propels the KX forward with a gnarly moan that tells you it is making maximum traction.

Yamaha overgeared its YZ250, but gearing changes for local tracks will make any of the four bikes run stronger. YZ power is broad, but not overly impressive. It runs very strong from the mid-range on up, but wants — almost demands — to be over-revved to get the max out of the water-cooled, Power Valved and reed-valved mill. Suzuki is the fastest, Honda and

# 250 SHOWDOWN

Yamaha run a strong second, and Kawasaki is a smooth fourth. Each bike makes its power in a different way. It is a buyer's market.

## 250cc POWER MONGERS

SUZUKI RM250Z	97
HONDA CR250R	94
YAMAHA YZ250J	90
KAWASAKI KX250	90

## WHICH ONE HANDLES BEST?

If a basic division were drawn up between the four machines they would fall into two separate camps: quick and stable. Suzuki, Kawasaki and Yamaha would be quick-handling motocrossers, while the CR would tend towards more conservative specs. Handling — the ability to turn, carve, jump, remain straight and not pitch you off — is affected by everything from rake and trail to the size of the rider's feet. Making a qualitative judgment on handling requires some understanding of the rider's skill and

the type of track he will compete on.

Honda handled the best in the most-varied conditions, and was better suited to loam and sand tracks than the other machines. If it must belly up to the starting gate for criticism, it is heavy (ten pounds more than the Suzuki), has slightly lazy steering (a tendency to be imprecise), and prefers berms to inside lines. In its favor are the all-around good manners it has in deep whoops and fast, rough straights. Honda is the best-handling 250 for rough and fast tracks, especially those blessed with abundant traction.

Suzuki has built a bike that is the king of the inside line; it loves hard terrain, flat corners and short straights. It is the epitome of a *cut-and-thrust* motorcycle. Handling flaws show up in sand whoops, rough, fast straights and in off-throttle situations. The RM250Z is not a berm machine; it is best to pivot corners. As a word of war-

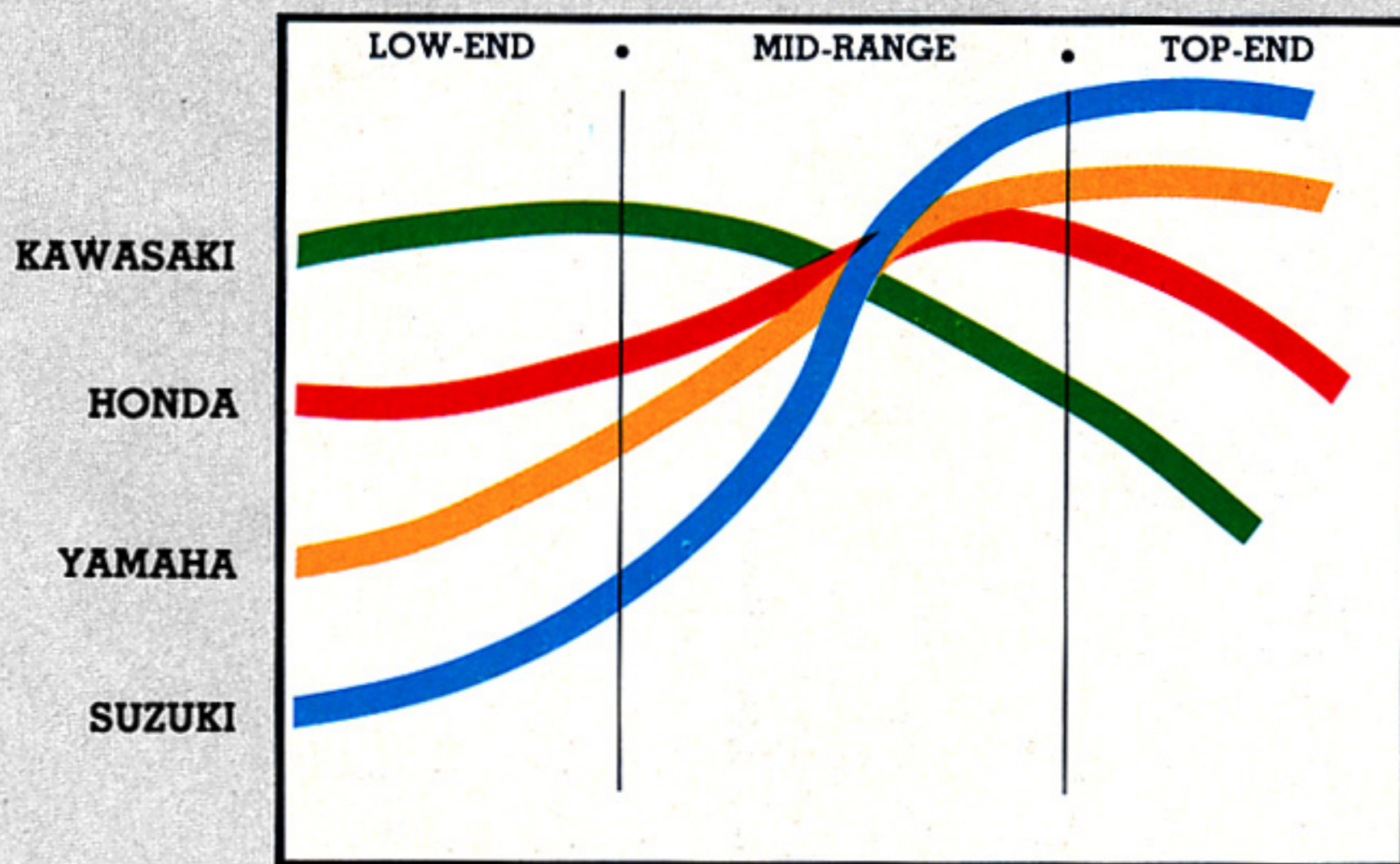
ning, it has no forgiveness for riders' mistakes. The front end shakes its head on rough tracks at high speed, and in sand the geometry is too quick for confidence-inspiring rides. Suzuki is the best hard-terrain-handling bike, but is not as good in the soft sweeping sand tracks.

Kawasaki's handling is complemented by its low-end powerband. It loves to turn tightly and churn out of the inside line. Like the RM250, the KX also shakes at high speed. The KX isn't a handling package for every man; the ergonomics (seating arrangements, control layout and peg placement) are totally off-base. To ride the KX you have to scrunch up into a ball, and what would be an excellent handling bike becomes an excellent handling bike you don't fit on. Kawasaki and Suzuki shaved the weight off of their 250s, and the handling is vastly improved because of it.

Yamaha is a quick-handling bike that is

## COMPARATIVE 250 POWERBAND CHART

(Relative power & horsepower placement — not a dynamometer reading.)



## POWERBANDS: FOUR WAYS TO SUCCESS

• Of the four Japanese 250 motocrossers, the Honda makes the best overall powerband. It has a strong low end, good middle and a passable top end. It isn't the quickest on the bottom (Kawasaki is), most potent in the mid-range (Suzuki is), nor does it rev out (Yamaha and Suzuki do), but it covers each range with a wide blanket.

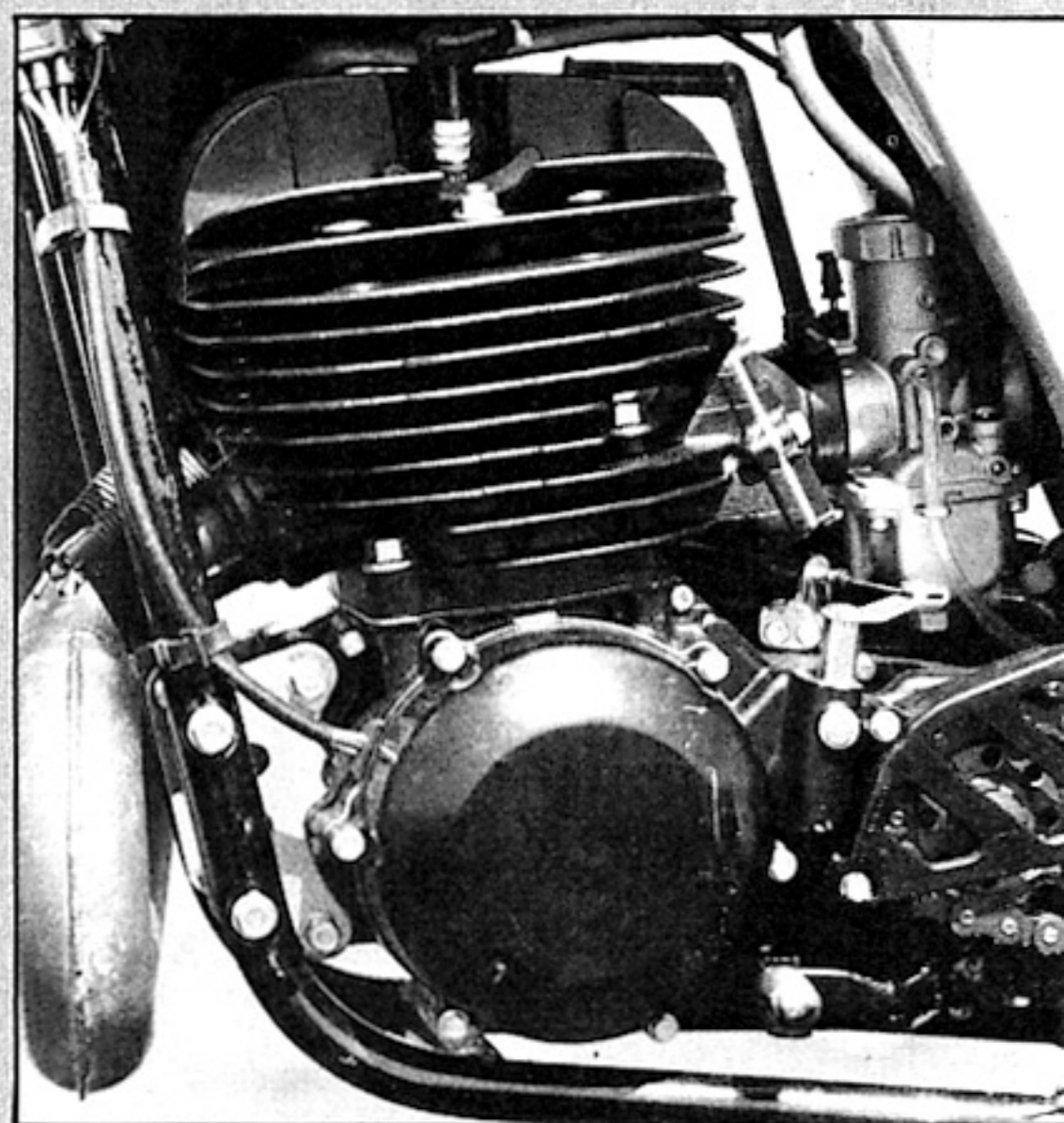
Kawasaki really shines in the low end and early mid-range. This type of power is extremely usable, especially in mud, hills, off-cambers and by average-level riders. Just because it doesn't rev out is no reason to dismiss the KX250 as underpowered. What it lacks in top end to the Suzuki and YZ, it makes up on the bottom.

Yamaha has a flat, even, chugging

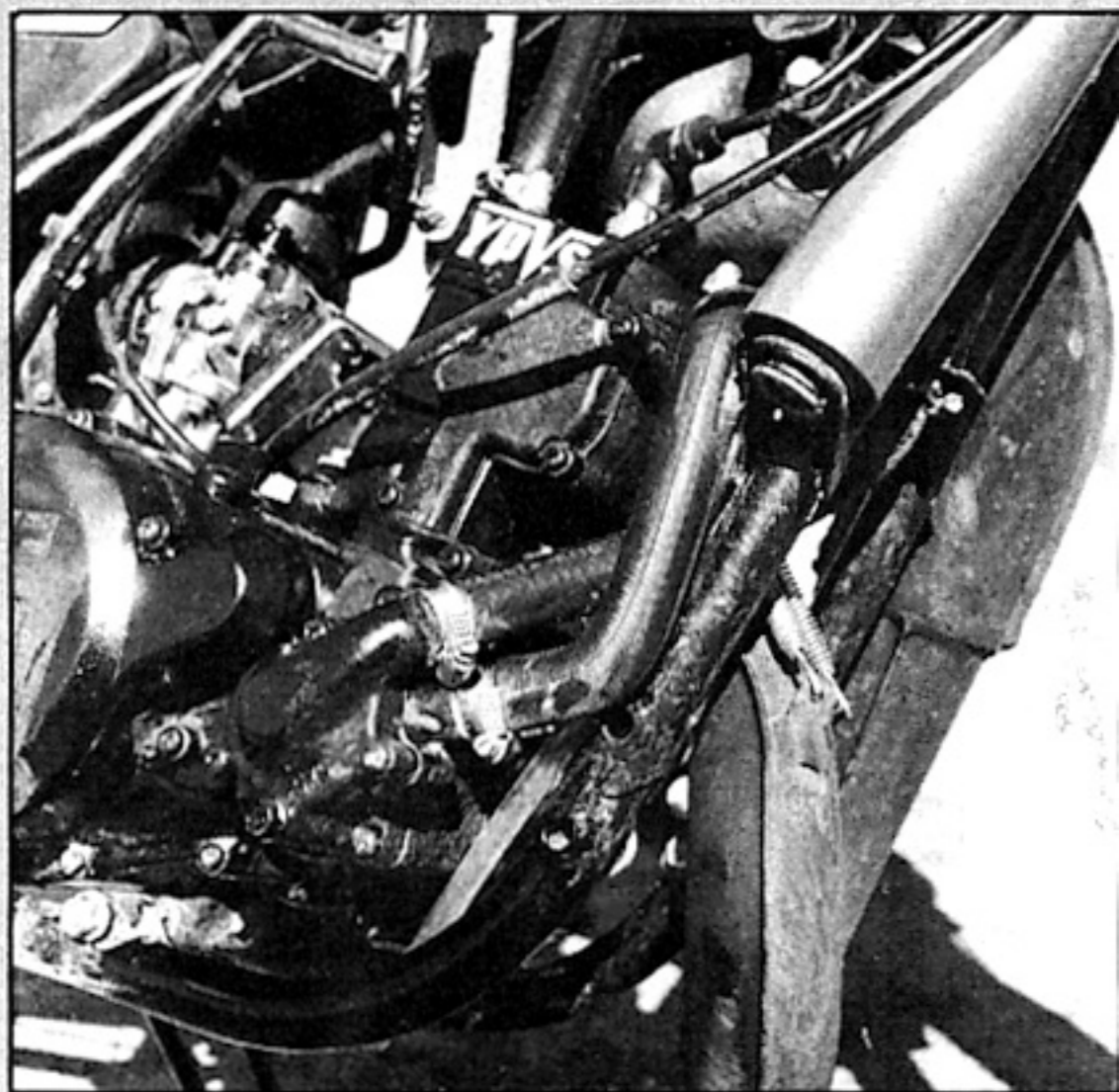
sort of power. Low end is average, and it is followed by a good mid-range and decent top end. The YZ250 isn't spectacular anywhere, but it pulls over a long range without any sags or bubbles in the curve. YZ power is easy to use. It will pull down low and can be overrevved, thus it is foolproof.

Suzuki has an expert-level powerband. Low end ponies are the least of the four, but when it kicks in late in the mid-range it really kicks in. This burst of power is augmented by a willingness to rev out (and make power as long as you have the nerve to hold it on). Not an easy powerband for the average rider, it is perfect for intermediate and high level talent.

Four good powerbands and not a clinker in the group. •



Torquiest, best low end and best junior-level mill — Kawasaki KX250.



Broadest power, strong middle and likes to be revved — Yamaha YZ250J.

hampered, held back and downgraded by its obesity. The YZ250J weighs too much. The quick front-end geometry, slightly affected by the radiator weight, makes the J model want to dive into the turns, but the rest of the bike is hesitant. We had our best luck when sitting towards the rear of the YZ (keeping weight off the front end) and letting the YZ's geometry work by itself.

#### DEUCE HANDLING TRAITS

HONDA CR250R.....	95
SUZUKI RM250Z.....	92
KAWASAKI KX250.....	90
YAMAHA YZ250J.....	88

#### WHO HAS THE BEST SUSPENSION?

Evaluating the forks in stock form means that we changed oils, air pressure and viscosity, but added no kits or springs. Among the four Japanese 250s there is a paradox. Although they buy their forks from Kayaba, they are not the same and



*Honda's CR250R is a match for the RM on many tracks, and for a certain type of rider.*



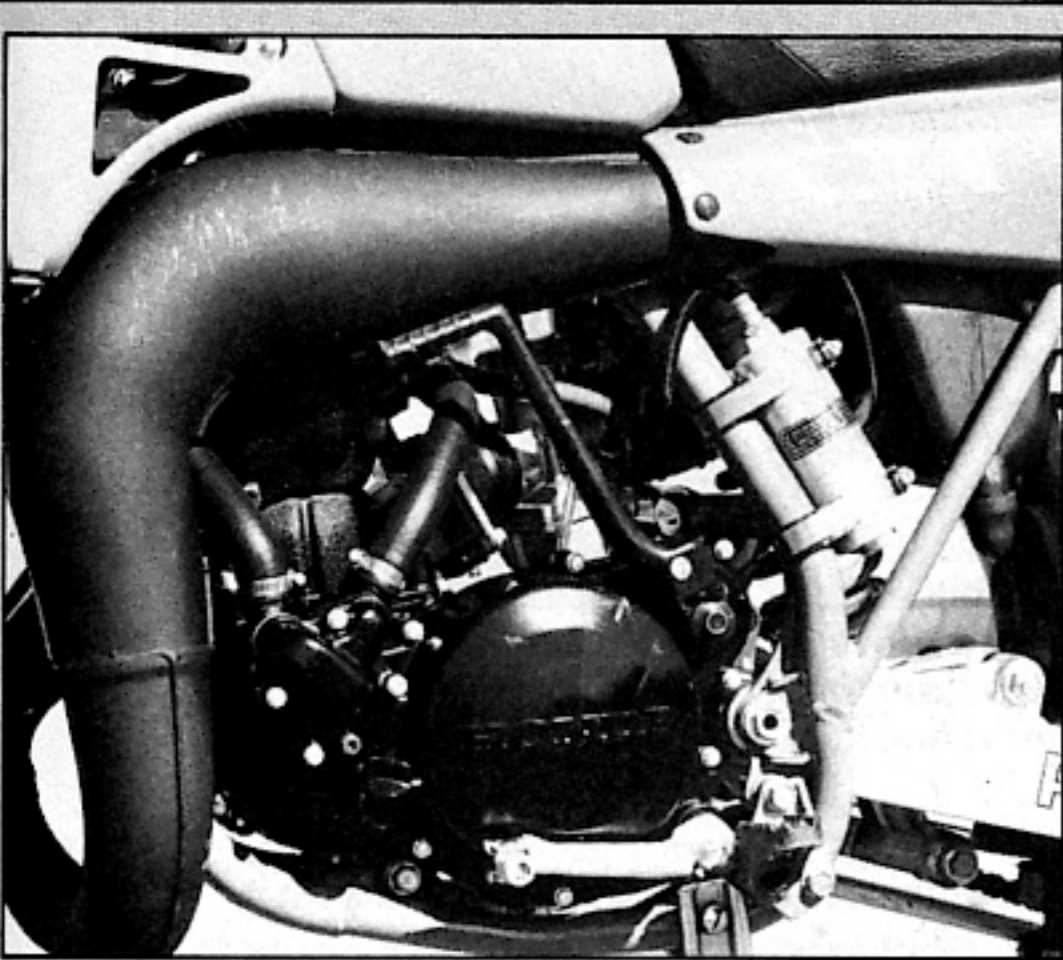
*Kawasaki is the privateer's delight. It hooks up all the time and makes lovely power.*



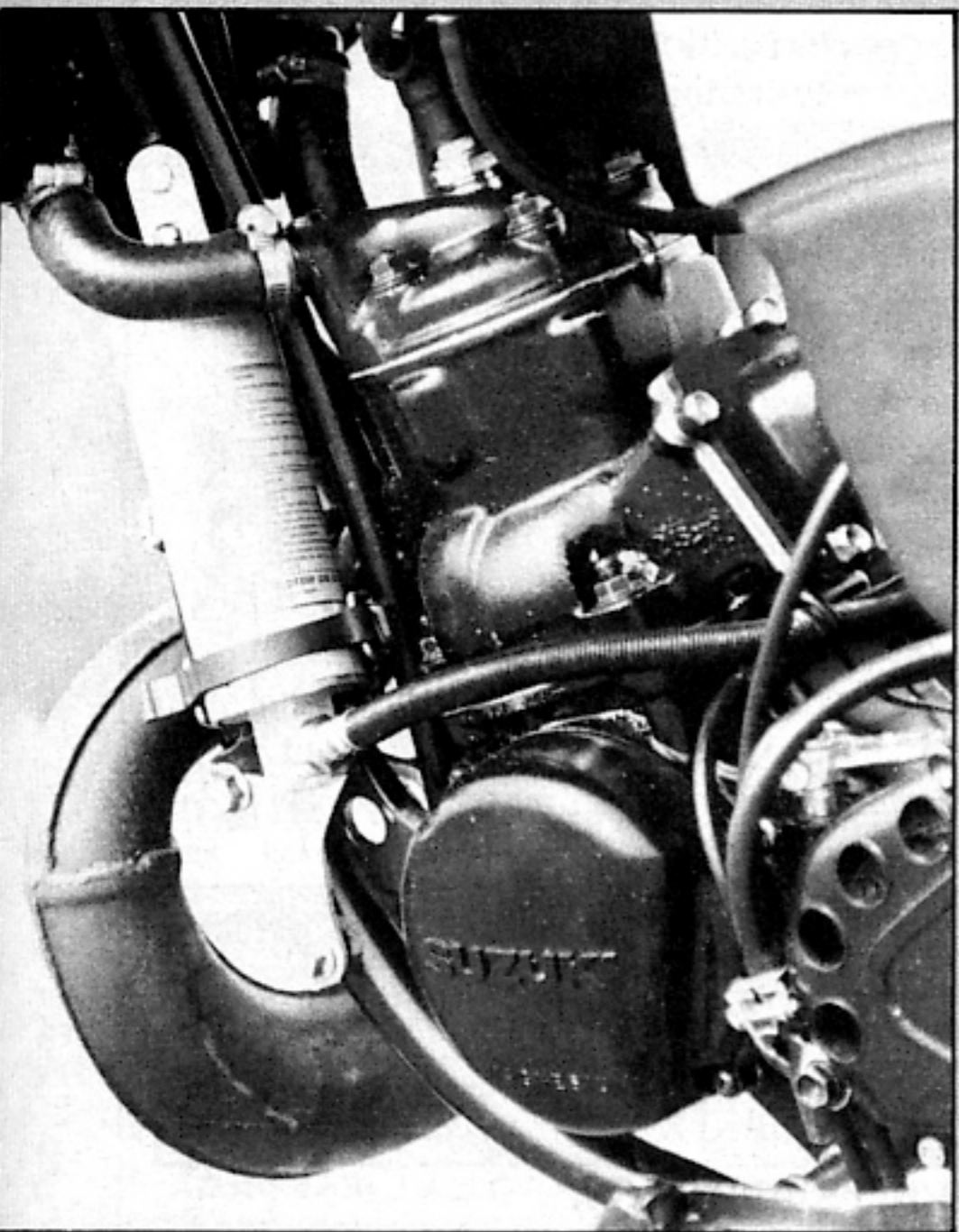
*Yamaha stepped up the technology race for 1982 by building the new YZ250J with more adjustments and gizmos than any of the other three bikes.*



*Suzuki's RM250Z is the best deuce-and-a-half class motocrosser of 1982... but with some reservations.*



*Most manageable, competitive and mid-range oriented — Honda CR250R.*



*Fastest, hardest hitting and most top end — Suzuki RM250Z.*

they don't work the same. Honda has compression damping adjustments in each fork leg on its 43mm 11.8-inch-traveled models. Yamaha and Kawasaki have the same basic legs, but different damper rods on their 43mm forks. Suzuki opted for smaller 38mm Kayabas.

Yamaha has the best forks of the four 250s. With no air in the forks and only slight changes in the YZ's oil level, we were able to make the Yamaha forks flawless. Honda's forks came second — but it was close. The Honda forks work better after they are broken in; there appears to be a lot of stiction and seal drag when they are new.

Suzuki's 38mm forks worked adequately, but not as well as the YZ or CR, and surprisingly they didn't have that expected *great* feel to them. Suzuki suffered because of its wimpy 38mm legs. Kawasaki came in fourth because its stock springs are too stiff for the average rider.

It should be noted that Suzuki went to 38mm forks to save weight, so that is a plus. Additionally, Honda's trick adjustable compression damping was hardly significant in terms of getting the forks to work properly.

#### 250 FORK FINALS

YAMAHA YZ250J.....	98
HONDA CR250R.....	96
SUZUKI RM250Z.....	92
KAWASAKI KX250.....	92

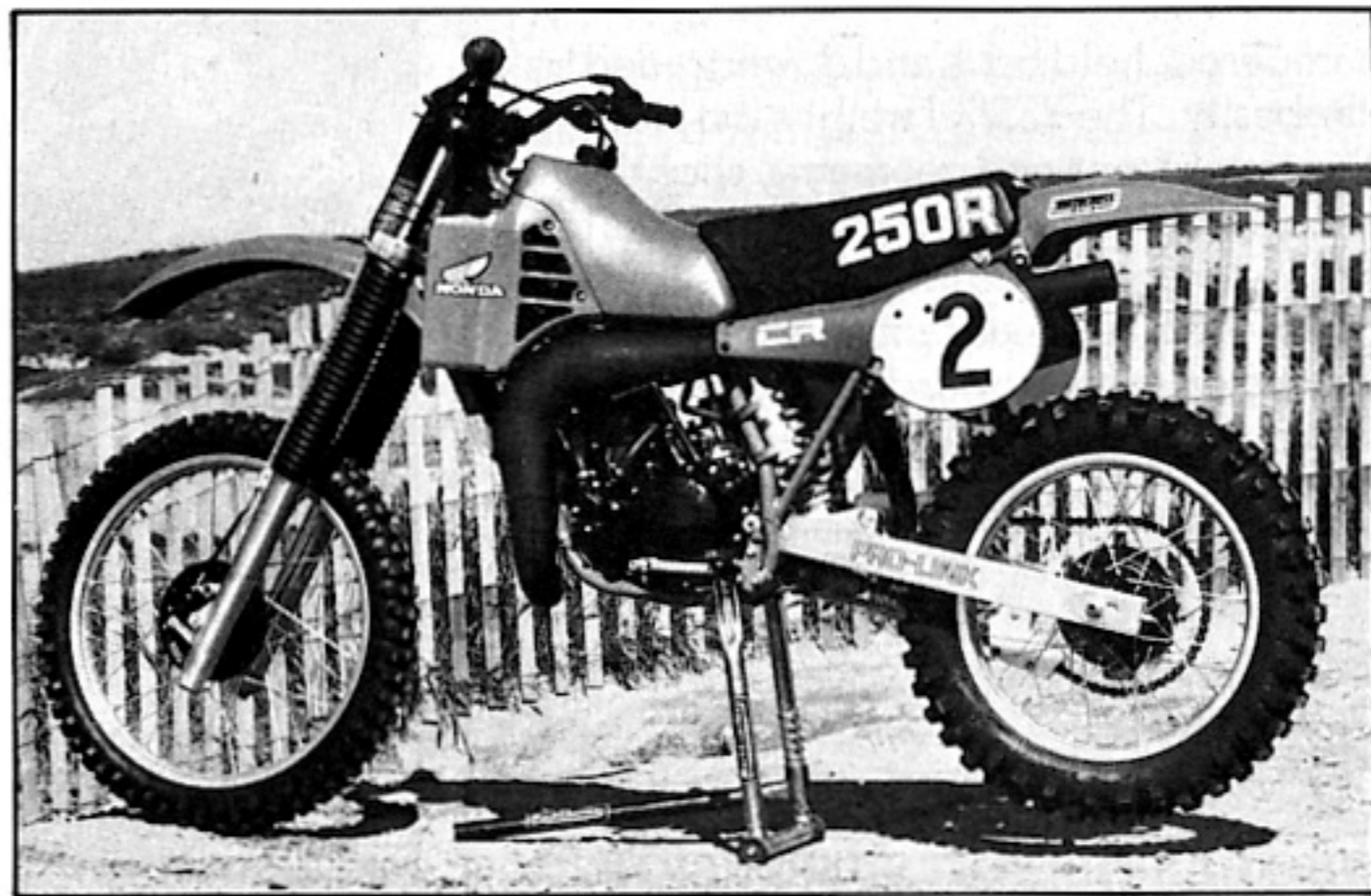
When rear suspension is pulled into the suspension category, things get even more confusing. Each system seems to work well, but our complaints came from a variety of areas. Suzuki's Full Floater was hands down the best rear suspension for fast riders. It is a proven winner and is in no danger of being touched by the other three in the bad bumps. Honda's Pro-Link system gets the job done with equal verve, but with a slightly different feel. Both Suzuki and Honda require conscientious effort when dialing in preload. The Suzuki is set up stiffly, while the Honda is a little softer. Average riders will feel more comfortable on the Honda, but at speed the more firmly sprung RM stands out.

Honda has a good mechanical system that is hampered by a questionable Showa shock. There is no doubt that with an Ohlin, Fox or White Power in place of the stock Honda Showa shock, the Pro-Link would be

# 250 SHOWDOWN



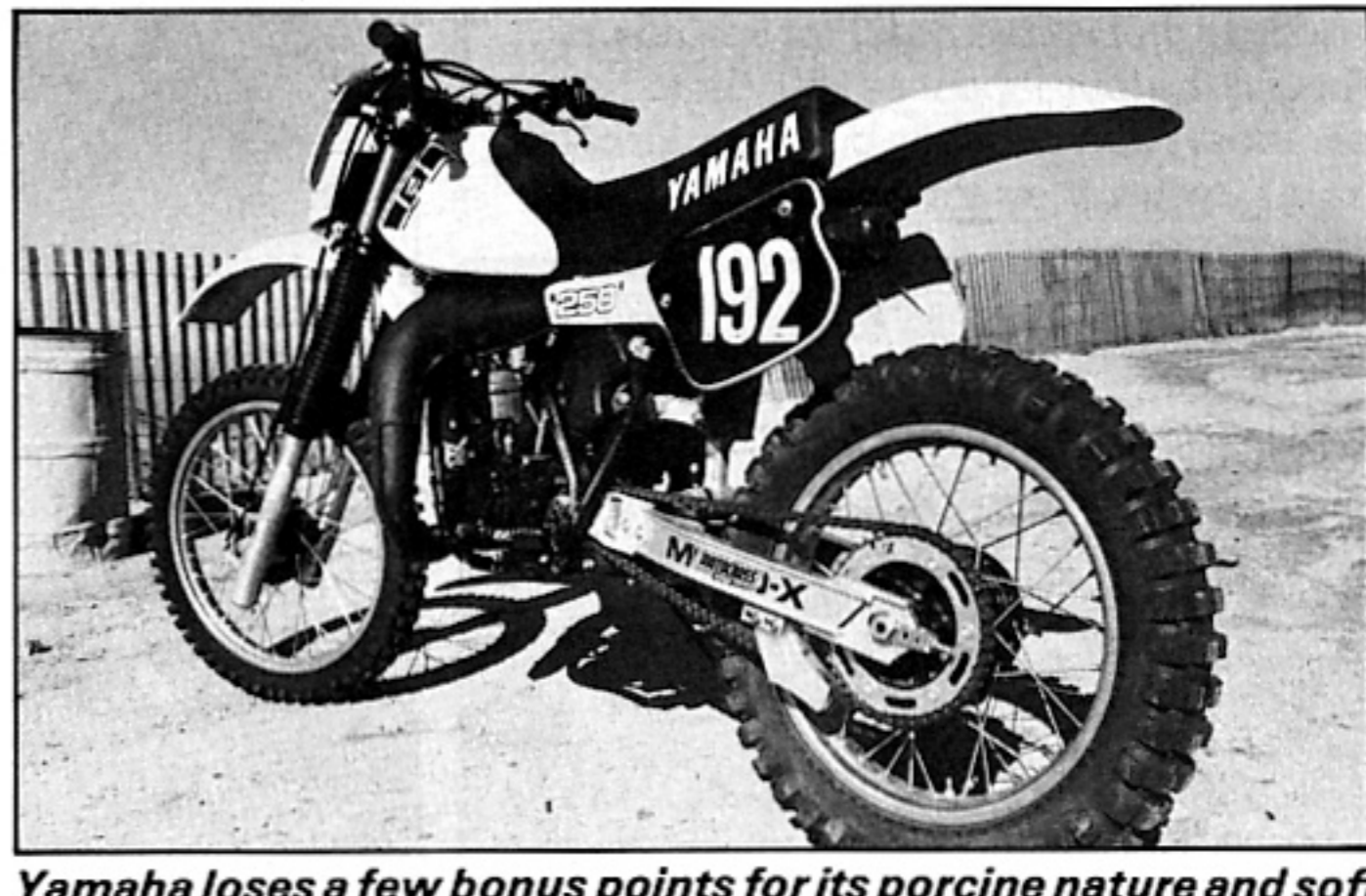
Kawasaki made a lightweight, air-cooled, disc-braked 250 that needs some subtle suspension care to bring it up to snuff.



Honda has come a long way in 1982. The new CR250R stays at the top of the class with stable handling and good power.



Suzuki designed the RM250Z to take no prisoners. It is the lightest, fastest and quickest handling.



Yamaha loses a few bonus points for its porcine nature and soft suspension, but when you have been on top for three years you know what it takes to get it back.

right up front, but out of the crate the Showa isn't first-rate. The Kawasaki shock suffered from an extremely stiff rear spring, too much compression damping and a dependence on heavy preload.

Yamaha has a great shock that has adjustable compression and rebound damping, multiple settings and total adjustability, but its linkage system works only so-so. It isn't bad, but the feeling is not one of complete confidence. We surmise that the Yamaha shock is perhaps the best shock mated to the worst linkage system, while the Honda has the worst shock paired with a good leverage ratio.

#### REAR SUSPENSION SUSPENSE

SUZUKI RM250Z	99
HONDA CR250R	97
KAWASAKI KX250	90
YAMAHA YZ250J	90

#### DON'T-STOP-NOW BRAKES

The Suzuki RM250Z is the fastest accelerating and hardest hitting powerband, so it is obvious that it would be blessed with the best brakes — wrong! Kawasaki has the best front brake and Honda has the best rear brake. Yamaha and Honda are only a shade worse than the KX on the front. That leaves Suzuki at the back of the pack when it comes to stopping power. A Kawasaki front and Honda rear would be the ultimate

combination.

Yet, all four bikes have good brakes and the criticisms are relative to each other.

#### BRAKING BONANZA

KAWASAKI KX250	99
HONDA CR250R	97
YAMAHA YZ250J	97
SUZUKI RM250Z	95

#### ERGOMETRICS AND MISCELLANEOUS TIDBITS

Ergometrics is man's relationships to the machines and things around him, and in motocross that means the handlebars, footpegs and levers. This section will evaluate those items and at the same time take into account the bits and pieces that make a difference. Bonus points are added for some areas and subtracted for others. For example, Kawasaki has rotten ergometrics so it loses some points, but it is much lighter in weight than the CR or YZ so it gains some points. The Suzuki and Kawasaki are light (less than 220 pounds), while the Yamaha and Honda are heavy (more than 230 pounds).

Suzuki has a straightforward, simple-to-use front numberplate, Kawasaki and Yamaha designed unusual shapes for its front plates, and Honda incorporated a grill that defies putting numbers on. Give points to Suzuki and subtract from the

others.

Yamaha really missed on the gearing, and would require that the buyer spring for a new rear sprocket. That is a minus, but Honda and Kawasaki aren't totally immune to gearing criticism (but it can be fixed at the countershaft).

Kawasaki is air-cooled. Is that a plus or a minus? Nobody knows for sure, but more than likely next year's KX will be water-cooled. Yamaha has the Power Valve, which is neat, but it didn't win the power category so it isn't neat enough. Suzuki has the square-slide 38mm Mikuni, and since its jetting is spot-on, that *must* be a plus. Suzuki has those stupid bank vault airboxes. Take those square-slide carb points away. Give Yamaha some points for its new airbox design and the fact that you can up the preload on the YZ without hammering on anything with a screwdriver. And the beat goes on!

#### MISCELLANEOUS BONUS POINTS

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#### WHO'S TOPS NOW

The Suzuki RM250Z is the best 250 motocross bike of 1982, but with some reserva-

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## 250 SHOWDOWN

(continued from page 64)

tions. It might be a little too professional for the beginner- or junior-level rider. It isn't as well suited to sandy and whooped-out tracks as it is to hard, tight tracks, but it is super fast, light and aggressive, known in Texas as hostile, agile and mobile!

Honda comes in second overall, but is first overall to anyone who doesn't want the hard-hitting *rat-a-tat-tat* of the RM, needs a more forgiving handling package, and will be riding on tracks that don't favor the cut-and-thrust (head shaking) habits of the RM250Z. The Honda has good power, decent handles and a workable suspension. It is a match for the RM on many tracks and an outright winner on others.

Kawasaki scoops up third place with a bike that is the privateer's delight. It is inexpensive to maintain (no watercooling), light, and has a strong low end and mid-range that will keep it hooked up all the time. The handling was highly rated, but its biggest drawback was its unusual seating and stiff suspension. But try one on — you may like it.

Yamaha has been on top of the 250 class for the past three years, and the 1982 J model is the most advanced model Yamaha has ever introduced, but it is held back by lack of attention to weight, power and smoothing out the handling. Knock ten pounds off and it would be a different machine. □