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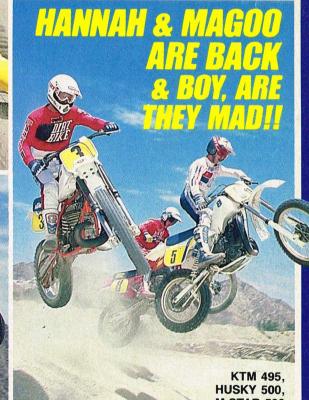
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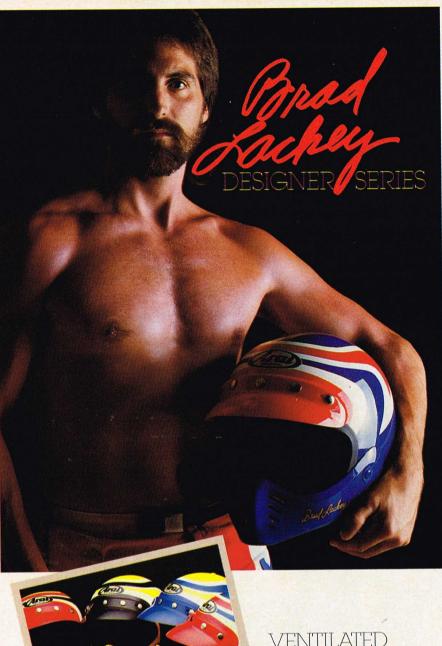






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125 SHOOTOUT





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HONDA XR500

WARNING: Much of the action depicted in this magazine is potentially dangerous. Virtually all of the riders seen in our photos are experienced experts or professionals. Do not attempt to duplicate any stunts that are beyond your own capabilities. Always wear the appropriate safety gear

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ON THE COVER:--We've packed the pages with head-to-head shootouts this month. On top are six charged 125s going for the throat, and lower on the page are a half dozen of the fastest motocrossers in the world. Photos by Clipper and Webb; awesome separation by Valley Film.

TESTS

- 20 125 MOTOCROSS SHOOTOUT Testing a half dozen of the fastest 125s around
- 32 HONDA XR500R The bike all the others are shooting at
- 44 500 MOTOCROSS SHOOTOUT Battle of the titans

FEATURES

- **30 BOB HANNAH** Fighting back from injuries
- 31 MAGOO
- Wants to win again! 35 AL BAKER
- From Baja, with love.

54 TIRE TRACTION SECRETS

- 36 PRODUCT EVALUATIONS Bel-Ray 6 in 1, TNT Hand Guards, O'Neal Ultra-Lite Chest Protector
- 38 TIGHT WOODS RIDING SECRETS OF THE PROS Learn to carve from the nation's best
- **43 KEVIN HINES** Next in line for the National Enduro crown?
- Field report from the rubber room **60 GARY BAILEY TEACHES TECHNIQUE**
- How to pass...and make it stick 64 HOW TO COPE WITH DUST Larry Roeseler, Al Baker, Dan Ashcraft and Dick Burleson tell you how
- 66 HOW TO OVERCOME FEAR Dealing with things that go snap! in the daytime

COMPETITION

- 28 UNADILLA WORLD 250 GRAND PRIX Lechien conquers and Hannah's back!
- **42 BUCKEYE 100 NATIONAL ENDURO** Cunningham dominates in his backyard

TECHNICAL

- **52 HONDA ATAC TIPS** Know your exhaust linkage
- 56 FREE HORSEPOWER 90 percent of the bikes sold are choking!

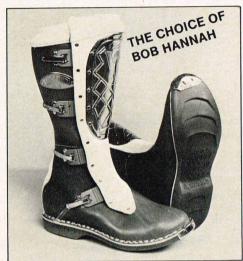
DEPARTMENTS

- 7 FROM THE SADDLE Tear-ierkers
- **8 LAST OVER**

It's easy when you know the language

- 10 BITS AND PIECES
- Who's where, when and why 12 MR. KNOW-IT-ALL
- Dealing with rampant stupidity in a crass fashion 14 RIDERS WRITE
- Replies from U.S. males **18 NEW PRODUCTS**
- All-new budget wreckers
- 74 CRASH & BURN Once more, with feeling

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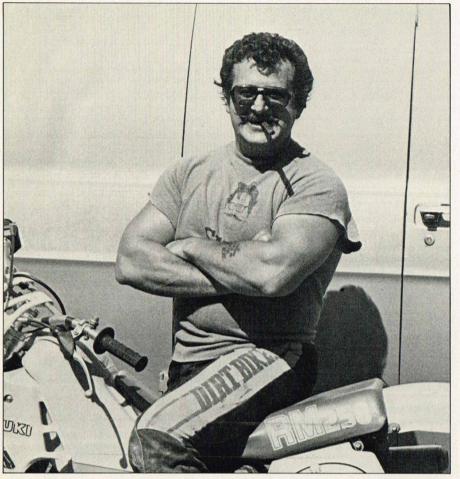
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From the Saddle



Tear-jerkers

By Rick Sieman

rear-jerkers. We're not talking about when Ramone leaves Belinda for an underaged goat brander from Seville and gets hit by a train and a bus. Nope. We're talking about real-life tear-jerkers...the kind that can bring a grown man to his knees, eyeballs moistened, hurting too much to even curse. Let me explain:

A short time back I was working on my bike, quite peacefully, mind you, getting it ready for the weekend. Now, I have a habit of sticking the screwdriver I'm using into the footpeg. That way I can find it easily. Anyway, I had just put the shiny new Craftsman straight-slot screwdriver into the peg and turned my attention to removing the airbox cover and the filter, when the phone rang. I got up from the milk crate and drove—literally drove!—the tip of the screwdriver into my left leg, right above the knee. Using my lightning-quick racer-trained reflexes, I immediately fell to the floor, moaning like a kicked poodle, tears welling up in my lagoon-blue eyes. Tear-jerker.

A friend of mind was fixing a cracked pipe on his Yamaha by carefully welding along the spider-webbed damage, taking his time, doing it right. He set the welding rod down, removed the welding goggles, studied the weld, then put the goggles back on to weld a bit more. When he picked up the welding rod, it was by the hot end. Tearierker.

Once I was in a desert race, doing rather poorly, if memory serves correctly, and I smashed my right foot into a rock that was hooked directly to China. The pain was blinding and caused white dots to swirl in front of my eyes. However, it was not a tearjerker. I was only five miles or so from the finish, and I had no choice but to ride in.

After picking up the bike, I got back on, found neutral, and gave a boot to the kickstarter, with the swollen toes pointed out. On the third kick the bike fired, but the kickstarter slipped up and slapped me on the back of the leg, just above the boot. Serious pain, but still not a tear-jerker.

Rather carefully, I rode back toward the finish line, with the entire right limb throbbing like a wounded tuna. After a few miles, the foot hurt so much that I could no longer keep my heel on the footpeg. So I held the foot in the air and rode even slower. About one-quarter mile from the pits, I rode through a little gully, and the suspension gently bottomed out. This lowered the injured foot just the correct amount, and it made contact with a grapefruit-sized rock, toe first. Real tear-jerker!

My friend George was racing at Saddleback one fine, clear Saturday, and he related this tale: He got off the line a fraction late and had to gas it hard to get to mid-pack. As he neared the top of the long start straight, a rock lazily left the rear knobby of the bike in front of him and arced through the air. He tilted his head to one side to play it safe, and the bike moved over slightly with his body. The rock then dropped gently right into his groin, hitting him in ...how shall we say it?...one of the fami-

The pain was intense enough to make him suck in his breath, curl up into a ball and make no attempt whatsoever at trying the first turn. He merely rode through the turn, fell on the ground at one mile per hour and lay there, feet in the air, whimpering. Tearierker.

Recently I ran into a series of minor cuts and scrapes that were more infuriating than anything else. First off, I cut open my right thumb on a sharp-edged hose clamp while removing the carb. After a few minutes, I forgot about that. Then, a bit later, a screwdriver slipped and my left palm got a nice little gash. I sucked on that for a few minutes to cleanse the wound and then proceeded. A half hour later, a wrench slipped, and I gashed open the backs of two knuckles on the footpeg. This was getting monotonous. Twenty minutes later, I got a three-inch white-meat cut on the back of my left hand while trimming a zip tie with a dull razor blade. Not much time passed before my right hand got pinched in the toolbox lid. I more or less wrote off these petty injuries and went about the business of shaping up my bike for the next day.

At 11:15 that night, I was just about done, with only the air filter left. It had been hanging up all day to dry, so I grabbed it and got out a bottle of filter oil to wrap up the job. With the filter in my left hand, I poured a liberal amount of Maxima filter oil on the foam and began to work it in really well.

At this point, I realized that my hands had no less than ten open wounds! People have received medals for less serious injuries. Well, what could I do? My hands were already covered with the filter oil, and the cuts were thoroughly saturated. With tears in my eyes, I squeezed the oil through the foam, then stumbled into the laundry room and turned on the hot water and squeezed liquid soap into my greasy hands. And washed them. King of the tear-jerkers!

Last Over

It's easy when you know the language

By Paul Clipper

ately I have been receiving much mail Lat Dirt Bike asking surprisingly simple questions. After fielding a number of requests for enlightenment, it became obvious that many of our readers were unfamiliar with even the simplest of motorcycling terms. This is a situation that must be put to rest, so in an effort to broaden the knowledge of those who need it. I have put together the following glossary.

In an effort to be as clear and as precise as possible, I have sought the advice of many experts in the field and can therefore attest to the accuracy of this information. Readers who have questions that remain unanswered at the conclusion of this column are urged to contact the editor of this magazine for help in specific areas.

Revolutions per minute: Reference to how hard and fast your head is spinning after centerpunching your first tree in a tight enduro. Not to be confused with counterrevolutions per minute, which is a measurement of either the speed opposite eyes rotate in their sockets after the above collision, or of political weather in South America.

Before top dead center: Used to describe the point of impact during an endo. Coming down before top dead center would be a forehead landing, otherwise known as a face header. If a square landing on top dead center would be a 9.9 in international competition, BTDC would be a 5.2.

After top dead center: Particularly nasty. Use your imagination.

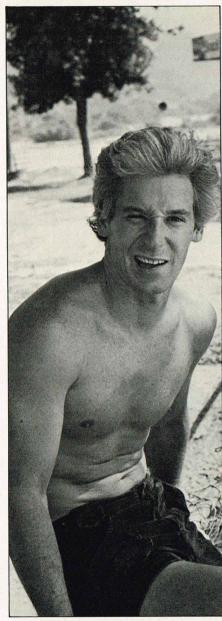
Spring rate: The rate at which your route chart rolls backwards in a fast section of an enduro. Expressed as a ratio: If your chart rolled back eight miles in one mile of fast trees, the spring rate would be 8-to-1. Spring rates of up to 92-to-3 are not uncommon.

Swingarm pivot: What happens when you try to jump a very large log which contacts the frame rails and stops the bike dead, leaving it rocking back and forth like a seesaw. The rider is usually left sitting on his butt ten feet in front of the bike.

Ring end gap: The opening left in a wedding band after you break a finger and the hospital has to cut the ring off. Usually very difficult to forget, as the affected spouse becomes enraged and clips said split ring onto your eyelid.

Bore diameter: The exact diameter of the hole you would like to drill in the skull of the stupid oaf who keeps passing you back in every open section of a tight enduro.

Cylinder displacement: Rate at which beer cans take up room inside an ice chest. The smallest ones only have a cylinder displace-



ment of six, and you can't fit in much ice.

Compression ratio: A ratio expressed as the difference between ambient air pressure and what your insides feel like after knocking back a quart of cold soda after a hot run. Not a very sociable condition.

Double-leading-shoe brake: What a Husky rider does to bring himself to a stop after a long section through a deep creek. Effective at slower speeds, but hard on riding

Single-leading-shoe brake: Above Husky rider if he happens to smack his toe on a

First over: Reference to the first time you do an endo on a new bike. A necessary and unavoidable situation, comparable to the first scratch you get on a new car, but more painful.

Primary reduction ratio: Measurement of

how small you feel after bragging to the other guys on your minute about what kind of a bull goose unreal timekeeper you are, and then leading them all into the first check five minutes early.

Secondary reduction ratio: Very rare. An amplification of the above if they allow you to get away with it a second time. Usually accompanied by a painful roosting and the insistence that you ride the rest of the day

Final drive ratio: The mysterious force that gets you out of bed at four a.m. on raceday, when you know you won't do any better than 12th in class, if you even manage to finish. Final drive ratios can be both positive and negative: i.e., a huge, shiny trophy is positive drive, while a wife/girlfriend with a pair of tickets to a high school production of Oklahoma is negative drive.

Primary kickstarter: Usually a reference to the biggest guy walking around in the pits. He's the guy you head for if your bike won't start and you've already worn yourself out trying to kick it.

Rim lock: Describes the situation you get into when you drop your front wheel into a muddy rut and it takes you and three kindly strangers to pull it out. Roots make very good rim locks.

Shift fork: What you do when you're trying to eat right after breaking three fingers on the dominant hand. This causes a slight problem with what to do with the knife and soup spoon, but most enduro riders learn to cope after a while.

Transfer angle: Refers to the amount of strength you have at any given gas stop of an enduro, and your ability to tip a gas can up far enough to avoid spilling gas all over the bike. The transfer angle starts out correct at the beginning of the day and deteriorates in the late afternoon.

Cylinder scavenging: The process you go through when you've spent your last four pistons and the better part of a bank account on ignoring a massive air leak. Also a derogatory term for the process of seeking sponsorship.

Squish band: The small hold-down strap at the bottom of some rear fender bags on Japanese enduro bikes. So named for a tendency to deform tuna fish sandwiches on a long ride.

Intake port: Where you pour the Gatorade and stuff the Twinkies after the first loop of an enduro. Also the main air intake for riders who refuse to wear protective gear or use mufflers.

Exhaust port: Don't ask.

Port timing: The ability to coordinate the use of the intake and exhaust port and not get the two mixed up. Improper port timing can occasionally result from a severe compression ratio.

Last over: See above.

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Bits & Pieces

By Tom





O'Mara gated dead-on at the Buffalo Supercross.



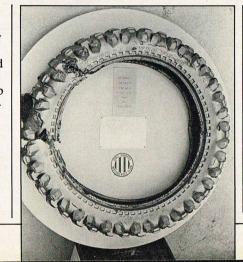
O'MARA CONTINUES SUPERCROSS STAMPEDE

Johnny O'Mara shows no signs of letting up on the Supercross domination he's displayed so far this season. In Buffalo, the Honda teamster gated dead-on and proceeded to walk on the competition. David Bailey pulled in behind O'Mara on the start and was content to stay there, hoping for a bobble from O'Mara. Most of the riders hated the one-line track that made passing nearly mpossible.

For the second year running, David Bailey mastered the Foxboro Supercross race. Bailey passed both Ward and Johnson on lap one and never looked back. The night ended with Bailey out front, followed by Johnson and Ward. Supercross points leader Johnny O tallied a fourth and now holds a commanding lead over second-place Ward.

A DIFFERENT SORT OF TROPHY

Leave it up to the famed Dirt Diggers M.C. to come up with a twist on trophy design. This outrageous award, dubbed the Dubious Desert Award, was designed by Al Smith (of A&B Super Roller) and is awarded to the desert racer in the club who finishes a race under the worst possible conditions. The recipient, Matt Shook, came into the finish line with this tire dangling off his rear wheel. It was promptly painted gold, mounted on this plaque and will be passed on from year to year to yet another unfortunate. Good job, Diggers.





Georges Jobe and Andre Malherbe are battling for the 500 World title.



David Thorpe has kicked into overdrive in the last two 500 GPs.

ACROSS THE BIG LAKE...

Britain's Dave Thorpe has suddenly kicked into overdrive and slaughtered the competition in the last four motos of the GP circuit. In England, Thorpe rode flawlessly and turned in a perfect 1-1 day. Georges Jobe followed him in the first moto, and Honda teamster Andre Vromans ended up in the runner-up slot in moto two.

In Belgium, the young Brit once again fought bitterly with Malherbe and Jobe and took both moto wins. Look for European race coverage of the Belgium GP and a wrap-up of the 500 GPs in the November Dirt Bike.

HOLLAND PREPARES FOR ISDE

The main question concerning this year's ISDE in Assen, Holland, is, who will be ready for the flat, sandy terrain of the Netherlands? Apparently the Dutch will. Although a firm team list has not been released yet, Gerrit Wolsink, fivetime winner of the Carlsbad USGP, is a strong choice for the Dutch Trophy team. Their Vase team isn't about to suffer, either, as Kees Van der Ven is rumored to be giving it a go. The remainder of the team positions will be filled by "World-class motocrossers and ex-motocrossers," according to a reliable source. It would be a strong bet at this point that the Dutch plan to win this year, and that the emphasis will be on special test times rather than difficult terrain. Will our premier woods riders be ready for such an event? They're out practicing their motocross right now, and, as always, we can hope for miserable weather.





nate the 500 Nationals.

SMOKE ON THE HORIZON

Several things are becoming apparent on the motocross scene. First, there's a real kick-down battle shaping up for the 250 National Championship. Honda's Ron Lechien and Yamaha's Ricky Johnson are mere points away from each other with just two rounds remaining. At the Binghamton National, Johnson scored perfectly, going 1-1 for the day. Lechien was plagued by crashes, and suffered a dismal 3-8 score for fifth overall. The points had Johnson with a 19-point lead going into the Millville National.

Johnny O'Mara

In Minnesota, Johnson's luck went sour as he was hampered by shock trouble, and Ronny Lechien went 1-1, closing the gap considerably on Johnson. It seems that Lechien had some help from

teammate Bob Hannah in both motos. Hannah held a sizable lead and quite suddenly slowed toward the moto's end, letting Lechien take both wins. Interesting.

In the 125 wars, it's O'Mara and Ward trading places every weekend. They split moto wins at Binghamton again, and after the New York National, the points spread was 12. In Millville they traded wins again, so there's no change in the points. Just one mechanical glitch could ruin either rider's chance for a National title.

On the boring side comes the 500 class. David Bailey won both motos at Binghamton and Millville. No news here Every week he widens the points spread over Glover.

ROLL WITH THE CHANGES

Kawasaki's off-road lineup for 1985 will see some changes. First, the KDX250 has been dropped, leaving only the KDX200 and KDX80 in the enduro market. Will we see big changes on the popular KDX200 since it's the only enduro

racer? Sorry, no. It'll be the same basic machine as the '83. The good news comes in the MX bikes. Kawasaki has water-cooled the KX500, and from what little we've heard, it's serious. Stay tuned. We may test it next month!



Graham Noyce has thrown in the motocross towel and is rumored to be the newest threat in ATV racing.

INTERNATIONAL RUMOR MILL

Graham Noyce, who spent the better part of this year on the Honda support team, never made it to the British GP. Soon afterwards he announced his retirement. A phone call from Britain turned up the almost unbelievable rumor that he plans to stay away from International GP racing, and instead spend his time racing ATVs! More on this situation as it develops.



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Mister Know-it-All



By Rondo

RAT BIKE OR RIGHT BIKE? WHERE TO SPEND THOSE BUCKS

• Out of the massive amount of mail I receive daily, an unnerving percentage of the letters ask me how to make their bike run better. A typical letter might go thusly:

Dear Rondo:

I have a 1978 YZ250 and would like to beat my friend Harry, who just bought a 1984 KTM 495. The only thing is, I'd like to do it for under 200 bucks. Thanks a lot.

Marvin Grinder Spinoza Flats, IA

After I recover from a throbbing headache, I usually have 40 or so cups of coffee and try to collect my thoughts. What, indeed, do we tell the Marvin Grinders of the world? Face it, 2000 bucks would not make his old YZ beat his buddy's new KTM. But what should he do? After all, the 1978 YZ is all he has, and the \$200 mentioned gives you an idea of his budget.

My suggestions?

Mr. Grinder (not his real name), here's what Rondo would do if he (God forbid!) were in your wretched position. I would forget about buying any sort of hop-up parts for the Y-Zed. Instead, I would take that sucker and shape it up until it was as fresh and as strong as it was stock...in 1978, when it was first released.

Take the bike completely apart... and I mean completely!

Strip it down to the bare frame. Then inspect each and every part. Check the frame for bends or cracks and then sand it down and give it a fresh coat of epoxy paint...in the stock color.

Buy new bearings for the steering head, swingarm pivot and both wheels and buy new bushings for the shock(s). Rebuild the shock with fresh oil and seals, then do the same on the forks. Put fresh seals, wipers and rings on the forks and make sure nothing is worn on the dampers. Clean out the forks scrupulously.

Buy new brake shoes and springs and completely rebuild, clean and paint the backing plate, taking care to grease all pivoting points properly. Take the wheels apart and true the spokes, replacing any rounded nipples, and also grind off any spokes that have worked too far into the nipples and might cause flats.

Take the engine apart and replace all worn parts. If any gears are rounded off, replace them now. Fresh rings are a must, and you might even want to go one size up and slap in a piston, too. Do not reuse any gaskets. Fresh ones are cheap.

Repaint the cases and barrel in stock colors (if needed), check the clutch plates and drive gears. Put a fresh chain on the bike and make sure the sprockets are in good shape. Take all of the wiring apart and remove any corrosion you might find, then neatly retape everything just like stock.

Carefully put the entire bike back together, using fresh motor mount bolts and new nuts and bolts wherever possible. Buy some fresh foam if your saddle has broken down, and maybe slip one of the newer-style safety saddles. They're cheap.

Put in new oil, a new plug and some new stickers, and replace any plastic that's too cracked and ragged looking. Make sure that you have decent tires on the bike and have someone check the jetting if you're not capable. Oh yes...you most certainly should have checked inside that carb, too, for worn slides, needles and fuel inlet seats.

You should now have a bike that will run great—probably better than you ever expected. Now, get in good shape and try to physically wear down your friend with the new bike.

Address all interesting or semi-interesting questions to Mr. Know-It-All, Rondo Talbot, The Gypsy Genius, c/o DIRT BIKE Magazine, 10600 Sepulveda Blvd., Mission Hills, CA 91345.

SHOES FOR SAND?

Dear Mr. Know-It-All,

My trusty TT250J is in need of new tires, but which ones to buy?

Most of my riding is done in the desert and in soft sand. I'm considering a K139 Dunlop 3.00×21 up front, but I don't know what would be best for the

rear (a 17-incher). Would a Metzeler be better up front than the Dunlop? How about a 3.25×21 front?

Thanks in advance for any help you may provide.

Chris Orndorff
Provo, UT
Your TT250 might be trusty, but it

doesn't have enough power to pull a big tire on the rear...not in soft sand. You are rather limited in choice with the 17inch rear wheel. Consider an IRC sixply-rated Vulcanduro. While not wonderful in the sand, it is highly rock resistant and will let the rear wheel spin instead of bog.

In sand, bigger is better, so yes, use 3.25 × 21. Metz makes a good one.

IN SEARCH OF TRUTH

Dear Mr. Know-It-All,

I've looked in many books and magazines and asked many people this question. What, mechanically, is a powerband and where is it located? Is it something in the trans, the carb, the reed valve or somewhere else? Can you take a bike with no powerband and add a powerband to it? I know you have the answers to these questions.

Mike L. West Milford, NJ

Dear Mr. L. At first I was tempted to make sport of your lack of knowledge, but, being a fair and tolerant man, I shall, instead, pass on a kernel of savvy to you.

Most powerbands are located below and slightly to the left of the whindle port and inside the braxton chamber. On some European bikes, it can be found inside the mizzen spline, or by the turnstile.

I hope I've been of some assistance to you. Oh yes. Powerbands are available from White Brothers for \$9.95 and up, and come in many decorator colors, some with whistles. Ask for Tom White and tell him Rondo sent you. New Jersey, eh? Oh, well....

FROM SWAMPS TO MOUNTAINS ON A CR500

Dear Mr. Know-It-All,

I'm blessed/cursed by being the proud/ frustrated owner of a Honda CR500R.

It is used as a recreational woods bike, ridden by a middle-aged swamp rat (me) in south Mississippi.

Its only engine modifications to date are that I installed two head gaskets in an attempt to make it start easier, and the stock carburetor needle has been dropped one notch. The bike is now only slightly cantankerous.

I want to take it to the Rocky Mountains the first part of August to do some trailriding.

Now for the questions:

What carburetor modifications do you recommend for the stock Keihin for operation at the 9000- to 12,000-foot elevations I'll be riding?

Does anyone market an add-on spark (continued on page 70)

Suddenly, every exercise bench you've ever seen just became obsolete.

Introducing the Pro MX[®].

With bench and military press workouts done in opposite directions. So that the weight bar is always properly positioned in front of you.

Not behind your neck. Or at your throat.

With a four-way adjustable support. For incline presses, decline presses and sit-ups.

With three width and two height settings for bar supports.

And the flexibility of wide or narrow grips.

With a two-position adjustable thigh support. Providing proper isolation of quadricep and hamstring muscles in leg flexion and extension

exercises. As well as straight-leg or bent-knee sit-ups.

With 2 x 4" and 2 x 2" rectangular heavy gauge welded steel tubing. And an optional padded curl support.

All at an affordable price.

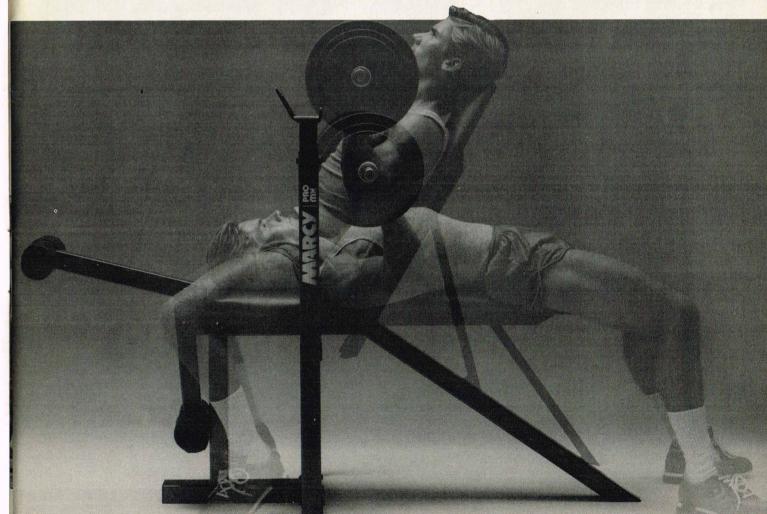
Look for the Pro MX® at better sporting goods stores everywhere. Or call **1-800-62-MARCY** ext. 33for information.

Institutional quality. From the people with

nearly 40 years experience in institutional fitness equipment.

WHEN YOU FINALLY GET SERIOUS.

WE KNOW EXERCISE BENCHES BACKWARDS AND FORWARDS.



Riders Write



VOICE OF EXPERIENCE

Dear Dirt Bike,

I really enjoyed your three-wheeler/ dirt bike shootout, but you left out a few things. I have owned both a threewheeler and a dirt bike and have compared them, and I think you underemphasized the dangerousness of threewheelers. Many times I have crashed my dirt bike, and usually I just got back on and rode as hard as before, but minor crashes on my three-wheeler have nearly put me in the hospital. Many of my friends have gotten hurt, too. When you crash one of those suckers, you can't get away from them, and they usually crunch you badly. Don't try to jump one without suspension, either—it'll kill you.

Before I got "killed," I got bored. If you can't jump or go fast on a rough track, they are no fun after one month. I sold mine. Advice to dirt bike riders thinking about getting a three-wheeler: Don't! They are boring and they will hurt you.

Douglas Post Lakeview, MI

A LESS-THAN-TOLERANT VIEW Dear DB.

We the dirt bikers can kiss off weekend bike rides through Los Padres (Southern California) National Forest because those three-wheel clowns are infesting every trail. Try putting along a three-foot-wide trail and meeting up with | couldn't bring myself to "give" my

a bunch of four-foot-wide ATVs coming the other way. It doesn't work. Looks like the only thing to do is join the Sierra Club, throw them all out, and then go back to putting around.

> Phil Marsik Van Nuvs, CA

ONE READER'S VIEW

Dear Dirt Bike.

I recently subscribed to your magazine for the first time, but have bought it randomly before. I am writing to ask if you are going to do an article on the Honda ATC200S. I recently bought a 200S and would very much like to read an article giving your opinion on my ATC. I read DB every chance I get. I especially like the tests done on different motorcycles and ATVs.

Mike Kolakowski Pembroke Pine, FL

We tested an ATC200X in the May '84 issue of DIRT BIKE, and presently have no plans to test the 200S. May we suggest a publication known as DIRT WHEELS? They do every one of them.

A DISSENTING VIEW Dear DB.

The mag title says "Dirt Bike." Bike means two wheels.

Phil Marsik Van Nuys, CA

This letter was accompanied by a drawing of a "No ATVs" ideogram. I think we can safely assume that Mr. Kolakowski and Mr. Marsik are fundamentally opposed on their views.

THE AGE-OLD QUESTION

Dear Dirt Bike,

I have a question about your June '84 "Crash & Burn" section where you claim Marvin waxed his visor and then rammed it into the ground. In the first photo it shows him touching his visor, and in the background number 11 is going off the jump. In the second photo he is indeed ramming his visor into the ground, but in the background number 11 is approaching the jump. I suspect that you have the photos switched around.

> Paul Evans Riverside, CA

Now that's foolish. You don't think Marvin would ram his head into the ground and THEN wax his visor, do you? Would you?

NOTE TO THE RELIC YARD

Dear Sirs.

Could you please advise me of where all the Hodaka parts are? Also Bultaco? I stopped riding a few years ago but

bikes away, so they've been collecting dust in the garage. Now I'd like to get them running again, but I can't find anything but Honda-Yamaha-Harley around here—and they just smirk when you ask for off-brand parts. Specifically, I've found beaucoup rust in the Bultaco tank. Should I have it sealed, or go to a plastic tank?

David Dickerson Austin, TX

For any readers who are looking for parts for old bikes, we slipped in a little column on sympathetic dealers on page 37 of the 1984 BUYER'S GUIDE. That issue is available for \$3.25 from our back issues department. There are numerous Bultaco dealers and one good Hodaka dealer. For tank rust, you could clean it out with a handful of steel shot and a little solvent (shake it up until your arms are sore and the rust is gone). then additionally seal it with a tank sealant if necessary. You could probably scrounge up a plastic tank that would fit, if you could talk a dealer into ordering it for you.

STREET LEGAL

Dear Editors.

As an unofficial seven-year Dirt Bike junkie, I am finally coming out of the (passive) closet. Each month I eagerly await my issue of Dirt Bike with bated breath and sticky hands, which inevitably keeps me very close to my mailbox. Now, after years of highly enjoyable, but alas passive, reading, I have a simple and ever modest question: How do you street-legalize an '83 XR500R?

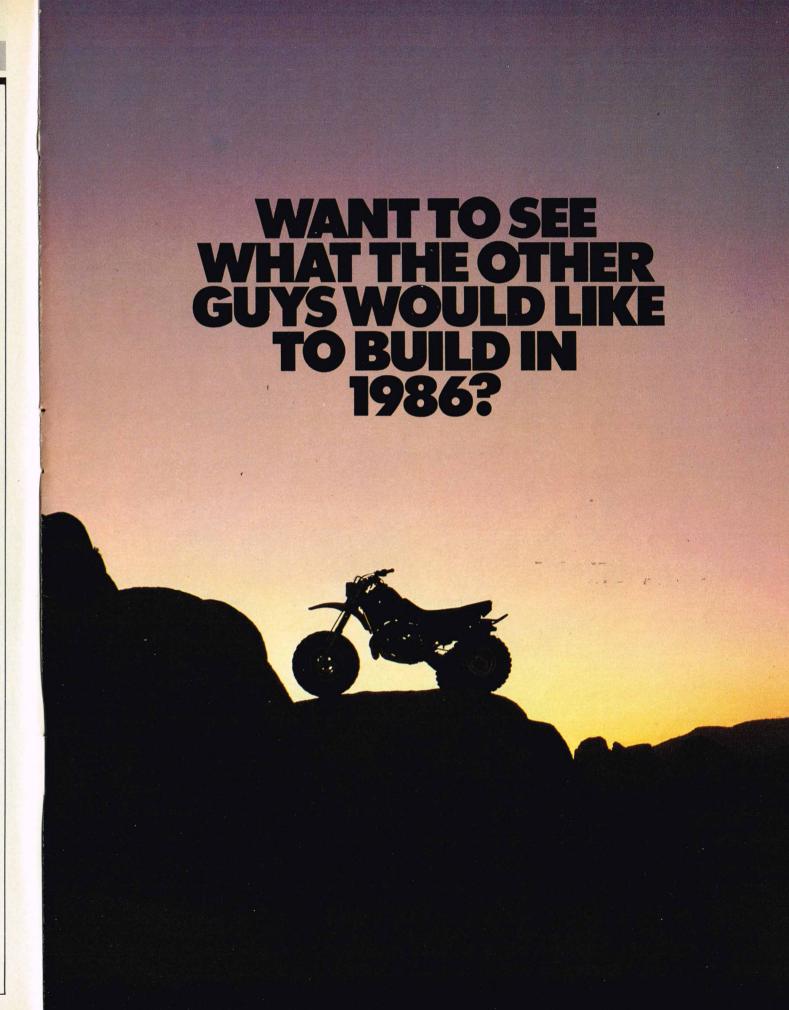
In your October '83 issue there was even a hint that it is possible, so how in the heck is it done? I ask this question in all honesty—rather than suffer a fate worse than death at the hands of the DMV.

Sieman, Clipper, Webb and all those who make each issue so outstanding, thank you. Without a doubt, your mag is the undisputed leader.

> Mike Mellow San Diego, CA

P.S. If ever in the neighborhood, you're always welcome at my house. However, Rondo should call early and make reservations since my dog only has one bowl.

Believe it or not, in some states the XR is nearly legal out of the box. In California, you will find it difficult, if not impossible. You could rig up a brake light switch and a battery to keep the lights on, and then take it down and try to get it passed, but you'll need lots of luck. For a good laugh, call up the Department of Motor Vehicles and ask them about it.





Once again, it's time for everyone else to play follow the leader.

Because Honda just introduced the radically new ATC*250R for 1985. Redesigned from the ground up with three-wheel technology so advanced, the other manufacturers have only dreamed about it.

OVER 40% MORE POWER. The all-new 246cc liquid-cooled powerplant pumps out an amazing 42% more horsepower than last year.

Our new 250 also delivers maximum torque over a wide powerband for instant response in any situation.

And keeps on delivering, thanks to a highly efficient cooling system featuring lightweight aluminum radiators.

A gear-driven counter-balancer helps the muscular two-stroke run smooth. And this year, the 250R has a six-speed close-ratio transmis-

sion to get all the power to the ground.

remote aluminum

reservoir has fully

MORE SUSPENSION. More power means you need more landing gear. So we really gave the other guys something to shoot for: 9.8 inches of travel front and rear.

Up front, massive 39mm air-adjustable forks are secured by forged-aluminum triple clamps.

In back, our Pro-Link™ suspension soaks up almost anything Mother Nature can dish out. Its gas-charged shock with

adjustable compression and rebound damping.

IMPROVED FRAME. The ATC250R's awesome engine is harnessed in a new lightweight, semi-double cradle frame.

The new frame is strong, rigid and extremely light. And it's been engineered to provide optimum steering geometry.

FASTER BODY. The new fuel tank has been designed to hold the fuel lower. The result: a lower center of gravity for even better handling.

The motocross-type seat is not only more comfortable, but adds to rider maneuverability.

HOT WHEELS. There's a new narrow-section, low-profile front tire for precise, responsive steering. In back, new low-profile tires are mounted on offset 9-inch rims. And the rear track width is adjustable to suit different racing conditions.

There's more stopping power, too. The largediameter front and rear disc brakes feature Honda's exclusive, twin-piston calipers.

Put it all together and you've got the hottest machine on three wheels. In fact, the 1985 ATC250R is so fast and reliable, it won the Baja in Barstow 500 before it was even officially introduced.

Of course, that's the kind of head start you'd expect from Honda. After all, we invented three-wheelers. And we've perfected them.

See the 1985 ATC 250R at your Honda dealer. It's got warp-speed technology the other guys would love to build.

If they weren't still trying to build our 1984 model.

For more information and the location of the Honda dealer nearest you, call 800-ATC-3WHL.



New Products



DOTS FOR TOTS

Brand new to Hi-Point's already generous lineup is the 4.10 x 14 mini Red Dot line of dirt tires. It features an all-new staggered centerknob pattern with a tight side pattern, which they say provides superb cornering stability. Then, to top it off, they use a special rubber compound so the tire can be used in a variety of terrain, ranging from soft sand to loose rocks. See it at your Hi-Point dealer or, if you don't have a Hi-Point dealer, contact Hi-Point Racing Products, (East) 3709 W. Erie Ave., Lorain, OH 44053; (West) 2650H Mercantile Dr., Rancho Cordova, CA 95670; (Canada) Box 849, RR 1, Wheatley, Ontario NOP 2P0.



NOT ANOTHER LITE...

No, not that. This is actually Dico's new Mini Lite trailer. It is sized with the motorcycle, ATV and Jet Ski people in mind. The trailer is five feet wide by nine feet long by five feet high. A lightweight design allows it to be towed by most any vehicle, including foo-foo compacts. The rear door serves double duty as a ramp, and the adjustable roof vent provides ventilation. For more trailer news get in touch with the Dico people at Dico Company, Inc., 323 E. Ball Rd., Anaheim, CA 92805; (714)956-2950. Toll-free outside California (800)854-7555. Toll-free inside California (800)824-9971.



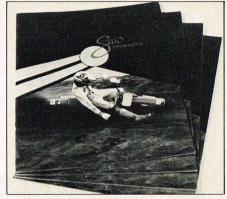
MALCOLM SMITH'S BIKE-SIZED MILK CRATE

Rather than get arrested for milk crate stealing, Malcolm Smith now has a long-travel crate that's MX legal. It's tall enough to handle longtravel scoots and is made of strong plastic so it will hold up to some serious abuse. You can also pack the crate full of lubes, tubes and garbage, and throw it in your van. Boy, what fun! The MS Milker sells for \$14.95 and is available from your Malcolm Smith dealer, or contact Malcolm Smith Motorcycles, 7563 Indiana Ave., Riverside, CA 92504; (714)687-1300.



O'NEAL SHOW STOPPERS

What a beauty, and a nice shirt, too. O'Neal's new T-shirts have bolder colors and, as they say, sporty new graphics. They're made of 100-percent cotton, and colors are yellow, blue, powder blue, red, black, and white. All manner of sizes can be had, and they sell for \$8.95 at your local O'Neal dealer. O'Neal USA, 9555 Owensmouth Ave., Chatsworth, CA 91311.



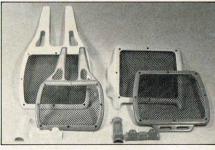
CHUCK SUN ENERGIZER THREADS

This is Chuck Sun's new catalog, which is chock full of the former MX star's latest apparel. New-wave graphics are combined with the latest trendy gear designed for the off-road rider. You can have a catalog for two bucks by sending the greenies to Chuck Sun Products, P.O. Box 287, Sherwood, OR 97140.



EXORCISING THAT PAINFUL, UGLY GLITCH

There are a few Honda CR500 owners who aren't real happy with the jetting and starting problems they have with their bikes. According to the Boyesen people, CR500R reeds tend to flutter at low throttle conditions, causing jetting hassles. This irritating flutter can result in premature reed fatigue. Boyesen says his reeds spread out the power better and hold up better to stress. They sell for \$29.95 and, like all other Boyesen products, are available from Boyesen Engineering, R.D. 1, Box 826, Lenhartsville, PA 19534; (800)441-1177. In Pennsylvania call (215) 756-6818.



MAIER EASY-BREATHING FLY SWATTERS

These are vented numberplates for ATVs, minis and motorcycles. Maier provides various mounting paraphernalia with every screened plate. They use standard, eight-inch bolt-on numbers, and all popular colors are available, with either a black or white screen. For more information contact Maier Mfg., 13393 Grass Valley Ave., Grass Valley, CA 95945; (916)272-



If you choose to race a 125, you'd better get used to the idea of riding like a lunatic, overrevving the motor and abusing the clutch. You don't nit-pick lines; instead, you dive into turns and slingshot the corners. desperately trying to keep the engine screaming its guts out at spooky revs. When you enter a bumpy straight, you catch the next gear and let the bike dance around like a nitro-powered basketball.

Therefore, it makes sense to value horsepower over almost anything else in the 125 class. With the need to keep the engine working at near peak revs most of the time. passing other 125s in the turns consists of little more than controlled ramming and outright intimidation.

With this in mind, here's the field we have for our comparison test, in alphabetical or-

CAGIVA—A new (for this country) Italian racer, the Cagiva has Marzocchi forks, an Ohlins rear shock and a very conventional engine with no exhaust valves. A tall bike, the Cagiva is blood red, handsome, and trying hard to make a dent on these shores. Carburetion is Dell'orto, ignition is ND, tires are Pirelli sand models, and a single radiator does the cooling.

HONDA—A heavily updated bike from 1983, the CR has an ATAC exhaust add-on, a disc brake up front, brilliant red plastic, and touches of blue here and there. Forks and shocks are by KYB, but built to Honda's specs. Dual radiators cool it down, and carburetion is by Keihin.

KAWASAKI-A single large radiator cools the green rocket. Braking is disc up front, conventional at the rear. Forks are KYB, as is the rear shock. A trick Mikuni carb is partly responsible for making it ultra-

KTM-Introduced late in 1983 in an exclusive DB test, the KTM was faster than any 1983 125 around. Double-leading-shoe brakes squeal the wheels at both ends. Zoke forks ride up front, and a White Power shock is Pro-Levered at the rear. The white charger comes stock with a Dell'orto carb and excellent Metzeler tires.

SUZUKI—After a lame year, the Floater is once again Full. This little revver has KYB forks up front and a fully adjustable KYB shock at the rear. A blue frame accentuates the yellow plastic. Dual-leading-shoe brakes can be found up front, with normal stoppers at the other end.

YAMAHA—Looking much like the 1983 effort, the YZ is, in fact, much changed. It too has an exhaust valve. Low saddle height is evident; KYB forks work up front and a single KYB monoshock setup handles the rear. Dual-leading-shoe brakes are on the front while regular brakes are at the rear. Carburetion is conventional Mikuni.

MISSING IN ACTION

Not here are the Can-Am 125 and the Husky 125. Husky bowed out of the shootout. Reason? Its offering is simply too slow

NO-HOLD 5-BARRED 125 MX SH OOTOUT!!

Winners, losers & near misses

home in the desert and at hare scrambles in any bike comparison. than on a MX track.

The Can-Am 125 remains a mystery, as

in pure horsepower and is much more at they are slow and heavy, which is not a plus

For pure outrageous horsepower in 1984, we know of no one in the universe who has we declare the Kawasaki the king. It would one, yet we are told they do indeed exist. pull every other bike in a basic drag race to If they are anything like past Can-Am 125s, the first turn and would simply not get passed on the straights. Oddly enough, it also has the most snap down low and at midrange. Truly an impressive engine!

the tail of the KX, usually about a half length behind in a normal trip through the gears. The KTM, though, did have a slightly higher top speed with stock gearing. Only a slightly soft response at lower revs kept the KTM from giving the Kawasaki a harder

A complete lack of low end and midrange power was characteristic of the Suzuki. Still, when the rider was able to keep the

sucker screaming, it hauled the mail. Gear selection was more critical because of the hyper nature of the RM engine, but at peak revs it could run with anything.

We rated the Honda and the Cagiva even on power. The Honda had more down low than the Italian bike, but when the Honda signed off, the Cagiva kept howling. It would invariably edge the Honda in a drag race, but would respond too sluggishly off the low end for maximum corner-to-corner effectiveness. Also, we must point out the fact that some of the Honda 125s were not so good, while others were decent. (See April '84 DB for details.)

The unfortunate YZ got last place. There's a little bit of a jolt at low revs, a nudge at mid-range, and then a giant black hole as the bike revs out. Most 80s will smoke it in a drag race.

TURNING

Give the Honda the nod for being the sharpest turning of the six bikes. It will snake inside anything else on the track, even with worn-out stock tires.

Second ranking goes to the Suzuki. With the forks raised a bit and the right preload on the rear, it turns well enough to get the job done. We rated the KTM third. While not a razor in the turns, it is very predictable, exhibits no headshake and will go where it's pointed.

The tallish Cagiva turns well and feels much like the KTM. No magic, but no bad habits. In fifth, the KX simply wallows and dives too much, and the softish forks give the KX a tendency to knife in and tuck the front end under. With the optional fork springs and a very high oil level, much of this trait diminishes.

Rate the YZ last. For some reason, in spite of its lowness the YZ steers fuzzy and lends no confidence. Hard-packed turns reveal that the front end has a mind of its

STRAIGHT-LINE STABILITY

This is how well a bike works at higher speeds over rough tracks. Here, none of the other bikes could track quite like the Cagiva. In fact, Cagivas have been doing extremely well in the desert races lately. No headshake, and bullet-true tracking make the bike a high-speed delight, especially in the whoops.

Give the KTM the number two slot here. It tracks much like the Cagiva and has no steering headshake when coming down from the top gears.

A bit busier than the two top-rated machines, the Suzuki nonetheless is comfortable at higher speeds and demonstrates only a slight wiggle when braking hard over bumps.

The Kawasaki worked fairly well here but only with the power on hard. Roll off the throttle, and the bike tends to dive and wander. In fifth, the YZ demonstrated some of the old "Yamahop," a side-to-side dislike for whoops.

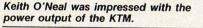
In dead last, the sharp-turning Honda

In most drag races the KTM was right on

20 DIRT BIKE / OCTOBER 1984

OCTOBER 1984 / DIRT BIKE 21





This year the Honda has KYB suspension all the way around. ►

pays the price for its great cornering abilities by being the headshakingest 125 around. Chop the throttle at the end of a bumpy topgear straight, and the bars will waggle like a car antenna with a dead cat tied to it. Even extending the forks doesn't help much.

OVERALL HANDLING

All things considered—turns, straights, sweepers, hairpins, what-have-you—we rate the Suzuki the best all-around handler. It doesn't shine in any one department, but it does nothing bad anywhere, either. Much of the credit must no doubt go to its superior suspension.

KTM gets credit for second in overall handling, with super-high-speed stability and no real vices. Third is the Honda, in spite of its looseness at higher speeds. On a typically tight MX track it's hard to beat its cornering excellence.

Fourth and fifth spots are held by the Kawasaki and Cagiva, respectively, and last is held by the YZ.

FORKS

Suzuki is far and away better in fork action than any other 125 around. Second is Honda, with a slightly harsh set of legs, and third rated is the mushy Kawasaki fork. Fourth is the lackluster YZ/KYB fork, and Cagiva and KTM share last with outdated Marzocchi units.

SHOCKS

Again, the Suzuki shines with its legendary Floater. Second slot is shared by KTM and Cagiva. Both have excellent units (White Power and Ohlins) that can be dialed in to near perfection by a savvy shop.

Next is the Kawasaki, which has a shock that is very good but not as long lasting as either the White Power or the Ohlins. Honda and Yamaha bring up the rear with very adjustable units that seem harsh no matter what the settings.



HITTING THE SCALES

Light is good in MX. Here's how they stack up on the deadly accurate and highly abused *DB* scales: All bikes were weighed with no gas in the tanks but with oil in forks and gearboxes, and with filled radiators. We took off the kickstands, too, as you should not race with a kickstand.

Th	ne lightest bike of the group is the KTM.
1.	KTM 193.75
2.	YZ195.0
3.	KX and CR (tie) 197.5
	RM 198.0
	Cagiva212.0
	OCE DELDG TEG TIGET

COST REARS ITS UGLY HEAD

The big price spread between the European bikes and the Big Four bikes has all but disappeared. Here are the suggested retail prices on the machines, bearing in mind that as the year grinds down, bargains can be had.

■ As long as the Cagiva was kept singing, it pulled well. Let it drop off the revs, and it was bog-o-matic time.







Randy Johnson rips the top off a berm on the KX125.

125 MX

2. RM 1859

3. CR 1898

4. YZ......1899

is the Suzuki, a very complete package. Sec-

ond rated is the Kawasaki with a marginal

clutch, some frame cracks reported, and

We called it a tie for third, with the Hon-

da, KTM and YZ about even. The ATAC on the Honda seems to do little more than

spotty detailing.

■ Lowest saddle height of all the 125s can be found on the Suzuki. Ricky Sieman plows the RM through a Dunes turn.



The snappy KX125 seemed least affected in the sandy turns, pulling almost as hard as a 250 at mid-revs.

◄ Hampered by below-average power, the YZ demanded extra concentration in soft-terrain turning.





125 MX

complicate a top-end job, and barrels and timing have been off on a percentage of the CRs sold. KTM comes with confused forks, a suspect head gasket, a fragile kickstarter and a rear brake arm that breaks when bugs land on it. The YZ seems to be a chronic spoke-breaker and wheel-bender, shifts poorly, and has the loudest exhaust this side

Last rated, the Cagiva suffers from a death-wish ignition, weak wheels, too much pork, and a rear brake that appears to have been designed by a poodle.

LAYOUT AND FEEL

A very personal thing, we still got very uniform feedback from the riders over the year. Most of them liked the way the Honda felt. It was slim and trim, and everything was where it should be. Good design overall.

Second rated was the Suzuki, a fairly low bike with everything nicely tucked in. Taller riders like the roomy KTM, which still comes with a hard saddle and a brake pedal that takes getting used to.

In fourth we have the Kawasaki with a good overall feel. Complaints were limited to a too-high-in-the-front saddle, a pipe that burned some legs, and the radiator shroud irritating long-legged riders.

Fifth rated, the Cagiva is simply too tall for the average 125 rider, and the saddle soon mushes out. Last place is held by the YZ, a low bike that sits funny, with the bars too high in relationship to the pegs and the saddle.

Very simply, the RM and the Cagiva are the best shifters of the group. Kawasaki gets the next spot, with the Honda a bit on the notchy side. The KTM is only awkward from first to second, with all the other gears working well. Last placed, the YZ gearbox will improve with time and oil changes but it is terribly notchy when compared with the others.

BRAKES

Honda, first. Kawasaki, second. Very close. The KTM and the YZ are tied; both have good stoppers. Next rated is the RM with an average front brake and a rear brake that wears faster than any other setup tested. Last rated, the Cagiva front brake is marginal when dry and hopeless when wet, and the rear brake pedal hits on the kickstarter halfway down, nullifying any chance at predictable stopping. Poor.

RELIABILITY

Other than wimpy wheels, the YZ seems very reliable. Of course, if it made the same power as the other bikes, it might be quite a bit more stressed.

We called the RM, KX and KTM about even, with the Honda next, and the Cagiva

RATING THE 125s— HOW THEY STACK UP

In first place we have the Kawasaki, earning its coveted slot mostly through sheer horsepower. While flawed in the forks,



The RM had the best "legs" of the group, with super forks up front and the legendary Floater at the rear.



Duane Summers, number one lightweight in the desert, was the pilot of our Cagiva.



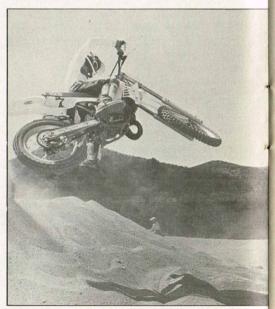
Tod Sciacqua does his best Ricky Johnson imitation on the Yamaha



Steve Schmitz flicked the Honda around like a toy. Overall, the CR has the most "Pro" layout and feel



Slightly confused forks and a killer motor mark the Kawasaki.



Lightest of all the 125s, the KTM still feels big when airborne.

other 125s will still have to get around the blazing-fast KX, which is not an easy task when you're dealing with less pure horse-

We rate the Suzuki second overall because of its brilliant suspension and in spite of an almost total lack of low end and mid-range power. If you can keep the RM buzzing and the track is rough, it's hard to beat. But it'll still have to get around the KXs.

Third spot is held by the KTM. It has a superb motor, odd forks and is the lightest bike of the group. Sharper turning and a more dialed-in suspension would have placed it at the very top. It's also the most versatile bike of the 125s and can be used in the It requires major work to get it to run with woods, desert and hare scrambles with the the average machines in the 125 class and

generous stock gas tank.

The Honda is rated fourth, in spite of being the best-turning bike of all. Serious steering headshake and spotty quality control on the barrels downgraded it. Even the "good" one could use more power at higher revs.

In fifth place we have the Cagiva. It's a great handler but is far too heavy, has fuzzyworking forks, and an ignition that will puke its spark at the first hint of moisture. For sheer acceleration the Cagiva is competitive with the top bike, but the response is sluggish at lower revs.

In last we see the Yamaha, hampered by the slowest motor ever to sport the YZ label.

does not distinguish itself with any fantastic handling or turning traits.

In order:

- 1. Kawasaki
- 2. Suzuki
- 3. KTM
- 4. Honda
- 5. Cagiva
- 6. Yamaha

As you can see from our report, none of the bikes are perfect, yet some of them are simply amazing in specific departments. The perfect 125? Well, how about a Kawasaki engine in a KTM chassis, Honda turning traits, with Suzuki suspension components? Top it off with Cagiva plastic and a Yamaha number one plate.



Cagiva WMX125





Honda CR125



Suzuki RM125



Kawasaki KX125



	CAGIVA WMX125	HONDA CR125R	KAWASAKI KX125C1	KTM 125MX	SUZUKI RM125E	YAMAHA YZ125
Engine type	Water-cooled, 2-stroke	. Water-cooled. 2-stroke	. Water-cooled, 2-stroke	. Water-cooled, 2-stroke	. Water-cooled, 2-stroke	
	single	single	single	single	single	sinc
Bore and stroke	56mm × 50.6mm		.56mm × 50.6mm		.54mm × 54mm	
Displacement					.123cc	
Carburetion	36mm Dell'orto	. 36/34 oval bore Keihin		.36mm Dell'orto		
Factory recommended jetting:						
Main jet	180	142	.280	.210	270	3
Needle jet						
Jet needle						
Pilot jet						
Slide number						
Fuel tank capacity	8.2 L (2.2 gals.)	.7.0 L (1.8 gals.)	8.0 L (2.1 gals.)	9.08 L (2.4 gals.)	.7 L (1.5 gals.)	7.5 L (1.98 gal
Lubrication	Pre-mix	Pre-mix	Pre-mix	Pre-mix	Pre-mix	Pre-m
Transmission					. 6-speed	
Gearbox ratios:						
1,	2.273:1	2.333:1	2.307:1	2.750:1	.2.066:1	2.462
2	1.786:1					
3						
4						
5						
6						
Gearing, front/rear						
Ignition					PEL	
Recommended spark plug					NGK B9EGV/ND W27ES-GU	
		Champion QN-84			Mart Bold Mile Marte Co.	Champion B9E
Sllencer/spark arrester	Silencer only, aluminum		Silencer only, aluminum	Silencer only aluminum	. Silencer only, aluminum	
Wheelbase					. 1475m (58.1 in.)	
Ground clearance					. 320mm (12.6 in.)	
Seat height			955mm (37.6 in.)	948mm (37.75 in.)	940mm (37.0 in.)	930mm (36.6 ii
Rake/trail						
Wet weight, no fuel						
Tire size and type:					100.0 100.	
Front	3.00 x 21 Pirelli	3.00 x 21 Bridgestone M37	. 3.00 x 21 Bridgestone 790 .	3 00 v 21 Metzeler 3F	.90/80×21 4PR	90/90 × 21 Bridgesto
		Total A E. Bridgestone Mer.	. O.OO ALT Bridgestorie 700 .	COUNTY MICEORICA	Bridgestone	M
Rear	4.25 x 18 Pirelli	120/90 Bridgestone M38	4.00 x 18 Bridgestone 790	4 60 x 18 Metzeler Perfect	. 120/80 x 18 4PR	
			The state of the s	Cross	Bridgestone	M:
Suspension type and travel:				0.000	Bridgostorio	
Front	40mm Marzocchi 300mm	. 43mm KYB, 290mm (11.4 .	. 43mm KYB, 300mm (11.8).	40mm Marzocchi 300mm	. 43mm KYB, adj. comp	43mm KYB, adj. com
	(11.8 in.)	in.), adj. comp. damping	in.), adj. comp. damping	(11.8 in.)	damping, 300mm (11.8 in.)	damping, 300mm (11.8 in
Rear		. Pro-Link, 310mm (12.2 in.)				Monocross, adj. com
	(12.8 in.), adj. rebound	adi. comp. and rebound	adj. comp. and rebound	rebound damping, 320mm	rebound damping, 320mm	and rebound dampin
	damping	asj. somp. and rebound	doj. comp. and rebound	(12.6 in.)	(12.6 in.)	310mm (12.2 ir
Intended use	Motocross	Motocrosss	Motocross	Motocross	Motocross	Motocro

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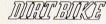
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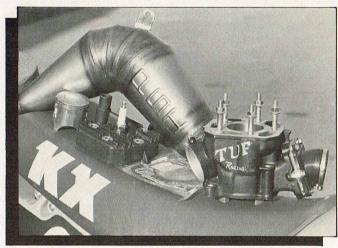
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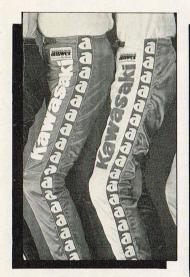


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Size S	Sm $\square M$	ed L	g □XL	,
TEAM F	MX GLOV	ES	. FREE	-
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Size S	Sm I	⊒Med	□Lg	1



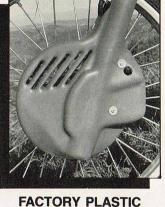
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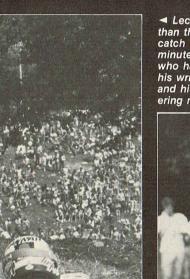
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LECHIEN LEADS A MERICAN SWEEP

Suzuki puts on the show but Honda takes the curtain



■ Lechien's second-moto start was less than thrilling, and he had to charge to catch the front-running Hannah. With ten minutes left he passed the Hurricane, who had nothing left to give. The cast on his wrist had come off two weeks earlier, and his arm had been reduced to a quivering mass of beef jerky.



Suzuki's Jem Whatley came to Unadilla in search of important GP points; he's with-in striking distance of Kinigadner. A mis-erable 17th overall did nothing for the Brit, who went home with dreams of hometown tracks and nightmares of American riders who willfully toy with the European stars.

■ Team Tamm's Alan King put in an impressive ride, finishing fourth overall. Considering he was on a production Honda, he was happy with his showing. He claimed that the difference between the works Hondas and his stocker model really showed on the tough Unadilla track. King said they're not even close.



one of the high points of his season so far. In timed practice sessions he tallied the fastest time. After a mid-pack start in moto one, he jammed through traffic in search of Hannah and Lechien. He even-tually caught both the Honda teamsters for the victory. The second moto looked like a runaway, but six laps into the race Mark lost his rear brakes. He ended up fifth in the second moto.



RESULTS: UNADILLA 250 GP I. Ron Lechien (Hon). 2. Bob Hannah (Hon) 3. Mark Barnett (Suz). 4. Alan King (Hon). 5. Keith Bowen (Yam). 6. JoJo Keller (Hon) . Marc Velkeneers (Gil). 8. Jacky Vimond (Yam).

► Heinz Kinigadner, the 250 World points leader, could only manage an 8-10 finish for ninth overall. Kinigadner was happy to get the race over with, as he had fallen and injured his leg. He said the tracks in Europe are easier and not as demanding. Yamaha rider Jacky Vimond ended up eighth overall, and is seen here throwing a little roost in the KTM rider's mug.



For two months, Hannah hasn't been able to train. Making a return at the tough, demanding Unadilla track showed that Bob still had the speed, but arm fade kept him from winning. Still, he rode an excellent race and ended up second overall for

► Honda's Ron Lechien took the overall win at Unadilla and in doing so, became the youngest rider ever to win a 250 GP. The 17-year-old rider capitalized on the misfortunes of Mark Barnett and the still-recovering Bob Hannah. Lechien tallied a 2-1 moto score for the day.







BOB "HURRICANE" HANNAH

Racing with pain, & no holds barred on Insport

□ DB: With your good finish at the 250 USGP, it seems like you're back from your arm injury.

Hannah: No way! I could barely hold on in that race. I don't know how I even rode. I had the cast removed from my arm only about ten days before the race and was only able to ride four times. I'm not even close to being back in shape.

DB: Well, you won your heat race at the Buffalo Supercross and placed in the top ten in the Main. That's not too bad.

Hannah: Hah! I could have ridden that stupid track with one hand. Conditioning had nothing to do with it; the only guys who like a track like that are guys who can't ride. When I saw how pathetic that track was, I almost walked off. If I could have gotten the top 15 guys together, if they had the guts, we could have straightened Insport out real

Mike DiStefano makes the worst tracks in the stadiums. First he and Mike Goodwin screwed up Pasadena (the Rose Bowl), then they wrecked Buffalo. It was a jerky track. The heats were all dust, then they watered it, and it was a mud bog. It was proba-



bly the worst stadium track I've ever seen. next time they junk out a track like that, I'm This DiStefano acts like he's a five-time World Champion, and in reality he couldn't



going to try to get the top rides to boycott the race. Maybe it'll take that to shape up build a driveway without screwing it up. The Goodwin and those Insport jerks.

PRO FILES

DANNY "MAGOO" CHANDLER

Overcoming injuries & back on the track again

DB: Danny, you've just had a string of terrible injuries. What's the status of your health now?

Magoo: Yeah, it was a serious string, too. First, I broke my jaw and smacked my head so hard I had a concussion and couldn't hear out of one ear. Then, when I was just starting to get over those injuries, I went out and broke my collarbone. I'm just now starting to get my act together.

DB: Are you ready to win again?

Magoo: Let's see...in my first real race back (Binghamton, New York), I was running a strong fourth in the first moto and trying to pass Bailey when I slid out. I got up way back in the pack and worked my way up to seventh. On the second moto I crashed on the start and had to work up from last and got an 11th. And physically, I was wasted. Right now I'm only about 70 percent of what I should be physically.

I have the speed when I concentrate hard, but my technique is off on certain things... things I used to take for granted. I know I can beat anybody out there; it's just a matter of getting back on my pace again.

DB: What are you doing for training now?



Magoo: I'm really working out hard now. At first, after the two injuries, I just sat around feeling weird and out of it, not even knowing if I ever wanted to race again. Now I'm hungry for it again and pushing myself. Every day, I ride a stationary bike for 45 minutes to an hour...and I ride it hard. Then I row on the rowing machine for 15 to 30 minutes, as hard as I can pull. When I was in shape, I used to be able to row super hard for 45 minutes. I do weights three ly. Watch!

days a week, mostly low reps with heavy weights. I also try to ride every day, usually twice a day for 30-minute motos. And now I make sure I do it with friends.

DB: Do you think you can win a 500 National this year?

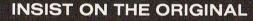
Magoo: Yes. I know I can beat Bailey. Right now he's sailing. He's confident, training hard and has great technique. But I watch him ride, and I see sections where he's cooling it that I can fly through...when I'm physically right. You watch, before the year is up. I'll win at least a moto or two!

DB: How do you feel when you see the Trophee and MX des Nations team selected and you're not on the list?

Magoo: Hey, I will be on that team again, at least once more. And I'll win big again. You can bank on that. Those are tremendous races, and I want to represent our country again. This year, injuries kept me off. If I'm injury-free, they'll have to take me. I'm ready to win again. Give me a few months to get my timing restored, and the old Magoo will be back. The injuries healed, but it's taken longer to get back mental-

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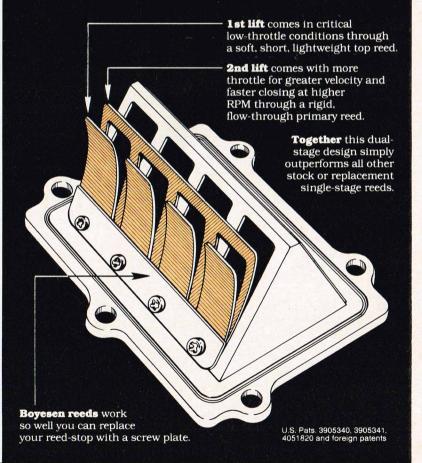
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HONDA XR500R By the Staff of DIRT BIKE It's big, it's plush, it's under fire

The Honda XR500 is in a rather odd position: Everybody is firing at it. The claims fly: "Our bike is faster than the XR." "Our bike is 25 pounds lighter than the Honda 500." "Our big four-stroke has a whole lot more low-end punch than the XR, and the suspension is better, too."

Why are all these people attacking the poor XR without the merest hint of mercy? It's because the XR500 is the standard of four-strokes. It's what the others are shooting at. Or for.

It's a target; a big, red, vulnerable target that everyone else wants to shoot holes in. And under the rules of competition in the marketplace (no rules whatever, to be exact), the XR500 is fair game. Let's take a look at what's causing all this furor.

HOLDING PATTERN

Honda went all out on part of the XR lineup for 1984. A completely revitalized 200 and an all-new 250 can certainly be considered highlights of their four-stroke parade. The XR500, on the other hand, received no new handouts, gimmicks or items. It had proved itself as a salable and easy-to-ride machine, and was just about right for the thumping enthusiast. Smart, ridable power, ballpark suspension, and middle-of-the-road habits made it a popular bike.

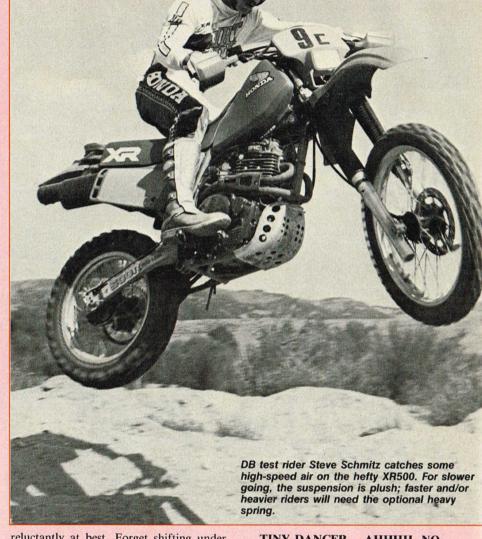
Big changes don't make a bike better. With that in mind, we coaxed a big XR out of Honda to evaluate, or re-evaluate, its merits. We already knew that it will not give Team Husky grief on the enduro circuit or smoke Ricky Johnson at a four-stroke National, but it will hold its own down in Baja or on those long trail rides, or when simply busting brush in the hills. This is the XR's niche.

WORKHORSE IN DISGUISE

You could say that the 500 motor is a real mule. It makes its power fairly early, carries into a decent mid-range, and then revs out in a broad and usable fashion. It's not a stump-puller like the TT600, but it has enough power to keep you going in the slowest and ugliest of terrain.

The entire performance of the 500 is broad in nature. You can short-shift, rev, plonk or lug the engine, all with reasonable results. Its strength is its adaptability to rider input. An expert can rev it to the moon; an enduro rider can lug and use the torque; and a novice can concentrate on maintaining forward momentum

On the less positive side is the transmission. Moving through the five speeds is done bles, then reacts.



reluctantly at best. Forget shifting under power; it refuses. We put some Kal-Gard Engine Gard in the oil, and after a couple hundred miles the trans loosened up-almost as good as a worn-out Yamaha.

Starting Big Red takes a particular routine. Turn on the choke, never touch the throttle, and kick. Get your hand near the throttle and it's doom. Once the engine is hot, this routine works about 50 percent of the time. The other 50 percent it lights off when it wants to.

Honda has dialed in the jetting almost to a T, but the 500 still suffers from that painful, nagging glitch right off the bottom. When the bike is being chugged at low rpm and the throttle is slammed open, it stum-

TINY DANCER...AHHHH, NO

At 275.5 pounds (measured on the protesting DB scales) the Honda can't be considered your basic fun-to-flick machine. Working tight woods or uphill switchbacks takes some serious muscle, and some riders have been known to shed six to eight pounds during a day's ride.

Compounding the mass of the machine is a nice-looking but ineffective saddle and tank arrangement. The wide tank is nestled to a huge tongue on the saddle that defies the human body. If you're tall and skinny it's no problem, but 90 percent of the people will have to deal with the obstruction. It pushes you back on the saddle, as opposed to the preferred up-on-the-tank style.

Working trails and fire roads won't tax



Once you get into testy terrain, a few nervous habits surface. Whoops and bumps cause an allergic reaction that borders on scary. The rear end will take the first few bumps just fine, then quite suddenly it lurches and moans, ending with a harsh bottoming that sends the tail section into another time zone altogether. Even continued doses of throttle won't straighten it out. Backing off is the only safe answer.

A super-short wheelbase (56.1 inches) is one of the reasons for the weirdness, as is the less-than-tolerant rear suspension. Installing a stiffer spring helps, but then it becomes harsh on the small bumps. The only reasonable alternative is a change in the shock and Pro-Link linkage system. Maybe

PARTS AND PARTICLES

Give an A-plus to the all-time killer excellento front brake. It's progressive, not too intense, waterproof, and plain boss. The rear unit, on the other hand, is semi-wimpy and loses its efficiency with prolonged water use. Consider it painfully average.

Although the throttle is a dual cable model, its action is moderately easy. So is the clutch action; it feels more like a 125 motocrosser than a big four-stroke. Those neat little brush guards on the front levers are deluxe but will break if you fall on them.

The 17-inch rear wheel seems to work okay, but it is tough to find good rubber for it. A slotted swingarm makes a nice, quick detachable rear wheel, and the snail cam adjusters make for quick chain adjustment. The chain itself is a strong O-ring model that's perfect for mud running.

Honda changed the material on the chain guide to make it more unbreakable than before. Also, they are using a denser material for the cushion under the tank so that it won't flatten.

That big tank holds a lot of gas, and you can go at least 70 miles when she's full. We actually got an 82-mile loop out of ours during testing

THE SHOOTING GALLERY

While the Honda may not be the most brilliant four-stroke, the fastest or the lightest, it's still the main target of the competition. The package is aimed at the masses, not the expert. It's a little heavy and the suspension is somewhat ordinary, but the bulk of the bike is right. Your average rider can hop aboard and have an entire weekend of riding fun. The competition keeps firing away at the XR, but they haven't shot it down yet. Hopefully, Honda will reload for '85 and return the fire.



Trailing the Honda shows off the versatile motor and the made-for-the-masses chassis. Shifting is too notchy for our likes, and a Weight Watchers' diet plan would help too!



HONDA	XR500R
Engine typeAir cooled, SOHC, 4-valve, 4-stroke	Recommended spark plugDPR8EA-9
Bore and stroke92mm×75mm	Silencer/spark arresterYes/yes
Displacement	Wheelbase
CarburetionDual 28mm	Ground clearance
actory jetting:	Seat height950mm (37.4 in.)
Main jet	Rake/trail25.5°/114mm (4.5 in.)
Needle jetN/A	Wet weight, no fuel
Jet needleN/A	Tire size and type:
Pilot jet	Front
Slide numberN/A	Rear
uel tank capacity12 L (3.2 gals.)	Suspension, travel:
ubrication	Front
Gearbox ratios:	Rear
1	Intended useEnduro, off-road
2	Country of originJapan
3	Retail price, approx\$2398
4	Distributor:
5	American Honda Motor Co.
Gearing, front/rear14/48	100 W. Alondra Blvd.
gnition	Gardena, CA 90247

PROFILES

4 4 3 4 4 = ?

Flying low with the Baja commander



Although Al is known for his Baja prowess, he does campaign as many National enduros as possible. Here he's seen at the Quicksilver run in Northern California.

Al Baker now works for Honda of Japan in the development of its XR lineup. This photo is a few years old, but Al still has the smile, add a few wrinkles

1 Baker has been on top of the off-road A world for many years. Starting in the late '60s, in ISDE competition, motocross and desert racing he has, as they say, done it all. He works with Honda of Japan on the development of its XR lineup and has been campaigning an XR500 in the Baja events. We found Al at his ranch in Hesperia, California, taking a break from testing.

DB: How much mental preparation goes into racing the high-speed Baja races?

Baker: It's all mental preparation. You don't just get on a bike and hang it wide open. You're going to lose it, or the bike is. A lot of it has to do with knowing your motorcycle and listening to the motor. You have to know when it's going to come apart. You know that when it starts slowing down, there's extra friction going on inside. Or if it starts overrevving on you, it's getting lean. So it's really important to listen to the motor to keep it happy for long, high-speed sections. Just like roadracers, it's all mental, keeping the concentration necessary to deal with what your motor is telling you. It's not all wide open and hang it out.

I like to learn the Baja course. The night before the race I sleep on it and transmit the entire course through my head to know how I want to run the race, what's going to happen and how I'll deal with it. So, when I'm going fast, I'm sort of mentally prepared. I already know what's going to happen. It's automatic.

DB: How important is pre-running the Baja courses?

Baker: A lot of guys pre-run to find shortcuts. I do it to find out how fast my bike is, how to set up the suspension so it has enough travel so the ride is plush in the rough areas but firm enough for the high speeds. Gas mileage is also critical. You don't want to run with a full tank all the time. We try to estimate how far our bike can go in each section on a certain amount of gas. Gas mileage is that important.

DB: Are the Hondas you run super-tricked-out machines?

Baker: The last couple of years, our bikes (Honda XR500s) have been nearly stock. It's almost better to run stock. Once you start running different pistons and cams and stuff, your bike may be faster, but the items haven't been durability tested. I'll always sacrifice some power for a bike that won't

In the last Baja 1000, our bike was pulling an actual 105 mph. The year before, I think we got an honest 95 mph, no more. Our bike is identical to the 500 Husky on the top end. We always thought the fourstrokes were an advantage down there for holding high speeds for a longer time. But in the last one, Dan Smith was about 200 yards behind me as we entered a 14-mile dry lake. At the end of the dry lake, I turned back and looked, and I hadn't pulled him an inch!

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PRODUCT EVALUATION



O'NEAL ULTRA-LITE BODY **PROTECTOR**

Low-bucks, wrap-around protection

By the Staff of DIRT BIKE

n a sea of Darth Vader shoulder pad/ Let chest protectors, there's room for a simple, lightweight, low-cost unit. Such an item is the new vented O'Neal Ultra-Lite by Yoko of Finland. Unlike the elaborate (and effective) JTs, Flak Jaks and Hallmans, the Yoko can be used *under* a riding jersey or enduro jacket if the rider desires.

Yoko does not claim to offer the wraparound armor of the new high-tech protectors. Instead, it's designed for hot weather. woods riding or as decent protection under a jacket in cold weather.

The ultra light weight and the simple design let the rider forget that he's wearing the Ultra-Lite protector, yet it does offer good protection. We wore the Yoko for a number of trailriding and practice sessions and were impressed by the comfort.

The Yoko weighs only 1.8 pounds, compared with the JT at 3.0 pounds, the Flak Jak at 2.5 pounds, and the Hallman at 3.5 pounds. Protection includes a vented chest plate, cupped and cushioned shoulder pads, cushioned plastic upper and lower back plates, and even a small stomach pad below the chest plate. While not in the full-armor league, the Yoko gives solid protection at a light weight, and for the low-bucks price of \$49.95. Available in the usual team color combos from O'Neal Distributing USA, 9555 Owensmouth Ave., Chatsworth CA 91311.



BEL-RAY 6 IN 1

We use it to keep our test bikes alive

By the Staff of DIRT BIKE, who run through

This is certainly the most overdue prod-L uct evaluation in the pages of Dirt Bike. We've been using Bel-Ray 6 in 1 for years to keep bikes alive, to shape them up for photos, and to keep just about everything outside of the engine from rusting.

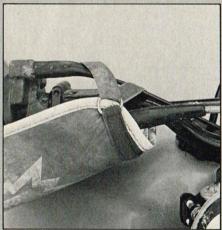
We use the stuff on footpeg pivots, brake and shift lever tips, axle nuts, threaded brake rods and cables, for lubing control cables and for getting water out of the chain of a bike we've just washed for the twenti-

We also use it to loosen rusty old nuts and bolts that should have been spritzed with 6 in 1 a long time ago. If we're going to be in a real mud race, we spray a fine mist of 6 in 1 under the fenders and on the bottom of the engine and frame rails. It makes cleaning up afterwards noticeably easier.

One other good use: If your bike is going to be sitting for any length of time, say a month or more, take out your spark plug and spray some 6 in 1 inside the barrel, stroke it through a few cycles, spray in some more, and put the plug back in. It'll prevent rust from forming on the liner, which can happen with some synthetic oils and most any four-stroke.

Good stuff, this 6 in 1. You ought to keep a can around like we do. Available from just about any shop that carries the Bel-Ray line of products. The small seven-ounce can sells for \$2.95 and the large 16-ounce can goes for \$4.25.





SON OF THE **MUDMUCKER**

Improving the basic hand protection

By the DIRT BIKE Staff

udmuckers are very popular in the East for enduros and hare scrambles, and they are used heavily in the West by desert and cross-country racers. The original Mudmucker was designed by Ed Leasure of TNT and was basically a stiff section of foam with clips on it to allow attaching around most bars.

The key word here is "most." On some bikes the original Mudmuckers fit just fine. On others they were too loose, and with some of the disc-braked machines, the lever protectors would either fit too tightly or not

Enter the new generation Mudmucker II. with a Velcro strap and an O-ring as the base for attaching. This lets the rider strap the MMs around just about anything and then tighten them down just right. The new MMs are also stiffer and will hold their curved shape better than the old ones.

Several of the DB staffers carry Mudmuckers with them in the bottom of their gear bags, even for plain old MX, just in case it rains. Also, for cold weather riding, these things are great. At a price of \$17.95 for a pair, they're a must for your gear bag.

Available from TNT, R.D. 3, Box 480, Canonsburg, PA 15317; (412)745-6242.



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TIGHT WOODS SECRETS OF THE PROS

The nation's top tree-splitters tell you how to beat them at their own game



You may find it hard to believe, but most of the National riders enjoy this kind of riding.



tting through tight woods is a problem Tevery Eastern enduro rider suffers from in nearly every enduro that comes along. When you're flailing through handlebarwide trees, smashing knuckles, shoulders, elbows, and occasionally knees, and all the while trying to go fast, it is more than a little demoralizing to have an AA enduro rider pass you as though the trees didn't even

What are the Pros' secrets to high-speed woods work? Being true knuckle-busters from the word go, we didn't know, so we enlisted the aid of some of the top enduro riders in the country to tell us, and you, just what they do to slice through those saplings like gazelles. Each one of them agrees that practice is the main thing, but they all have little secrets that may make it much easier the next time you're confronted with large, unyielding pieces of woods. Read and enjoy, and then go out and attack a forest.

JACK PENTON

Eleven-time ISDE rider; six gold medals, three silvers and two bronze; 48 gold medals in ISDE Qualifier competition since 1971; 13 overall victories in National enduro competition since 1973, finishing second overall nine times; currently taking it easy and occasionally racing a 125 for KTM America.



Jack Penton-"You have to ride aggressively mentally, and do it all day long."

"More than anything else, aside from riding technique and all that garbage, the secret to getting through trees fast is concentration. You have to pay attention to exactly what the heck you're doing all of the time. You see so many guys do well in the beginning of an enduro, and then as the day wears on, get sloppy and make stupid mistakes. I can't believe it's physical conditioning, because we're talking about enduros here, not hare scrambles or motocross, where you don't have a chance to rest.

"You have to ride aggressively mentally, and do it all day long. Concentrate on the

Jeff Fredette-"Before we had brush guards, we used more finesse.

By Paul Clipper, with considerable help from those who know

trail, on the branches in the way, the logs across your path. Stay alert! Don't duck your head and close your eyes when you pass under a low branch; crouch down and keep your head up and your eyes on the trail. Don't slow down at logs and figure, Oh, I'll just go around this one. Don't take the easy way out. Look at them, know what you have to do to get over them, and charge through them fully aware of what needs to be done. And do it all day long, not just in the morning.

"I used to ride without brush guards on my handlebars, figuring that hitting a couple of trees would just make me mad and go faster. But I really wrecked my fingers in Michigan this year, and after that, I started using them. Now I'm a believer. Using brush guards—and not breaking fingers is the way to go."

MIKE MELTON

Six-time ISDE rider, three gold medals, one silver, and two bronze; National enduro champion in 1983; SETRA champion in 1978; winner of 14 National enduros overall; currently leading the 1984 National Enduro series, riding a 400WR for Husavarna.



Mike Melton-"Lean over in tight trees and you'll get cleaned right off the bike!'

"I don't know if there are any secrets to this; you just miss the trees as much as you can. You have to be able to judge distances well, like being able to look at the gap between two trees and then center it with your bars without hardly thinking about it. The only way you can learn that is to practice in the tight stuff. You're going to hit a few trees at first, but you soon learn what you can get away with.

"Real tight, handlebar-wide woods mean you have to get way forward on the bike and really work the bars to make those quick turns between the trees. You can't pay a whole lot of attention to the rear wheel when you're doing this—for a real tight turn I just lock up the back wheel and slide into the so, if you hit a tree with the flat part of a



Drew Smith—"The most obvious mistake everybody makes is not concentrating on

trees and then nail it from corner to corner. This way I can keep the bike upright and still make the turns. It's nothing like a motocross track, where you can lean over in the turns. Do that in tight trees, and you're going to get cleaned right off the bike."

JEFF FREDETTE

Five-time ISDE rider; four gold medals and one silver; overall winner of South Penn Enduro Riders National in 1977; overall winner of Blackwater 100 hare scrambles in 1981; overall winner of Burr Oak National Enduro in 1982; finished tenth nationally in 1982, ninth in 1983; finished fifth in ISDE Qualifier series in 1984; currently sixth in Nationals, riding a Kawasaki KDX200.

"The main thing is to just keep telling yourself to keep going. You can feel like you're going fast through the woods, but you have to keep telling yourself, Push! push! Before we had brush guards, we used more finesse. To get a bike through trees closer together than the width of our handlebars, we would jerk the bars to one side and back again really fast, so the front wheel would scrub, but didn't have enough time to turn. This way, we could scrub, but didn't have enough time to turn. This way, we could wedge the bars through sideways, and then have it straightened out on the other side of the trees.

"You don't want to load the front endthat would cause the front wheel to turn—so you give it some throttle to keep the front end light. If you're going real fast, it works better. You just flick the bars to one side and hope nothing happens.

"With brush guards you can play the game a little sloppier. I use brush guards-I also manufacture and sell them-and I find that they make it possible to just bulldog through a lot of sections. You have to be careful about what size of tree you can hit without getting stopped; you have to know the trees. Little saplings in Oklahoma are a lot tougher than saplings in Michigan. Albrush guard, it's liable to suck you into it and stop you solid. Make sure you glance off with the curved part of the bar, just at the last half of the grip, and you can squeak through cleanly. You can plow through the little trees with brush guards, and you can bounce off the bigger ones, but take the time to figure out your limits."

DREW SMITH

Eight-time ISDE rider; four gold medals, one silver and one bronze; 175cc ISDE Qualifier Champion 1977, 1978, 250cc Champion 1979, 500cc Four-Stroke Champion 1983; won first National Enduro overall at Burr Oak in 1978, has won "six or seven" Nationals overall; highest finish second overall in 1979 National series. Currently riding an XR500 for Honda Motor Company.

"The most obvious mistake everybody makes is not concentrating on the trail. You should never look at a place you don't want to go. That's called target fixation—you look at the tree, and you think, Oh no, I'm gonna hit that tree! and you hit the tree. You have to keep your eyes on exactly where you want to go, and constantly evaluate the situation: How wide is the gap? Do I have to twitch the bars? Can I get up another gear in this section? Many, many times I've ridden in races where I smack the end of my bars on trees all day long, but I don't let it bother me. A miss is as good as a mile, and if the tree doesn't knock you over, keep

"A lot of guys today are using bash bars on their handlebars, but to me that's like expecting to hit your hands. I've done pretty well up to this point, and I've never broken a knuckle or anything. I don't want to belittle the value of those bash bars or anything, but I think it's more important to concentrate on the trail, evaluate the situation, and trust your judgment."

John Martin-"You're not going to be able to read the terrain perfectly all the time.



OCTOBER 1984 / DIRT BIKE 39

TIGHT WOODS SECRETS OF THE PROS

JOHN MARTIN

Two-time ISDE rider; one gold medal and one silver; second overall in 1983 National Enduro series, fifth in '82, tenth in '81, third in '80 and sixth in '79, all riding a Can-Am for Bombardier.

"You have to be able to read the terrain when you're riding in trees, but you have to keep in the back of your mind the fact that you're not going to be able to read it perfectly all the time. There's always going to be that one tree that jumps out at you. You have to read every foot of the trail, especially if there are rocks or roots on it. Really, most of the fast guys don't just hit trees for no reason; usually it's a root or something in the trail that kicks the bike over into the tree. It's that one foot of the trail that you don't read right that'll put you into a big hunk wood.

"As far as threading through handlebarwide trees goes, the most important thing is where you place the front wheel. You have to aim the front wheel at the base of either the left- or right-hand tree-whichever is better for the next turn—and then put the handlebars through as you turn into it. When you ride up to the base of a tree like that, there's room for the handlebars—one side at a time. Don't just go ramming up to a pair of trees with your wheel aimed smack in the center, because if the trees aren't wide enough, you're going to hit one



or both of them. Aim at the base of one, and then make a circle through them, rather than a straight line. Once you get the front end through, don't worry about the rear end; it'll do what it wants, but you're already past the problem. It takes practice, but it works for me."

TERRY CUNNINGHAM

Five-time ISDE rider; three gold medals, one silver, and one broken leg; National Enduro Champion 1982; 17 overall National wins since 1980, six overall wins in ISDE

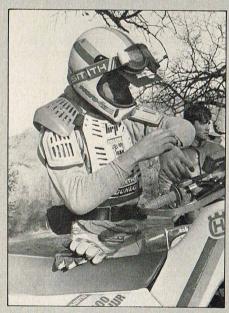
Terry Cunningham—"You have to be able to see the trees and figure out what needs to be done when you're in third gear and trying to go faster.'

Qualifiers; currently second place in National Enduro series, riding a Husky Automatic for Husqvarna.

"The secret to getting through tight trees is coordination together with timing. Coordination comes into play when you have put your bike through the trees before your body and you have to be able to move around in one direction while you're moving the bike in another direction. You can't ride like you're rooted to the bike, and that's why every now and then I'll smack a tree with my shoulder and get cleaned right off the seat.

"Timing is real important. You have to be able to see the trees and figure out what needs to be done while you're in third gear and trying to go faster. You see a pair of trees coming up and you have to make split decisions: Will my bars fit? Do I turn left and put the right side of the bars through? Or turn right and put the left side through? If you're not good at judging distances, moving around, and making decisions, and you don't use Bark Busters, you're going to have a lot of sore knuckles. And if you don't have a finger that's throbbing like a toothache, you'll have a lot easier time concentrating on what's going on."

TREE-MOWING GEAR

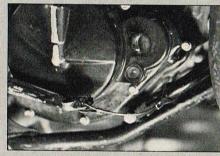


Kevin Hines at the first National of '84. To ride fast, you have to insulate yourself from injury as much as possible.

• When talk of tight woods comes up, you hear many of the Pro riders talking about "bash bars," a neat little piece of equipment that functions just as the name implies. They install on the handlebars of your bike and allow you to practically mow down the trees like a bulldozer, just as long as the trees are



Bash bars are available from a few manufacturers, and they all perform the same function-keeping bones unbroken



A short piece of old motorcycle cable and a small piece of 1/4-inch copper tubing will keep the brush from wedging your

small enough to bend out of the way to begin with. Even in bigger trees they are strong enough to keep your fingers unbroken, and are the hot ticket for keeping levers unbent and throttle housings unbroken. More than worth the money.

Folding foot pedals do a good job of

warding off lever bends, but they won't help you in tight, deep brush riding. Weeds and bushes can get wedged between the frame and lever, and knock you out of gear or even stop you solid occasionally. Run a length of old control cable between the lever end and the frame, crimp the loops together with a short piece of copper tubing, and you'll have no more problems.

BASH BAR MANUFACTURERS

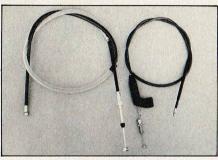
Performance Products Bark Busters, P.O. Box 1294N, Lacombe, LA 70445. Enduro Engineering Brush-Gards, 3175 Stoneschool Rd., Ann Arbor, MI 48104. Jeff Fredette's Hand Savers, 17841 67th Ave., Tinley Park, IL 60477.

BODY PROTECTION

It is amazing how many people go to the trouble of using bash bars and then hop on a bike without shoulder pads. If you protect your hands with aluminum bars, don't expect everything else on your body to be able to tuck in behind them. There will come a time when you slide between a couple of trees like a turbo-charged serpent, only to wail into it with your shoulder—just like checking a hockey player into the boards. We suggest the use of shoulder pads, knee cups, a good full-coverage helmet, and good, padded gloves. Trees are not soft and cuddly objects; you'll ride faster and with more confidence if you know you can hit them without breaking something. •

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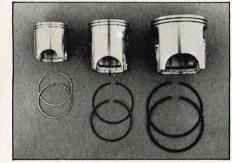
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CR125R11.37—12.36
CR250R12.08—15.12
CR450/480/500R 13.60—18.13
Specify year and model, plus bore size:
Std-1st-2nd.

NUMBERPLATE PANELS

CR60/80R (Each) \$26.03—\$28.89 CR125R (Each) 25.99—35.70 CR250/450/480/500R . . (Each) 27.81-30.87 Please indicate year and model, right or left panel.

RADIATOR COVERS

CR80R
CR80R

FENDERS, FRONT

CR60/80R	\$23.41—\$32.51						
CR125R							
CR250/450/480/500R	19.33-36.29						
0:							

FENDERS, REAR

CR60/80R \$11.88—\$32.51	ı
CR125R17.16—32.51	
CR250/450/480/500R 17.16—32.69	
Specify year and model	ı



All CRs, right or left (Each) \$3.06

LEVERS							
R brake levers \$5.25—\$11.00 R clutch levers	١						
R clutch levers 5.25—11.00	1						

Throttle pines

PERCHES

CR	clutch	١.														\$	8	3.	28	3-	_	\$	12	2.8	5	
CR	brake																	8	3.2	28	_	_	12	8.2	5	č
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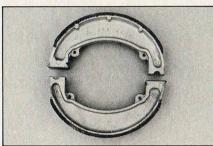
CR125R 19.51—21.73

Specify year and model.

FORK SEAL KITS

CR60/80R	\$8.50—\$9.90
(Each seal & wiper)	
CR125	8.50—10.70
(Each seal & wiper)	
CR250/450/480/500R	8.00—10.00
(Each seal & wiper)	

CLUTCH PLATES							
CR50/80R (Each) \$4.	15						
CR125R (Each) 4.41—4.	95						
CR250/450/480/500R (Each) 3.35-4.	96						



BRAKE SHOES

CR60/80R	. (Each) \$3.47-\$4.95
(Specify F or R)	
CR125/250/450/480	(Each) 5.30-7.95
(Specify F or R)	
CR125/250/500 pads,	front (Each) 14.39

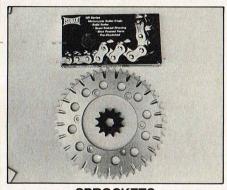
GENUINE HONDA SHOP MANUAL

ANSWER BARS

Carbon	5
Chromoly	5
Hannah Ltd, white with XBar Pad 29.9	5
GAFRNE BOOTS	

Red, blue, white, black \$149.95

HONDALINE MOTO VENT Size: Sm-Med-Lg-Xlg \$169.95



SPROCKETS

Front sprocket, Sidewinder	\$19.95
Rear sprocket, Sidewinder,	
125-Open	. \$39.95-\$54.95
Rear circle, 125-Open	
Front circle	\$6.95-\$9.95
Tsubaki chain, CR60-80	\$12.00-\$25.00
CR125-250-Open	\$16.95-\$42.95
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40 DIRT BIKE / OCTOBER 1984

BUCKEYE 100 NATIONAL ENDURO

T.C. IS OFF THE INJURED LIST

Closest points battle yet

Photos by Raymond McCoy

The Buckeye 100 was round seven of the still has a plate in his leg holding his thigh National Enduro series, the midpoint of a very close season. The Buckeye turned out to be Terry Cunningham's version of what an enduro should be, and he rode a nearly flawless race to beat Mike Melton by ten points.

This win put Cunningham one point out of first place nationally—Mike has 153 to winning his second title is a unique situait easy and letting his broken leg heal (he

together), but the more he rode, the better the points started looking.

"Midway through the season I decided that I would have to ride an Automatic if I wanted to win, and it was right before that that I decided I did want to win the championship again—I didn't want any part of finishing in the top five, like I planned to points to Terry's 152—and being that close do in the beginning of the year," said Cunningham. "Why the Auto? Because the Aution for Terry. He had planned on taking tomatic is the ultimate racing machine for enduros. That's all there is to it. All you



Terry Cunningham is now riding an Automatic to make up for his cautious riding style. He has decided to postpone his leg operation and win the National Championship in-



Although he lost the Buckeye by ten points, Mike Melton managed to slip into the series points lead. He has 152 points to T.C.'s 151; Hines has 150.



Kevin Hines had an off day, finishing fifth overall after burning two checks. He assures us he still plans to win the series.

have to do is twist the throttle; you don't have to think of anything else.

"I felt really good in the woods, and in one section I caught up to just about everybody. Kevin was riding five minutes in front of me, and I almost caught up to him. When a club lays out a run like that, where they don't give you any time to rest, they're laying out my kind of run. Put me in the woods and make the section as long as you want— 20 miles, 30 miles—that's the way I like to ride."

So, it looks like Cunningham is off the injured list and out for blood again. The anniversary of his broken leg is in October, and we asked him what his plans were until then.

"The plate is supposed to come out in October, but when I have it done all depends on whether or not I need the last National to win the series. If I need the points from the last run in Delaware, I won't have the operation until after the race. I didn't think I'd even be able to ride after breaking it last year, but if I don't win the championship, I'm going to be very discouraged. How's that for an attitude?"

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KEVIN HINES

The Cape Cod Yankee in King Richard's court



Nineteen eighty-three was the second year Kevin successfully qualified for the ISDE Vase team. Six flat tires on the opening day of the event kept him on bronze all week and prompted him to wish it were a 12-day enduro instead of six.





Because his racing was supported by his well-to-do parents. Kevin earned a guestionable nickname during the '83 season. He decided to play it to the hilt in '84.

A Kevin Hines was an unknown quantity, even though he'd been racing New England events since the tender age of 12 years whatever he gets based on his performance, old. It was just a short two years ago when rather than who he is and how much money he started seriously racing National enduros, he has, which is the way they were treating and all things considered, he did quite well, finishing 13th nationally and doing well enough in the Qualifier series to earn a trip to the Czechoslovakian Six Days, where he ting real fair with me, and Dick Burleson rode on the Vase team and finished with a and I have a good relationship going." bronze medal.

In 1983 he attacked the National Enduro and the ISDE Qualifier series. He finished fourth overall in the enduros, third overall in hare scrambles, qualified for the Vase team at the Wales Six Days, and finished think it comes down to the rider, basically. by two points.

last two years trying to make it on his own. In 1982 and '83 he was largely supported by his parents, although in '84 the struggle is a little better.

"I'm not on a full-factory ride like Cunningham and Melton. I guess you could call it a support ride—they give me a reduced It was a low-budget effort until this year. down to it, I don't think I would."

t the start of the 1982 racing season, As I've been doing better, they've been rewarding me with more and more, which I me at first. That's how I got the "Richie Rich" nickname, because my racing was being supported by my parents. They're get-

But if money was no problem in the beginning, why did he choose to ride a Husqseries, the National Hare Scrambles series, varna—is Husky the *only* bike for enduro competition, or could he have amassed this record on another machine?

"I think I could win on another bike. I with another bronze. So far this year, he's If I could keep another motorcycle together won three National enduros, the Oregon like a Husky, I'd consider riding one just ISDE Qualifier, and as of this writing, was to get another motorcycle in the field. Right in third place in the National Enduro series now, it's Husky racing against Husky, and that's fun and all, but not as much fun as Not too shabby for a rider who spent the brand competition. Husky has good bikes, but they have excellent riders. If Can-Am or KTM pumped enough money into an effort and gave the riders what they needed, most of these guys could win on anything.

"I really like Husky as a motorcycle. I'd like to see the weight reduced somewhat, but there's really no substitute for reliability. I price on motorcycles and a parts allowance. can say I'd switch, but when it came right

Last year Kevin pledged to win both the National Hare Scrambles series and the National Enduro series in '84: a threat that was not taken lightly by the competition. He started out this year in full stride, but his racing suffered a major setback in June.

"I was ready to win both of the National series this year, and then my father passed away, which detuned me more than a little bit. He was the major reason I was racing. A lot of people say you have to race for yourself, but that wasn't the case for me. I was racing to please my father. He was my coach. I tried to ride at the Pennsylvania hare scrambles a few days after his death, and it didn't feel the same at all. I felt like I could guit real easily and nobody would say anything to me. People say time will heal

...I'm going to give it a chance. Everybody else wants me to continue to ride, and I certainly would like to win it for my father.

"If I put things together and get my head on straight I can still win the enduro series, seeing I have good enough scores behind me for the throwaways. Mike Melton is in a bad position in that respect, since he has one DNF behind him so far. Terry Cunningham is going to be a real threat. He's real hungry for it; he has a killer instinct that's almost frightening. It's not going to be easy, and there'll be times where I won't want to ride, but I'm going to be out there causing trouble. Don't cross me off the list yet."

Yamaha vs. Honda vs. Suzuki vs. Husqvarna vs. M-Star vs. KTM



little nervous on a motocross track.



All three of the European big bikes need to go on a diet. Overall, the best handling is the M-Star. Both the Husky and KTM are a and are more at home on a motocross track. Of the three, the YZ and are more at home on a motocross track. Of the three, the YZ has the best overall manners.

By the Staff of DB

R acing an Open class bike on the average motocross track is an exercise in futility. A pack of 250s will snap at your heels and slip under you in the tight sections. Even 125s will irritate you in practice and drive you whacko if you have to race with them. At the end of the moto, your arms will be aching, your hands numb from the vibration, and your spirit bent, if not broken.

Why, then, oh why do people ever bother racing one of these unforgiving monsters? Is it for the boost to the ego: "Yeah, I ride a big bike, buddy. None of those popcorn machines for me!'

Well, to genuinely understand a big bike, you have to race it in its element...where it's happy. Where the arm-wrenching power will be an advantage. Where you have room to let that sucker breathe in the top gears. Where the tears will be pulled out of the corners of your eyes in spite of good goggles.

Take that same 500cc bike that reduced you to dog vomit on the tight track, and get thee unto a Grand Prix. Something with a few long straights. None of this tight, pansy foo-foo bike track stuff. Nope. We want a track that has you in top gear and wishing you'd put one more tooth on the countershaft sprocket.

This is where the joy is...letting the en-

upper limits of never-never land. Experiencing the thrill of a power wheelie...in top gear. Now that's what Open bikes are made

THE FIRING LINE

Nineteen eighty-four hasn't been kind to the powerhouses of the motocross world. For some reason, their advancement is lagging behind the 250s and 125s. This year's crop of machines has seen the pendulum effect: Excellent 1983 bikes received big changes and took a step backwards, while mediocre sleds took the elevator up a flight

We'll have six bikes in the shootout. They are the Honda CR500, the Yamaha YZ490, the Suzuki RM500, the M-Star 490, the KTM 495 and the Husky 500CR. Before we plunge into the shootout, we'll give you a very brief rundown on each machine.

Honda CR500R: Instead of updating its excellent 480R version, Honda chose to build a whole new motorcycle from the ground up. The 500 is bigger, heavier and faster than the older 480, sports a disc brake and exhibits inbred factory traits in the cor-

Yamaha YZ490: Yamaha's "run what you brung" theory carries over to the 490. They kept the looks very close to the '83 and opted to redistribute the weight to get hangine wind and kick and snort. Exploring the dling gains. Actually, the big YZ is remarka-

bly close to what Glover rides in the outdoor series.

Suzuki RM500: New forks, blue boots, and surprisingly little else has been done to the RM. A few years back they punched the motor out, but it still retains the four-speed tranny, the dual airbox, and the same plastic as the '83.

M-Star 490: This baby looks remarkably similar to the deceased Maico 490. In fact, it's nearly identical! Big news comes in the five-speed trans and a rear Ohlins that hits closer to the mark. Internally, the same clutch and cylinder are activated, as are the forks (only with the Maico logo removed).

KTM 495: Energy went into the suspension department and into mellowing the power delivery of the KTM. Upside-down White Power forks are used, as well as a piggyback White Power single shock. A diet reduced the weight somewhat from the porky '83 model.

Husky 500CR: Big news comes in small packages on the Swede-mobile. A plastic low-hanger tank and an '80s-patterned rake for quicker turning mark the changes. It's the only six-speeder and dual-shocker of the

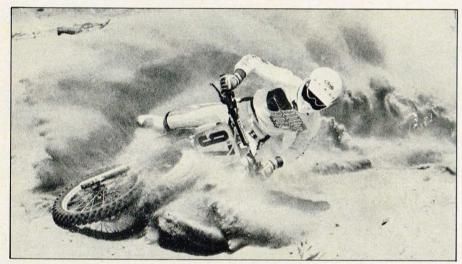
There you have it—six killers, head to head. The end results of each category will be graphed out so you can draw an easy conclusion as to the winner, and the losers.

OCTOBER 1984 / DIRT BIKE 45





The KTM is not really comfortable on the tight MX tracks. Tim Hanna (no relation to the Hurricane) muscles the big 495.



Handling the big Honda takes grit. An explosive motor rips off the bottom, and coupled with a strange mix of quick turning and a shaking head, it will take an experienced rider to handle Big Red.



Once properly set up, the RM will turn with the best of them. But, take it out in a high-speed section and the head shakes so badly it's scary.



Through the corners the M-Star is happy. It requires very little rider input; just point it



Overall, the YZ has the best of both worlds: It turns like a mink AND is stable at

PERFORMANCE

None of the six bikes in the shootout can with a good, strong boot on your foot. With be considered slow. They represent the a handlebar-mounted compression release, blown fuelers of the motocross world, and the M-Star is by far the easiest to fire. Next what's important is the type of power they comes the KTM with a well-designed kickput out and how usable and/or ridable it is.

The KTM, Yamaha and Suzuki come equipped with four speeds, the Honda and M-Star with five speeds, and the Husky has a four- or six-speed transmission. For pure RM, YZ and CR. Awkward kickstarters shifting ease, the M-Star tops the field, followed by the longer throw of the Husky. The YZ and RM are down a tad because of excess notchiness, and the KTM and Honda wallow in last for their less-than-stellar shifting performance.

Starting these beasts isn't best done in

				POWE	R		
Excellent						To the second	
Very good							67
Good							
Average							
Hopeless							- 20
	YAM	HON	SUZ	HUS	KY K	TM M-ST	TAR

start lever with which you can get the needed leverage to get a muscle boot in. Behind the KTM comes the Husky, which also has a fairly smart lever design. In last are the and bizarre jetting hamper all three. Once the jetting is dialed, the YZ gets easier. The CR and RM are a hit-or-miss deal. Sometimes they fire, sometimes it's hopeless.

In the usable pony department, the Yamaha is the clear winner. A monstrous low end and killer mid-range are mated to a decent shower shoes. They require a healthy kick top end, making the YZ the king of the Expert.

SHIFTING

YAM HON SUZ HUSKY KTM M

with its responsive low end, healthy mid hit. and the hardest and longest-revving upper hit of all the Open bikes. The Honda puts out a violent rasp that's potent and strong, but is downgraded because of the unpredictable blast that scares even the most experienced riders. To compound matters, sand riding produces a detonation that can only be fixed by reshaping the head. The KTM and Husky are tied, as both bikes have plenty of boost but vibrate like blenders and aren't too impressive in the upper-hook department. Last goes to the RM by virtue of the least power and the worst gearbox spacing. It's good for the Novice, useless for the

power giants. Next in line comes the M-Star

				S	TARTING		
	Excellent						
	Very good						
	Good						
	Average						
	Hopeless						
STAR		YAM	HON	SUZ	HUSKY	ктм	M-STAR

		ST	ARTING	
Excellent				
Very good				Cities
Good				- March
Average				Cippeto.
Hopeless			图 测速	

HANDLING

ies: turning and straight-line stability. Consider this: What good do 50 horsepower and hold a line, or when it shakes its head at much trouble. speed so badly that you go to bed at night with rubber sheets? It has to turn and it has with the RM to get it to respond. It's not to be stable. Bottom line!

An aggressive stance is needed to man-

handle the Husky. Stay forward and stay

on the gas! ▼

TURNING

Leading in the "carve-ability" department is the Honda CR500. It tracks like at best. The Husky simply doesn't feel at magic in tight turns, soft dirt and no dirt. home on a motocross track, and the KTM Even less-than-okay tires don't spoil the is unfeeling through the turns. They require CR's manners through the corners. Yamaha constant rider input and a cut-and-thrust did it's homework in the off-season and completely revamped the YZ's turning prowess. it holds a line, inside or outside, masses.

HANDLING Very good Good YAM HON SUZ HUSKY KTM M-STAR

This department consists of two categor- but takes just a little more rider input than the Honda. Shadowing the YZ is the M-Star. Typical German heritage is inbred in 12 inches of travel do when the bike won't the M-Star, and it likes to turn without

> Too much rider management is needed terrible, but it takes plenty of work to get through the corners at speed. Both the Husky and the KTM are marginal turners technique that's fine for the advanced 'crosser, but it's asking too much from the

			Т	URNING		
Excellent						
Very good						
Good						
Average						
Hopeless						
	YAM	HON	SUZ	HUSKY	ктм	M-STAR

STRAIGHT-LINE STABILITY

Here's where the Jekyll and Hyde comes out. The low-rated Husky gets top billing in the stability department. You can take the Husky and go flat-out in sixth; in sand, chop the throttle and take your hands off the bars, and it will hold a straight line. With the YZ, things aren't quite as cemented, although it's close. It's stable and will not shake its head at speed. At a shade lower come the M-Star and KTM. Both bikes are comfortable in the upper gears and will not scare you coming down from speed.

In last place are the RM and CR, due to their glaring headshake of death. Both machines suffer from the DTs when the throttle is chopped.

		STR	AIGHT	-LINE	STAB	ILITY		
Excellent								
Very good								
Good								SERVE
Average								
Hopeless								1
	YAM	HON	SUZ	HUS	KY K	MT	M-ST	AR

OCTOBER 1984 / DIRT BIKE 47

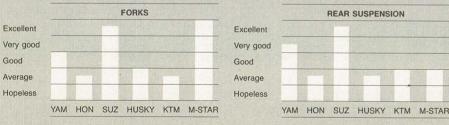
Engine type	HONDA CR500R Single cylinder, air-cooled	YAMAHA YZ490L Single cylinder, air-cooled 2-stroke	SUZUKI RM500E Single cylinder, air-cooled 2-stroke	HUSQVARNA 500CR Single cylinder, air-cooled. 2-stroke	KTM 495MX . Single cylinder, air-cooled . 2-stroke	M-STAR 500 SUPERCRO
Bore and stroke		. 87mm × 82mm			.: 92.25mm × 74mm	
Displacement	491cc	487cc				48
Carburetion	.38mm Keihin	40mm Mikuni		40mm Mikuni		
Factory recommended jetting:			Commit mat since windin	. 40mm wikam	40mm Type 35 Bing	4011111 Type 54 E
Main jet	162	440	300	360	195	
Needle jet	Fixed	Q-8	R4	AA5	. 284	20
Jet needle				79H3	6L6	20
Pilot jet	. 65	50	50	35	. 65	
Slide number	. 3.5	2.5	2.0	2.5	. 160	20
Fuel tank capacity	.9.8 L (2.56 gals.)	. 10.7 L (2.77 gals.)	.9.0 L (2.0 gals.)	12.5 L (3.3 gals.)	. 10.0 L (2.6 gals.)	10.11 (2.7 as
Lubrication	. Pre-mix	Pre-mix	Pre-mix	Pre-mix	. Pre-mix	Pro
Oil capacity/gearbox	. 0.7 L (0.74 qt.)	.0.8 L (0.85 gt.)	.0.8 L (0.85 gt.)	14 L (15 at)	. 1.4 L (1.5 qt.)	0.651 (0.68
Transmission			4-speed	6-speed	. 4-speed	5-spe
Gearbox ratios:					- Topod	
1	1.750:1	1.750:1	2 000:1	18 7:1	1.50:1	22
2	1.388:1	1.316:1	1.555:1	13.5:1	. 1.16:1	1.7
3	. 1.150:1	1.045:1	1.210:1	10.3:1	0.95:1	13
4	. 0.954:1	0.833:1	0.954:1	8 2:1	0.77:1	1.0
5	0.791:1			7.0:1		0.8
6				61:1		
Gearing, front/rear					. 13/52	14
Ignition		CDI	CDI	Motoplat	Motoplat	
Recommended spark plug					Bosch W4-C	
Silencer/spark arrester		Yes/no	. Yes/no	Yes/no	Yes/no	
Wheelbase					. 1500mm (58.3 in.)	
Ground clearance	. 335mm (13.2 in.)	335mm (13.2 in.)	. 370mm (14.6 in.)	385mm (15.2 in)	. 355mm (13.6 in.)	
Seat height					. 960mm (38.5 in.)	
Rake/trail		28.5°/120mm (4.72 in)	29 1°/123mm (4 84 in)	28 5º/131mm /5 2 in)	. 28° (4.8 in.)	2700
Wet weight, no fuel	230 lbs	228 lbs	237 lbs	244 lhe	. 239 lbs	241
Tire size and type:				. 244 103	, 200 103	
Front	3.00 x 21 Bridgestone M37	3.00 x 21 Bridgestone M37	. 3.00 × 21 Bridgestone M37 .	3 00 v 21 Trellehorg	3.00 × 21 Matzalar	3.00 x 21 Metze
Rear	5 10 x 18 Bridgestone M38	5.10 x 18 Bridgestone M38	5 10 v 18 Bridgestone M38	5 00 v 18 Pirelli	4.50 x 18 Metzeler	
Suspension type and travel:		To a to Bridgestone moo.	. 5. 10 × 10 Bridgestone Wiso.	. 5.66 × 16 7 116111	. 4.50 X 10 Metzelei	4.50 X 18 Wetze
Front	Showa 305mm (12.0 in.)	KYB 300mm (11 8 in)	KVB 300mm (11.8 in)	Hueky 300mm (11 8 in)	. White Power, 300mm	Major 42mm 210s
	. Onowa, Goomm (12.0 m.)	. KTB, 500mm (11.0 m.)	. KTB, 300mm (11.6 m.)	. Husky, 30011111 (11.8 III.)	(11.8 in.)	(12.2
Rear	. Showa, 315mm (12.4 in.)	. KYB Monocross 320mm	Full-Floater, 322mm	. Husky ITC, 345mm	White Power, 330mm	
	. Onowa, 015mm (12.4 m.)	(12.6 in.)	(12.7 in.)	(13.5 in.)		Ohlins, 325mm (12.8
Intended use	. Motocross	Motocross	. Motocross		(13.0 in.) Motocross	
Country of origin		Japan		Sweden		
Retail price, approx.						
Distributor:	Honda Motor Corp.	. \$2599	\$2499			\$27
J. J	100 W. Alondra Blvd.	6555 Katella Ave.	. U.S. Suzuki Motor Corp	. Husqvarna Motor Corp		
			3251 E. Imperial Hwy.	4925 Mercury St.	1906 Broadway	740 E. Santa Maria
	Gardena, CA 90247	Cypress, CA 90630	Brea, CA 92621	San Diego, CA 92111	Lorain, OH 44052	Santa Paula, CA 930

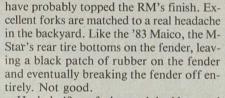
SUSPENSION

With the possible exception of the Suzuki, none of the bikes have what can be considered excellent suspension. They tease you, some with a dynamite set of forks and a less-than-decent rear end, or with a goodworking tail section mated to a hopeless set of front boingers. The RM has what we'd call the best overall suspension package. Up front, the KYB forks are a little harsh (compared with the RM250) but on the average get the job done quite well. Rearward, the Full Floater is by far the best of the bunch. Still, the spring is too soft (although an optional heavy spring is available) and the shock wears quickly.

500cc SHOOTOUT

Less-than-thrilling forks on the YZ and an acceptable, fully adjustable Monocross rear end finish behind the RM. Like the Suzuki, the YZ demands stiffer fork springs and a heavier rear spring for most riders. Had the M-Star seen fit to equip its bike with a sound rear assembly, it would





Husky's 40mm forks aren't bad but need considerable dialing in with oil levels and sometimes spring preload. Our seals wept on delivery, and Experts complained they were too mushy. The ITC dual-shock system worked fine in the desert or for trailriding, but it isn't close on a motocross track. Little or no rebound damping makes for the pogo-stick effect. This is not good and can even be painful.

Those trick White Power forks on the KTM are super adjustable, sturdy and light but come set up completely wrong. They're harsh through the first half of the travel and hurt your wrists on the ripple bumps. action.

REAR SUSPENSION



big bumps fine but needs some work on the

choppy stutter-bump sections. The shock

can be dialed in, but on a \$2900 dollar scoot.

this shouldn't be necessary. Right behind the KTM comes the Honda. They have yet to get the Showa forks close to workable, and the rear shock is undersprung, and fades and wears out quicker than the rear tire. A serious rider must invest in an Ohlins or White Power shock,

as well as find a cure for the mediocre fork

		SU	SPENS	SION (OVI	ERALL)	
Excellent						
Very good						
Good						
Average					JESSIE J	
Hopeless					33	
	YAM	HON	SUZ	HUSKY	ктм	M-STAR

GENERAL RIDING/TRAIL

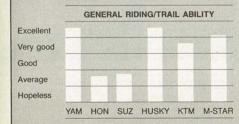
This is a strange category for big-bore motocrossers, but not all of these bikes see only a motocross track. A large percentage are trail ridden or desert bound, and a great many find their way into hare scrambles and enduros. Rating them meant woods testing, desert slamming and your basic weekend trail rides. A hyper, explosive, arm-ripping bomb doesn't fit the bill here; rather, a smooth, torquey, stable machine that plonks takes the top billing.

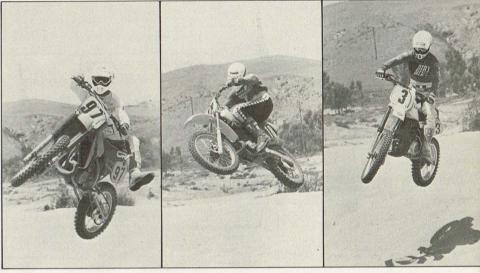
Actually, there's a tie for overall winner. The six-speed super-stable Husky and the YZ490 top the charts. Husky's 500 (with six speeds) has the most versatile engine of the bunch. First gear is low enough to trail ride, and sixth will catapult you to over 90 mph. Stable high-speed manners make it a perfect dez sled, and more than a few are ridden in hare scrambles and enduros with excellent results. The comfort of the Yamaha, coupled with a torque-o-matic engine, excellent turning and nice highspeed habits, makes it easier to ride than the Husky, but the four-speed tranny holds it back. Still, there's enough motor to get the job done quite nicely.

A five-speed trans on the M-Star is a plus, as is the nice overall performance of the engine. A skyscraper saddle height knocks it down a slot for the general riding

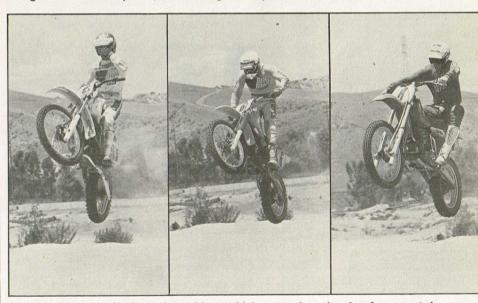
We'd consider the KTM an excellent GP bike; it can be geared to the moon and pull it easily. Slower speeds are a bit gnarly, as is the suspension, or lack of suppleness. In the woods, the 495 is a handful.

Filling out the bottom positions are the Honda and Suzuki. We give the Honda the nod simply because of the five-speed trans and the available power. It's not comfortable power, as the uneven bursts are awesome and rather frightening. Suzuki's problem goes even further, with only four speeds and not enough juice to pull down low. Trailriding the RM is an exercise in futility, the end result being a stalled engine and no play left in the clutch after a day's ride. One more gear and a pound of power is the only answer.





Air time on the Honda showed off its quick catlike abilities. It turns, pivots and accelerates like an animal, yet lacks the suspension to make it a winner. The YZ is the lightest bike, has a strong motor and all-around good track-side habits. In the air, the YZ proved stable and easy to handle. At higher speeds, the KTM feels right at home. You can gear for monster speeds, and the engine will pull it.



Of all the bikes, the Husky is the stablest at higher speeds and makes for a great dez sled. Big-time vibration and less-than-tolerant MX suspension keep it from being a threat on a motocross course. In the power department the RM is soft. The suspension is excellent and it feels lighter than its 237 pounds. Although the German M-Star hasn't received any major updates, it's still a hot-dogger on a motocross track. Had they done something about the existing flaws in the rear suspension, it would have been tough

THE FINAL COUNTDOWN— RATING THE BIG GUNS

All of these bikes were built as motocrossers and were meant to be raced as such. Here's the straight skinny on their motocrossing ability.

First place goes to the Yamaha. Good power, mated to a well-spaced four-speed

trans, gets top points in the power department. Slide that workable motor into an excellent-handling chassis and you've got a bike that does everything well.

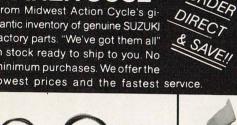
Second slot goes to the M-Star. It's sad that the Germans simply repackaged a oneyear-old scoot, but even so, the M-Star is (continued on page 70)

Good



rom Midwest Action Cycle's gi gantic inventory of genuine SUZUKI factory parts. "We've got them all" in stock ready to ship to you. No minimum purchases. We offer the

lowest prices and the fastest service.



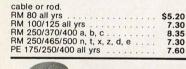
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Replace your worn cables with GENUINE FACTORY SUZUKI parts. They fit each year and model exactly.

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REAR BRAKE

RM 80 all yrs RM 100/125 all yrs RM 250/370/400/465/500 all yrs PE 175/250/400 all yrs	\$7.10 7.30 7.65 7.65
CLUTCH	
RM 80 all yrs RM 100/125 all yrs RM 250/370/400/465/500 all yrs PE 175/250/400 all yrs	\$6.60 \$7.10 8.35 8.35
FRONT BRAKE	
RM 80/100 all yrs	\$7.10 7.60 7.95
PE 175/250/400 all vrs	7 95





DINICC

PE 250/400 all yrs

PISTONS	n	Ц	1	1	a	÷	•	
GENUINE SUZUKI PISTO	N	s						
RM 80 all yrs								\$15.25
RM 100 all vrs					2			18.40
RM 125 all vrs								21.95
RM 250/3/0/400 all yrs .							ı.	27.25
RM 465/500 all yrs								31.50
PE 175 all yrs								23.90
PE 250/400 all yrs								28.30
STD. AND OVERSIZE. PL	EA	18	SE	1	N	C	10	CATE.
GENUINE SUZUKI RINGS								
RM 80 all yrs								\$12.50
RM 100/125 all yrs			ì	ĺ.		į	Ċ	13.60
RM 250 a, b, c								15.25
RM 250 n, t, x, z, d, e		C						8.35
RM 370 a. b								19.90
RM 400/465/500 all yrs .								9.40
PE 175 all yrs	6	1		•				14.65
DE 250/400 all vro		•	•	•	•	•	•	10.40

STD. AND OVERSIZE. PLEASE INDICATE

FORK SEALS

GENUINE SUZUKI, designed to fit each year

nd model exactly, IMPROVED	DESIGN.
M 80 all yrs	. \$ 5.50 pr.
M 100 all yrs	. 6.40 pr.
M 125/250/370/400 all yrs	6.60 pr.
M 465/500 all yrs	. 6.80 pr.
E 175/250/400 all yrs	7.95 pr.



GENUINE SUZUKI same as used by the factory eam. You can't buy any better.

ı	FRONT	
ı	RM 80 all yrs	\$ 8.65
	RM 100/125 all yrs	9.40
	RM 250/370/400/465/500 all yrs	10.45
	PE 175 c, n, t, x	11.50
	PE 175 z, d, e	15.70 g
	PE 250/400 all yrs	11.50 p
	REAR	
	RM 80 all yrs	\$ 8.65
	RM 100/125 all yrs	9.40
	RM 250/370/400/465/500 all yrs	10.45 p
	PE 175 all vrs	11.50 r
	PE 250/400 all yrs	11.50 p

\$ 9.99

\$13.60 ea

16.75 ea.

18.85 ea.

18.85 ea.

16.75 ea.

CHAMPIONS IN MOTO X THAN ANY OTHER

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 all ports chamfered as SUZUKI recommends, Exhaust bridge relieved to prevent seizure. · special micro-honing for excellent ring seating.

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ORIGINAL EQUIPMENT. Designed to fit each

year and model. Bolts right on

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Please indicate right or left panel.

ALL RM's 1981-82, -83 MODELS

special factory clearances

SWING ARM BEARING

SUZUKI swing arm bearings and

AND SPACER KIT

Consists of two GENUINE

RM 100/125 n, t, x RM 125/250/465 x, z, d, e

RM 250/370/400 n, t.

PE 175 c, n, t, z

PE 175 z d PE 250/400 all yrs

two spacers.

RM 80 all vrs

ALL RM'S AND PE'S

ALL RM'S, PE'S, TS 1975- to 1980 MODELS

RM's all years

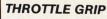
SIDE PANELS

z, d, e

RM 80 all yrs RM 100/125 all yrs

RM 250/370 a. b. c

PE 250/400 all yrs



GENUINE SUZUKI. Consists of inside plastic a Complete throttle grip assy.			
RM 80/100 all yrs		. \$	
PE 175/250/400 all yrs		1	0.4
	_		_



RADIATOR COVERS

RM	80	d, e					\$	5.	25	ea.
			z, d,							
RM	250) z,	d, e				1	1.	25	ea.
Plea	ase	ind	icate	riç	ght	01	le	ft	sid	e.
	400		·out	;	3111	0	10		siu	C.

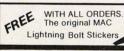
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ALL WATER COOLED RM's \$7.95

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MAC "SUZUKI WORKS" Same as FACTORY riders use. 4130 chromoly. Available in gold, yellow, red, blue,

PE 175/250/400 all yrs	\$24.95
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6.50 ea

6.50 ea

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CLUTCH

PLATES

PE 175 all yrs

PE 250/400 all yrs

FIBER DRIVE PLATES

STEEL DRIVEN PLATES

RM 80/100/125 all yrs \$ RM 250/370/400/465/500 all yrs

set up for the aggressive rider. RM 100/125 all yrs

Replace your stock aluminum driven plates with SUZUKI STEEL OPTIONAL ones. They

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Over 180 pages of photos, drawings, charts, info on how to repair, service and maintain your dirt bike. RM SERIES 1975 to 1981 twin shock \$12.95 SP/DR 370-400 singles 1978 to 1980 PE 175-400 singles 1977 to 1980 . . . 12.95





Complete piston se														
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RM 250 all yrs														46.5
RM 370/400 all yrs														51.9
RM 465/500 all yrs														49.9
PE 175/250 all yrs	!													45.9
Please indicate over	ers	si.	ZE	9										

WRIST PIN-WRIST PIN BEARING

WRIST PIN (Piston Pin) RM 80 all yrs RM 100 all yrs RM 125 all yrs RM 250/370/400/465/500 all yrs PE 175/250/400 all yrs	\$2.95 2.35 4.30 3.89 3.89
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RM 80 b, c, n, t, x	\$3.25
RM 80 z, d, e	4.65
RM 100 all vrs	3.95
RM 125 m, a, b, c, n, t	3.95
RM 125 x, z, d, e	4.95
RM 250/370/400/465/500 all yrs	6.35
PE 175/250 all yrs	4.25
DE 400 + v	
PE 400 t, x	6.50



RM 125/250/465/500 x, z, d, e . . .

KILL BUTTON SWITCH ASSY.

SUZUKI FACTORY replacem	ıe	n	t	p	ar	rt.						
RM 80/100 all yrs												\$11.50
RM 125/250/370/400 all yrs												12.05
RM 465/500 all yrs				ı.								13.10
PE 175/250/400 all yrs												13.10

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/465/50	00 x.	z, d	. е												30.	95
250/40	0 n, f	t. x.	z, c	ı,	е										12.	95
PHASE	III R	ACIN	NG	F	IL	TI	EI	R	S							
NIQUE	dual	stac	ae i	fo	a	m	1 8	ai	r	fil	te	r.	P	rc	oven	ef-
	7125 a, cz, d, e 7400 a, 7465/50 7250/40 100 thru PHASE NIQUE in NAT	1/125 a, b, c, cz, d, e //400 a, b, c, //465/500 x, /250/400 n, t //250/400 n, t //250/400 DHASE III RA NIQUE dual in NATION/ acing. MORE	1/125 a, b, c, n, t 1-2, d, e	/125 a, b, c, n, t, x cz, d, e	/125 a, b, c, n, t, x z, d, e /400 a, b, c, n, t /465/500 x, z, d, e /250/400 n, t, x, z, d, 00 thru 400 PHASE III RACING F NIQUE dual stage fo in NATIONAL and I acing, MORE FLOW	//125 a, b, c, n, t, x cz, d, e ./400 a, b, c, n, t ./465/500 x, z, d, e ./250/400 n, t, x, z, d, e .00 thru 400 PHASE III RACING FIL NIQUE dual stage foa in NATIONAL and IN acing. MORE FLOW fo	//125 a, b, c, n, t, x cz, d, e ./400 a, b, c, n, t ./465/500 x, z, d, e ./250/400 n, t, x, z, d, e ./200/400 n, t, x, z, d, e ./200 thru 400 PHASE III RACING FILT NIQUE dual stage foam in NATIONAL and INT acing. MORE FLOW for	/125 a, b, c, n, t, x z, d, e ./400 a, b, c, n, t ./465/500 x, z, d, e ./250/400 n, t, x, z, d, e .00 thru 400 PHASE III RACING FILTE NIQUE dual stage foam in NATIONAL and INTE acing. MORE FLOW for N	/125 a, b, c, n, t, x z, d, e ,/400 a, b, c, n, t ,/465/500 x, z, d, e ,/250/400 n, t, x, z, d, e ,00 thru 400 PHASE III RACING FILTERS NIQUE dual stage foam ai in NATIONAL and INTERI acing. MORE FLOW for MC	/125 a, b, c, n, t, x z, d, e z, d, e , d, o, c, n, t , d65/500 x, z, d, e , 250/400 n, t, x, z, d, e , 00 thru 400 PHASE III RACING FILTERS NIQUE dual stage foam air in NATIONAL and INTERN acing, MORE FLOW for MOR	/125 a, b, c, n, t, x z, d, e //400 a, b, c, n, t //405/500 x, z, d, e //250/400 n, t, x, z, d, e //00 thru 400 PHASE III RACING FILTERS NIQUE dual stage foam air fil in NATIONAL and INTERNA' acing. MORE FLOW for MORI	/125 a, b, c, n, t, x z, d, e /400 a, b, c, n, t /405/500 x, z, d, e /250/400 n, t, x, z, d, e /00 thru 400 PHASE III RACING FILTERS NIQUE dual stage foam air filte in NATIONAL and INTERNATIO	/125 a, b, c, n, t, x z, d, e ,/400 a, b, c, n, t ,/465/500 x, z, d, e ,/250/400 n, t, x, z, d, e ,/00 thru 400 PHASE III RACING FILTERS NIQUE dual stage foam air filter, in NATIONAL and INTERNATIOI acing. MORE FLOW for MORE P	/125 a, b, c, n, t, x z, d, e /400 a, b, c, n, t /405/500 x, z, d, e /250/400 n, t, x, z, d, e /00 thru 400 PHASE III RACING FILTERS NIQUE dual stage foam air filter. P in NATIONAL and INTERNATION/ acing, MORE FLOW for MORE PO	/125 a, b, c, n, t, x z, d, e ,/400 a, b, c, n, t ,/465/500 x, z, d, e ,/250/400 n, t, x, z, d, e ,/00 thru 400 PHASE III RACING FILTERS NIQUE dual stage foam air filter. Pro in NATIONAL and INTERNATIONAL acing. MORE FLOW for MORE POW	all yrs \$10. //125 a, b, c, n, t, x 12. z, d, e 25. //400 a, b, c, n, t 12. //465/500 x, z, d, e 30. //250/400 n, t, x, z, d, e 12. //465/500 x and the state of

X-3...flows air at an unusual high rate of speed, ye stops dirt down to sub-micron size. RM 80 all yrs (SPECIAL CAGE) \$12.95

RM 100/125/250/370/400 m, a, l	b,				
c, n, t					11.9
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PE 175/250/400 all yrs					12.9
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RM 80 z, d, e (NEW IMPROVED BEARING)	37.7
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(NEW IMPROVED BEARING)	49.9
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PE 250/400 all yrs	61.4

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RM 250/370/400 all yrs	30.4
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PE 175 all yrs	28.3
PE 250/400 all yrs	29.3

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GENOUNE 3020	
Complete set of factory gaskets to your cycle.	to rebuild
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RM 100/125 m, a, b, c, n, t	
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RM 250/370/400 a, b, c, n, t	
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RM 465/500 x, z, d, e	
PE 175 all yrs	
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RM 80 d, e								99.50
RM 100 all yrs								104.25
RM 125 all yrs								
RM 250 t, x								
RM 250 z, d, e								
RM 465/500 all								154.25
PE 175/250 all								143.95
PE 400 t, x								179.95
		7			7		Т	

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GENUINE FACTORY	640.05
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t, x	THE CONTRACTOR OF STREET
RM 250 z, d, e	
RM 370/400/465/500 all yrs	
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	assy. RM 80 all yrs \$73. RM 100/125 m, a, b, c,	4
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	for hardness. The winners choice.
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	DIAMOND CHAIN. As hard as its name. The
	chain used by racers demanding the best.
	RM 125/250 t, x, z, d, e \$35.95
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	RM 370/400/465/500 all years 36.95
1	TM 250/ TS 250 all years 34.95
-	SPROCKETS COUNTER SHAFT. Made from
	top grade steel, case hardened, over 60
	Rockwell.
	RM 80 all years \$ 8.95
	RM 100/125/250 all years 9.95
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9	
5	SPROCKETS REAR Hardened alloy, light weight,
۲,	wears twice as long as any others.
n١	RM 80 all years\$29.95
۲	RM 100/125/250 all years 32.95
0 5 5 5	RM 370/400/475/500 all years 34.50
2	PE 175/250/400 all years
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HEAD, BASE AND REED GASKET

RM 80 all yrs RM 100/125 all yrs

RM 465/500 all yrs

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CHAIN BUFFER SET

GASKET KIT

RM 80 all vrs

RM 100/125 n. t. x. z. d. e.

PE 175/250/400 b, c, n, t, x PE 175 z, d, e

RM 250/370/400/465 b, c, n, t, x,

6.60

37.75 37.75

Set consists of chain guide if from picture.	oll	e	r.	Ť	h	e	(te	S	iç	ın	1	m	ay vary
RM 80 all yrs														\$10.77
RM 100 n, t, x														
RM 125/250/4														
d, e														12.35
PE 175 all yrs														12.55
PE 250/400 t,	X													10.80

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The best FACTORY bearings you can buy.

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11.50 pr.
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PE 175 all yrs . . . PE 250/400 all yrs

RM 125 all yrs	11.50 p
RM 250/370/400/465 all yrs	12.55 p
RM 500 d, e	19.95 p
PE 175/250/400 all yrs	11.50 p
REAR	
RM 80 all yrs	\$11.50 p
RM 100 all yrs	
DM 405/050/070/400/405 all	42 OF -

RM 125/250/370/400/465 all yrs RM 500 d, e	M 80 all yrs	
	M 125/250/370/400/465 all yrs	13.25 p

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Consists of FACTORY pivot shaft snd Castle

nut.			
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Rm 125/250/465/500 x, z, d, e			
RM 250/370/400 a, b, c, n, t			11.50
PE 175 c, n, t, x			
PE 175 z, d, e			
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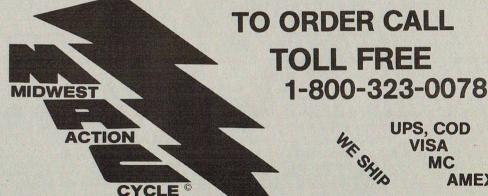
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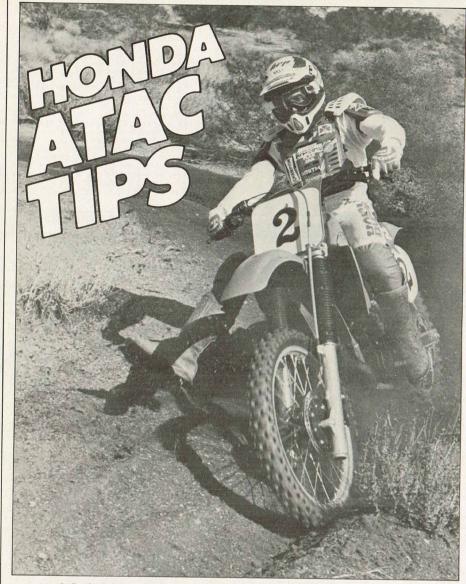
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KNOW YOUR LINKAGE



Maintenance is the key to performance

By Paul Clipper

We get letters from many people who are confused about the ATAC system on the '84 Honda CRs. Every sort of poorrunning problem is blamed on the ATAC. and many times the ATAC is not at fault. If it is, the major problem is always a lack of proper maintenance. If you want to keep your Honda running at its best, come along on a walking tour of your basic ATAC.

TO ATAC OR NOT TO ATAC

A word from the tuners: On the CR250, the ATAC is a good thing. It increases lowend punch right off the bottom and then seals up at upper revs and allows maximum top-end horsepower. Removing the ATAC and installing trick pipes has been tried by everyone, with no success. Moral: Don't even think of removing the ATAC from the 250-keep it clean and well lubed, and it will do you right.

The CR125 is a different story. Every

tuner we talked to during our research for the 125 hop-up article last month said the ATAC is wasted on the 125. It seems that the rev level most used on a 125 is above the working range of the ATAC, so any benefit it may have is slight and abrupt at very low revs. According to the experts, the best thing you can do to a CR125 is remove the ATAC and install an accessory pipe and manifold. We have heard much high acclaim for the Pro Circuit CR125 pipe, so if this is the route you want to take, Pro Circuit may be the people to call.

MAINTENANCE AND ADJUSTMENT

Both the 125 and 250 ATAC systems are well put together. The linkage is well protected from abuse and should be very reliable. The only maintenance we suggest is disassembly of the linkage occasionally for lubrication and inspection and periodic removal of the ATAC headpipe, and decarbonizing



The CR250's ATAC linkage is internal and well protected but not adjustable. If the valve fails to open fully with the engine off, you need to check the whole system for wear.

You may not be able to go as fast as Hannah can on a stock CR250, but your bike will run best if you keep the ATAC clean and functioning properly.

of same. When you do this, you want to clean all the carbon out of the headpipe, paying particular attention to the butterfly valve. The valve should be perfectly clean and move easily on its shaft.

The CR250 ATAC is very straightforward. There are no adjustments to be made, so if you take off the pipe and notice that the ATAC valve is not wide open, you have a linkage problem and should disassemble the linkage and compare its parts to new parts. Any sign of wear or bending is a signal to replace the offending part. If the valve is open and functioning smoothly, simply remove the carbon and lubricate all the linkage pivot points with molybdenum disulfide grease. Carburetor cleaner works well on carbon removal, so does a wire brush. All linkage is easily accessible through the ATAC chamber cover and the right-side engine cover.

According to the Honda shop manual, the 125 requires no additional lubrication. The linkage is much simpler than the 250, but it would still be a good idea to remove the rack shaft from the cylinder and apply a thin coat of grease. Carbon removal is essentially the same as on the 250, but pay particular attention to the ATAC chamber.

The 125 ATAC chamber hangs down below the headpipe, and could fill with carbon and unburnt oil if you're riding a sloppily jetted bike.





The butterfly valve is the critical part on both systems. Be sure to keep it clean and functioning smoothly.

The chamber hangs below the pipe, so gravity allows carbon and mung to fall into the chamber. If you were running a 20-to-1 mix in a richly jetted bike, it could be possible to fill up the chamber with noxious liquids, rendering it useless.

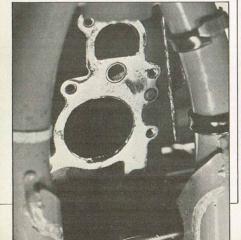
If you decide to run with the ATAC on the 125, keep a careful eye on the butterfly valve. When the bike is at rest, you should be able to pull off the pipe and see the valve standing wide open. If it isn't, you will find an adjusting screw just below the headpipe on the right side of the engine. Loosen the locknut and back the screw out a couple of turns, and then turn it in until you feel the screw contact the internal cam on the linkage. Turn it in an additional half turn, and then check the valve. If it's still not vertical, turn the screw in a bit more until it's right, and then you're done.

SERVICE HINTS

Use new gaskets when you put the ATAC back together. Also, use high-temperature silicone seal between the header flange and the cylinder, to avoid the possibility of leakage. The official Honda shop manuals for each of these bikes go into great detail on the ATAC, and we recommend that every CR owner buy one.

As long as the ATAC is working properly, it will be an asset to the 250, and even if it's not the best thing in the world, it won't be harmful on the 125. Let it get out of adjustment or dirty and stick wide open, and it will be a hindrance to either machine. Take the time to service it, and you will have the best-running stock Honda possible.

The hot tuners will tell you to seal the exhaust flange with high-temperature silicone seal, as well as using a fresh gasket.



Dave Mungenasts

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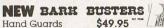
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You can go to the bank on the fact that Team Honda has spent many hours of track testing just on the right tire compounds. Here's Johnny O on Honda's baked-dry Supercross test track.



To the bucks-up, factory-level motocross stars, starts mean money in the pocket. Picking the right tire is half the battle.



Picking the right tire for the situation can be as chancy as swinging at a pinata blindfolded



Using the right tire for the right circumstances is critical. Here, a perfectly good Metzeler soft-terrain tire was run in hard-pack. The result was instant death to

hoosing a tire nowadays is a nightmare. Every company offers a number of tires for various types of terrain. The rubber wars are raging at a frenzied pace—new treads, compounds and carcasses. Specialization in the "meat" market is getting so advanced that weekend riders have no idea what tire works where or why. There are hard-track tires, soft-track tires, tires for intermediate terrain, for soft, hard, rocky intermediate terrain, and for mud. Long gone are the days when you put on a 3.00 × 21 Metz and a K88 Dunlop, knowing that's what everyone else was running.

Here at the ponderous but exclusive Dirt Bike offices we've gathered up the most popular tires and are going to give you a rundown on what type of terrain they're meant for. This is not a tire shootout, but rather a guide to getting the best traction for certain conditions. We've used a lot of the tires and will tell you how they work; others that you might be accustomed to will get categorized in one of three divisions: hard track, soft track (loam, sand, mud), and intermediate track (hard and soft terrain).

HARD-TRACK TIRES

like trying to race on shiny cement with a layer of dust on top-slippery, ugly, awful. Good rubber is probably the most important aspect to handling the blue-groove, baked tracks. Alphabetically, here's the line-

BRIDGESTONE: M23 front, M22 rear. These babies are legendary with the Saddleback racers, and for the last few years they have had a virtual stranglehold on the hardpacked tire market. They've been around for a few years and, although Bridgestone has tried to improve them, they haven't managed to yet.

DUNLOP: For the last few years, Dunlop has been the major force in MX racing tires. They're constantly striving for the best rubber in MX tires, and with hard-track treads it is no different. Bridgestone set the standard; Dunlop has set its sights. They have two hard-track front tires and two rear:

K-139, front—A tall knobbed tire that has been used by top MXers and is preferred by the off-road and enduro riders. It weighs a pound and a half more than Dunlop's other hard-track front tire.

K-490—A universal tire that was design-Hard-packed tracks are plain brutal. It's ed with hard-pack in mind. It works on



Tracks like Unadilla are prime examples of perfect traction. Here a soft-terrain tire is at home. Bob Hannah switches between the Dunlop K140 and the Hi-Point "R" series



Saddleback Park. Hard, oven-baked, cementlike dirt is nearly tractionless. Tire selection is critical.

hard-pack, soft, or mud. Many top MXers prefer this tire.

K-141 HT, rear—Dunlop's answer to the Bridgestone M22. They've dropped their K-138 in favor of the K-141, which has a more rounded profile, and corners better than the K-138.

HI-POINT: For baked usage Hi-Point has its Red Dot series. They're basically Metzeler copies and, in our experience, work well when they're new, and then quickly deteriorate. Many top enduro riders campaign the Red Dots, and they swear by them.

METZELER: These guys probably have the best reputation of all the tire folks, and for good reason. Their front 3.00 × 21 and 4.50 × 18 tires have been used and abused for many years and are still top-of-the-line meats. They offer two fronts and two rears for the hard-pack people:

3.00×21 3E MX—Your basic do-it-all tire that works well on hard-pack. Until Bridgestone and Dunlop became a force, this was the only choice.

3.00×21 3E Perfect Cross—Another jack-of-all-trades tire that is acceptable on hard stuff. They wear a little fast but are a good choice as a universal meat.

4E MX, rear—This is the patented allarounder that doubles as a good baked-terrain tire. Again, enduro riders and off-roaders have been using it for years and still remain faithful.

HT Perfect Cross—This is a lightweight tire that was designed with hard terrain in mind but actually is a universal-type tire. It works well in most soils.

Multi-Cross-Some riders use this for hard-pack. Actually, it's a heavy tire, ideal for enduro use or universal MX. It'll live on a strict diet of baked berms.

PIRELLI: These guys are big-time in Europe, but haven't had much luck in the States.

Hard Cross MT 35 tires—We hear that the front is a decent chunk of rubber and the rear model is close to excellent. Ross Pederson is under contract with them, and the Canadian berserker feels that the MT Hard Cross lineup is competitive with the Bridgestones.

TRELLEBORG: The only real hard tire Trelleborg offers is the 844 Broadmaster. It comes in a rear only, and chances are they won't offer it for sale next year.

(continued on page 72)

TIRE TRACTION **SECRETS**

TIRE CHOICES OF THE

What tires work where .. & why

By the DIRT BIKE Staff



Dunlop K139

Metzeler Perfect Cross (HT)

Hi-Point Red Dot



Pirelli MT32 Sandcross



Bridgestone M39 Soft Terrain













Trelleborg Ten Master

Hi-Point "R" Soft Terrain

Pirelli MT32 Sandcross rear

Bridgestone M22

Dunlop K138/K141 HT

Metzeler Multi Cross

OCTOBER 1984 / DIRT BIKE 55

HOW TO GET THOSE HIDDEN PONIES

By Rick Sieman

Fact: If you're running a main jet two sizes too big, you can expect to lose three to four horsepower at peak revs.

Fact: If your mid-range is jetted one needle jet too large, you can lose five to seven horsepower and as much as 20 percent of your effective torque right where you need

Fact: Just about every motorcycle sold to the off-road public comes jetted too rich, right off the showroom floor.

Sad fact: Most riders never know this and blissfully go about riding their bike, never realizing why they get their doors blown off by what appears to be identical bikes.

Happy fact: By getting your jetting in the ballpark, you can and will probably gain at least several and possibly as much as five horsepower out of the average 250 MXer and maybe more out of an Open bike.

TECHNICAL JARGON THAT SHOULD HELP YOU AT THE NEXT PARTY

Here are some incredibly dry facts that you absolutely must know if you're even considering correcting your jetting problems. Now, we're not going to get into wretched details and air/fuel philosophy here; we just want you to get the most power out of your bike, and we'll therefore dwell on the basics.

While there are a number of different carbs out there, all of them share common things. Here's the deal:

PILOT JET

This piece of brass handles the gas/air mixing chores at low revs and when starting. If your bike is starting hard or running ratty at low revs, here's where you make the changes.

NEEDLE JET/NEEDLE/CARB SLIDE CUTAWAY

All of these pieces have some control over the mid-range power of the bike. Because they all tend to overlap one another on how and when they control the mid-range, they are also the most confusing to the tuner.

MAIN JET

This small piece of brass handles the top end of the rev range, right from about threequarter throttle to full throttle. It's the one jet that most riders are familiar with, and, quite often, the last one they should touch.

VAPORIZER?

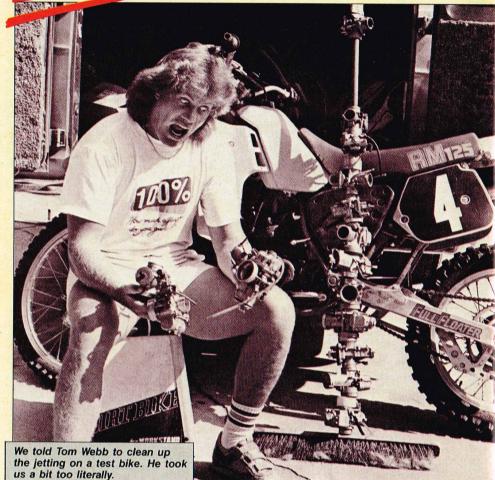
AIR CORRECTION JETS?

Forget it all. While these are valid tuning aids for a sharp carburetion man, their functions are far beyond the range of the normal backyard mechanic, especially when one considers the fact that most people don't even know where or what a needle jet is. The average rider can dramatically improve his bike's performance with basic changes in the pilot, mid and main jet circuit without becoming bewildered by an array of things he doesn't even need to touch.

WHERE AND HOW TO START

If you are thoroughly happy with your engine's performance, then by all means leave the sucker alone. If there's a stum-

The odds are about 4-to-1 that your bike is running slower than it should be



bling, rough, or flat spot anywhere in the rev range, then you have a problem that needs to be corrected.

Take out your spark plug and study it. If it's coal black, you're jetted too rich. If there are signs of the electrode running hot or if the plug shows whitish/gray readings, you're too lean. If the plug has a nice maltbrown/tan color, you should be in the ball-

At this point you have to think, be logical ...almost enough to give you a headache. You must figure out just where and what is off in that carb.

Let's say you have a dark plug. Fine. You know the jetting is rich. But where? Down low? On top? A word of caution: Resist the urge to run out and put in a smaller main jet. That is the very last item you will want to change in your quest for more horsepow-

Hop on the bike, start it, and warm it up thoroughly. Run it through the gears, pay-

ing attention to the sounds being emitted from the exhaust. Let's say the bike pulls cleanly from low revs, then burbles and runs a bit ratty at mid-range and flattens out on top before it should. This should indicate to you that the mid-range is too rich, and, quite possibly, the main jet, too. Before you do anything drastic, though, experiment with the needle position first. Most stock jetted bikes have the needle clip in the center position. Drop the needle lower by two clicks (by raising the clip) and you should see a big difference in the mid-range. If it helps, you're on the right track. If you run out of needle positions and the mid-range still isn't lean enough, you must go to the next smaller needle jet and experiment with needle positions all over again.

FIRST THINGS FIRST

Back up a bit now. Let's say the bike is a poor starter and runs rough at lower revs. You should correct the pilot circuit first before proceeding.

BING

Here's the brass inside a typical Bing carb. All gas has to enter the jetting system through the main jet (see arrow) and exits through the needle jet into the barrel of the carb.

- NEEDLE

MAIN JET

If the bike starts easily when cold, and

blubbers and is hard to start when hot, the

pilot is too rich. If it's hard to start when

cool or cold but starts decently when it's

hot, chances are the pilot is too lean. If the

low-speed performance is in the ballpark but

not quite as smooth as you want it, you can

make minor changes by turning the air screw

Okay. We now have the bike starting well,

running clean off the bottom and fine

through the mid-range. Still confused about

the slide cutaway? Unless DB (or your deal-

er) makes specific recommendations, you

should not have to change the slide number.

Chances are you can dial in the mid-range

satisfactorily with the right needle jet and

You are now ready to proceed to the main

jet. Let's assume you have a 250cc bike with

a 320 main and you feel it's too rich on top

and the bike won't rev out properly. Drop

to a 300 main, put in a fresh plug, and make

Find a flat open area and run the bike

hard at peak revs for at least a minute or

more, preferably in third or fourth gear, un-

der a load. Then, as you swing back to the

pits, chop the throttle and hit the kill but-

Dark equals too rich. Gray or white

equals too lean. Tan and you're home. Keep

going down one main jet at a time until you

get the right coloration, and use a fresh plug

each and every run so you don't get false

After you get the right main, you might

find that there's a slight flat spot in the mid-

range that requires you to move the needle

a bit richer. Remember, all jetting circuits

overlap, and one change will affect the other

circuits to a certain extent.

needle position.

reading.

readings.

a high-speed jetting run.

in or out. In is richer; out is leaner.

side a Mikuni. From carb to carb, the jet holder will vary in shape with Mikunis. but the main and pilot are fully interchangeable. Each series of Mikuni carbs has its own series of needle jets, which is overly complicated, because most of them are the same internally but vary in length.

- NEEDLE

NEEDLE JE

PILOT JET

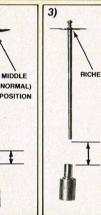
MIKUNI This is what you'll find in-

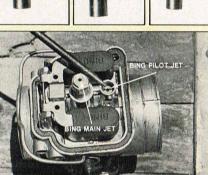
KEIHIN

Jetting changes in the Keihin carb are limited because the needle jet is fixed and cannot be replaced. Also, finding Kei-hin jets is difficult.

NEEDLE MAIN JE

be. Here are three views (exaggerated for clarity) showing how to move the needle from its normal position to lean or richen the mid-range. The needle and needle jet are from a Bing, but the principle is the same with any carb.





NEEDLE SETTINGS

Confused about needle positions? Don't

You're now in the proverbial ballpark, so take it out and put in a hard ten minutes or so. Make the engine work...get it good and hot. Then do another plug check. If it even hints at being a bit lean, go back up one more on the main and do another run. Then give it a murderously hard 30-minute run and make one last visual inspection of the plug, all the while listening for telltale sounds of pinging or detonation.

NOW, TAKE IT OUT AND

RUN IT HARD!

GAS AND OIL MUSTS!

All of your jetting must be done with good gasoline, the proper gas/oil ratio and a mechanically sound engine. Don't even try to jet a clapped-out bike. Never never change gas/oil ratios without making the corresponding jetting changes. If you've been running 20-to-1 and the bike is running right, a 40-to-1 mix will make the bike run richer. The less oil, the more gas. Don't get this backwards.

JETTING WITHOUT CHANGING JETS

One of the things we do here at DB is change the jetting without touching the jets. Let's say we have an enduro bike that's running just fine at 1200 feet above sea level and we head for an enduro that's being run ton. Coast into the pits and quickly yank at 4000 feet. Our current gas/oil ratio is the plug. This should give you an accurate 40-to-1. By going to 32-to-1, or even 20-to-1, you can lean out the entire jetting circuitry a whole bunch.

CONGRATULATIONS. YOU JUST GOT YOUR FREE HORSEPOWER INCREASE

With your bike jetted dead-on, you'll bring out the maximum potential in a stock engine. Most riders are too lazy, too stupid or too frightened to adjust their carb for those free ponies. As long as you use your head, proceed cautiously, and do one step at a time, you can have the best-running "stock" bike in your class. Good luck!

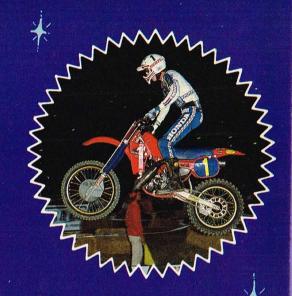


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HOW TO PAS

... and make it stick!

By Gary Bailey

First of all, you have to plan your passing ahead of time. Most guys don't think about trying to pass until they get right up behind another guy, rather than thinking three, four, or five corners ahead about how they're going to set up this guy.

You can't think about passing that far ahead, though, if you just run the groove all the time. You have to know every possible line on the track. You can't say, "Okay, I'm just going to go around this guy on the outside," and then do it without knowing what's over there. Chances are, the groove is the fastest line around the track, and you're not going to go fast in a strange line if you don't know whether that line can even be taken. You have to practice these different lines during *practice* rather than simply resorting to them during the race.

Obviously, certain places on the race track are easier to pass on than other places, and you have to have these spots in the back of your head. You have to think, "If I get a bad start, how am I going to pass these guys?" and that's what you have to be looking for on the race track. If you spend your practice time wisely, you may ride lines that you'll only use to pass people during the race. Don't use your practice time for race time. Use your head.

STORMING THE BERMS

The type of corner is going to dictate how you make the actual pass. Most people try to pass on a bermed corner—more or less a "one-line" corner. The typical mistake is



David Bailey avoids the obvious line of the berm to attempt a pass on Mark Barnett. If you watch the Pros practice, you will see that they try every different line on a track.



Right behind Liles on a rail corner, Hannah already has the throttle on and is aiming for a point in front of the Kawasaki rider. Nailing it this early takes a certain amount of trust-if the rider in front goes down, you'll hit him.

to come flying into the corner and run right up to the guy in front. The problem is, you have to brake hard to keep from hitting him, and while you're braking, he's thinking about accelerating. He's already getting on the gas, and if you pass him, you'll have to do it down the straight, because you blew it in the turn.

It's just like sitting at a traffic light: The first car takes off when the light turns green, but the fourth or fifth car doesn't take off at the same time. It can't. So here you are in this rail berm coming around the corner, and you have the same thing happening you have to wait for the guy in front of you to get going before you get on the gas. The key is to not run up on the guy. Charge in, but plan on braking soon enough to stay two or three bike lengths behind him. Then, as soon as you drop into the berm, hit the throttle whether he's on the gas or not. That way, you can get your drive started at the same time he does, or a little before, and maybe you'll have enough to take him on the inside.

That's a hairball technique, to be sure, and it helps if you know the guy in front of you. If you know he's a decent rider, and you know how he's going to react, you can do it. If you don't know him, or suspect that he might be a squid, leave yourself more than two bike lengths in case he does something wrong. Otherwise you'll ram right into him. Say, if David was in a Supercross, he would do this behind Hannah or Glover or O'Mara, but he's not going to try it behind Joe Schmoe.

Another pass that's least expected is on

Bob Hannah pulls a smooth inside pass on Alan King. He picks a spot right before Alan's foot and plans on using him for a berm if he has to.



HOW TO PASS...



Always be ready for the unexpected. Ricky Johnson was headed for an inside pass when the rider went down, forcing him to shorten a hay bale by a foot.

the outside line. Everybody expects to be passed on the inside, but if you have good outside lines in the back of your head, you can go around people like they're standing still. When Hannah was at his peak, in '78 and '79, he was real good at the outside pass. And the only way you're going to know these outside lines is to find them and practice them during practice.

USE HIM FOR A BERM

The classic inside pass is something you have to commit yourself to. Most guys make the mistake of charging in deep on another guy, and then thinking, "Oh shoot, I shouldn't have done this..." At that point they overbrake and straighten up, and then they lock handlebars. This creates problems for both riders. If you do an inside pass right, you have to be thinking, "I'm gonna use this guy for a berm." It sounds nasty, but you can keep it clean by aiming for a spot inside of his wheels, or on his wheels a little, and that'll keep you leaning over and prevent getting tangled.

This way you can bounce away from him better—you'll probably wind up pushing him to the outside a bit, but you're going to do that anyhow by just being there. You don't want to crash him-just charge in, aim for the wheels, nudge him out a little, and then take off. He might get pushed a little, but at least the two of you aren't lying on the ground.

PRACTICING PASSING

Naturally, it's impossible to practice pass-

should spend the whole time avoiding the main groove in each turn—crisscrossing it every which way, and imagining that you're setting somebody up in each turn. This can be a big help, and you at least learn all the possible lines on that track.

If you have a guy you go riding with all the time, you can help each other and have fun doing it. Usually one guy is faster than the other, and in that case the slow guy should ride in front all the time. This way, if you're faster, stay behind your buddy and work on passing him, and every time you get by, shut off and let him get by, and then do another pass. In so doing, you're working on your passing while the other guy is learning how to block a little, and he's also gradually getting faster because you're pushing him.

I did this with David when he first started riding. If he shut off too early in a turn, I'd come right up and bump him a little, pushing him to go faster. Later on I would ride in front and he would work on passing methe better he got, the more difficult I would make it for him.

Two guys working together can help improve each other, just as long as they don't go out and create a race. In the beginning of this season, David and Johnny O'Mara worked together constantly. They would get out on the practice track, and you could hardly see daylight between them all around the track. And you can see how well it works for them. This is the best way to get used to riding close to other riders, learning how to pass and block, and how to go fast.

POSITIVE THINKING

The key to successful passing is to think



This is what happens if you follow through a turn. No matter how slow the rider in front is going, everybody else is stuck at the same speed. An outside line would be the hot ticket on this turn.

about it all the time. Practice difficult lines and think about passing on them during the week, during practice on raceday, and even during the race. When you're out there on the track and you see a guy way ahead whom you want to pass, set your sights on him and start working on the pass before you're even close to him. Don't wait until you catch up to him and think, "Okay, I'm going to pass him here," because you're not going to do it.

And most importantly, don't follow. You can't pass a guy if you're following him. Set your sights on him, pick the right line for the turn, and get him behind you. And then go for the next guy.

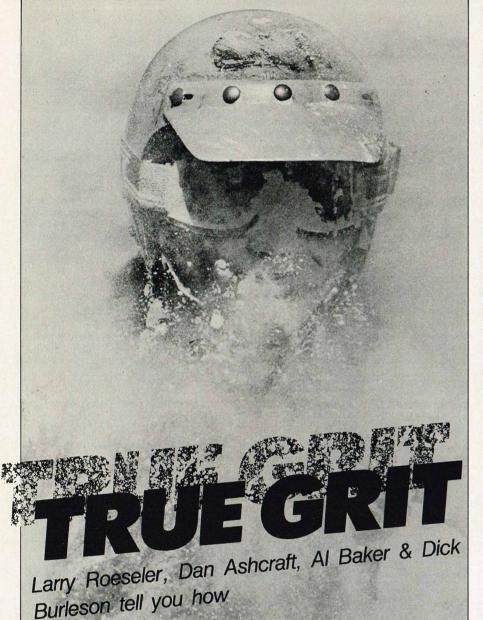
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ing by yourself, but if you're alone, you Even if a race position isn't involved, it's sometimes a good idea to pass just to stay dry!

HOW TO COPE WITH DUST



Burleson tell you how Larry Roeselei

t doesn't matter what part of the coun-Ltry you're from. It doesn't matter how good you are or how fast your bike is. Everyone, at one time or another, has to deal with this evil. Dust. That choking blanket can blind you on a fire road and reduce even top riders to quivering veg-heads. What do you do? Park your scoot and read a book until it clears? Or, do you cope with it and learn to deal with the problem? We asked some of the fastest racers in the business how they handle the dust dilemma.

LARRY ROESELER

Six Days (four golds, two silvers), top American twice, won Baja 1000 four times, Baja 500 five times, Vegas 400 four times, plus hundreds of off-road wins.

"When I know the dust is going to be really bad, I super-prep my goggles. I put Terry goggle oil on the foam, and if I don't have any of that with me, I use Vaseline, grease...whatever. I make the foam act like a filter. I also seal up the lens where it goes into the goggle frame with silicone seal.

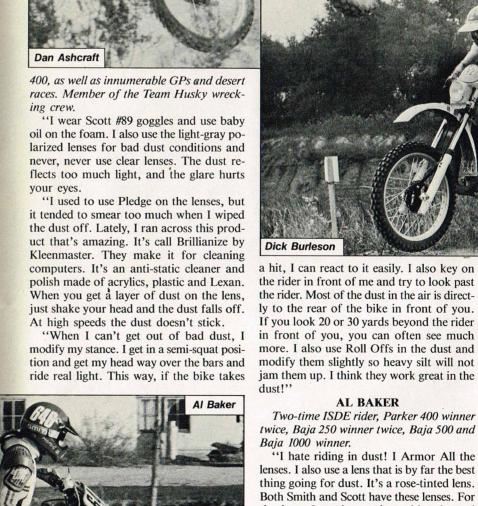
"Then I coat the inside and outside of the lens with Pledge. I give it a few coats and buff it out. This reduces the static electricity, and the dust clings less. I also use the extra-hard Scott lenses, as they act more like glass than plastic.

"I've been accused of riding crazy through blinding dust, but if the dust is real bad, I'll take my chances and get slightly off the course. I'd rather have to deal with rougher ground if I can see. If there's a rider in front of me in bad dust, I'll key off his rear fender, but I'll only do this at lower speeds. I don't even think about this trick at 60-plus.

"I don't wear Roll Offs in the dust, but I do use them in the woods. I don't use tearoffs at all. You're better off making the lens as slippery as you can before the race."

DAN ASHCRAFT

Winner of two Baja 1000 races, two Baja 500s, two Frontier 500s and one Parker





Dick Burleson a hit, I can react to it easily. I also key on the rider in front of me and try to look past the rider. Most of the dust in the air is directly to the rear of the bike in front of you. If you look 20 or 30 yards beyond the rider more. I also use Roll Offs in the dust and modify them slightly so heavy silt will not jam them up. I think they work great in the

AL BAKER

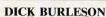
Two-time ISDE rider, Parker 400 winner twice, Baja 250 winner twice, Baja 500 and Baja 1000 winner.

"I hate riding in dust! I Armor All the lenses. I also use a lens that is by far the best thing going for dust. It's a rose-tinted lens. Both Smith and Scott have these lenses. For the desert I use the rose lens with a thermal interior pane. The outer lens is clear; the inner thermal portion is rose-tinted. The clear Lexan outer lens can be wiped with your hand.

"I take a 100-percent cotton cloth and fold it several times, making it a pad. Then I sew it onto the top of my left glove. During the race I can wipe my goggles with the pad on my left hand. Before the event, I Armor All the outer lens so the dust won't stick too badly. The advantage of the rose lens is that it picks up the highlights; anything

lens, and you can pick up shadows, rocks, dropoffs. In the dust it's important to pick up the high and low spots, and that lens does it. Forget using it in the woods; they don't work when you get in shade. They make it too dark. But in the desert they're

"Keying off another rider in blinding dust is really dangerous, and I try not to do it. But when that's the only alternative, I watch the guy's helmet. I also watch for little powder explosions coming off the guy's rear tire. That means there's a hole there, or a rock. Whenever possible in the desert, I always take another trail to stay out of the dust. When following a guy at about the same speed in dust, I make a special effort to get by in the rocks or a sand wash section. Then, when I get back on the powdery stuff. he'll have to eat the dust."



Eight-time National Enduro Champion and winner of far too many titles and races to list.

"You 3-M your eyeballs. No, really, I won't be too hot on this, because I don't do much. I just put up with the dust. Dust doesn't bother my eyes that much. Only when it's blanket-type ridiculous will I wear goggles. For dust runs I don't put any special treatments on my glasses; I just wear

"The actual riding in dust? I use the passthem-as-fast-as-you-can theory. It sounds stupid, but if you're looking at another guy's rear wheel and keying off it, then you're going the same speed as he is. So you're going to be in the dust. The thing to do is go about 108 percent at the time you need to, so you get by before he can screw you up. If you let yourself fall into someone else's pace, then you're trapped! You have to zap them as fast as you can. Then, a) you won't be sucked into their pace, and b) you'll completely demoralize them.

"I try to get off to the side just enough so I can see, and pass them quickly. Once I'm ahead of them, they have the same problem I had. If there's any wind at all, you want to ride on the side the wind is coming from. Remember, the faster you get by, dark stands out. It's a real color-sensitive the less chance they'll crash you out."



determines how fast we can go.

Fear, however, will often pop out of our mental snake pits like a viper and turn us into ineffective riders. At this point, many of us leave the game, never to race again. Some racers tumble onward with the fear. and never go really fast again.

WHAT IS FEAR?

Basically, it's a mental barrier, something that stops us from doing what we used to do. Examples are not hard to come by. A racer is involved in a nasty first-turn pileup and gets spooked when riders get close to him from then on.

Or a racer loses it over a big jump and can never get the confidence to leave the ground again with any commitment. Some riders have a terrible fall on a steep hill and cannot bring themselves to ride down another grade, ever again.

Another racer loops out at the top of an uphill and is shaking and trembling at the thought of attempting another climb. The examples are endless, and we've all experienced them to one degree or another by the time we've spent a few years on the saddle of a dirt bike.

HOW TO BEAT FEAR

The single biggest secret to quelling fear is familiarity. Let me give you a personal example: In the early '70s, I was involved in a horrible crash at Indian Dunes during a normal Sunday motocross. The late great actor Steve McQueen was in my race, and I saw him a few positions in front of me. Thinking it would be fantastic to pass the star of On Any Sunday in front of my friends. I rode like a wildman for a few laps

and actually gained some ground. Then, all of the chance-taking caught up with me, and I badly overshot a high-bermed turn and launched off the track like a projectile. I hit the ground with a sickening thud and earned a trip in the local ambulance.

Results: broken ribs, dislocated shoulder, cracked collarbone, shoulder separation, heavy cuts and bruises, and wrecked knee and ankle. Enough to give me nightmares for months to come.

After healing, I started riding and racing again, rather slowly, but determined to get back to my former speed. When I rode on the Dunes track and came into the turn that had been my undoing, my stomach tightened into a knot, and I forgot how to ride. I just could not take that turn with any speed at all.

After a few weeks of this misery, I felt that I had to do something constructive. The key was in an old book. The Laws of Success by Napolean Hill. I read the section on beating fear over and over, then put the experiment to the test.

The very next day, I went out to the Dunes, filled the gas tank and rode over to the killer turn. It was waiting for me. I removed a section of ribbon after the turn and made a small loop on the track that consisted of the straight leading into the turn, the turn itself and the exit straight. I would then ride through the infield area, get back on the straight and do it all over again.

The first hundred times though that deadly turn were unsettling, at the least. I rode slowly, in second gear, taking a variety of

could ride that slow pace forever without the slightest chance of overshooting the corner.

So, I stepped the pace up a bit...just a bit, mind you. And did another hundred laps on my tiny course. After emptying out one tank, I refilled it, and did it again. All day I rode around that stupid little loop, for what must have been a thousand laps.

By late afternoon I had done it so many times that boredom was my biggest enemy. So I would click the speed up another small notch. As dusk crept in and the late afternoon sunlight glared under my visor, I decided to put in some actual full laps on the

It felt weird. By the time I came around to "the turn," I was actually looking forward to it. By the third or fourth lap, I was stuffing the bike hard through that turn and knew that I had beaten it. Dead tired, I headed for home.

HOW TO APPLY THIS TECHNIQUE TO YOUR FEARS

No matter what your pet fear is, you can beat it into submission by using this technique. If it's a downhill, find a small hill and ride it to death until your boredom level forces you to seek out a tougher hill.

The same with jumps. Start with a baby jump and do it until you can't stand the sight of it. And do it again. And again. Your mind will tell you when to go to a bigger

There's an old slogan: Familiarity breeds contempt. That's the key to beating fear on the race track. It's just like building calluses on your hands. The more you work at it, the tougher your hands get.

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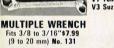
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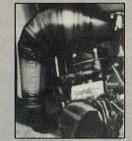


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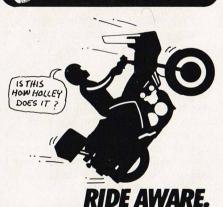
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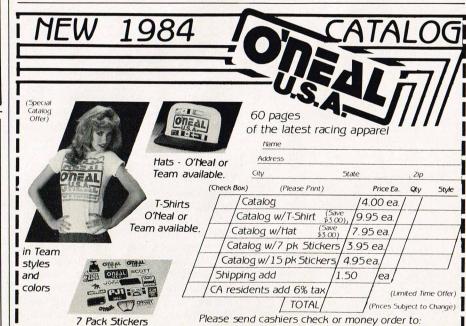
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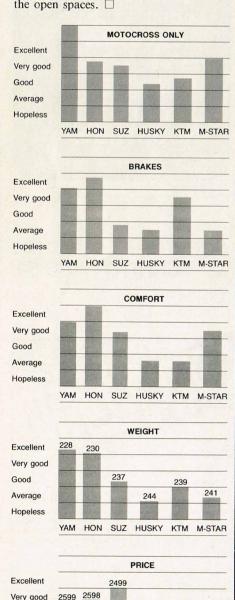
500 SHOOTOUT

(continued from page 49)

a threat. Great forks, a typically strong engine and hang-dog detailing were pieced to dated hardware and a not-so-swell rear end. As far as handling, the M-Star delivers only smiles.

In third position is the Honda. They took a perfectly workable 480, trashed it, and brought out an entirely new bike that's not as good as the year-old model. Yet, on a motocross track the hard-hitting CR can win races.

The bottom three MX-only ratings go to the Suzuki, KTM, and Husky. With more motor and less weight, the RM could be a threat. As it is, it's a good bike for the novice rider, but completely minor league for everyone else. Both the KTM and the Husky are sluggish on a motocross track, lack the quick-handling abilities of the others, and are too tall, too long, and more at home in the open spaces.



MISTER KNOW-IT-ALL

(continued from page 12)

arrester to fit the stock Honda silencer? My girlfriend will be riding my ancient (1980) Kawasaki KDX175. What carbure-

tor modifications do you recommend for

William A. Turner Long Beach, MS

The so-called two head gasket cure was a fiasco. The only way to shape up the CR500 is with a Klemm modified head (See "CR500 Salvage," DB Aug. '84).

At the altitude at which you'll be riding, the stock Keihin is hopeless, because it has a fixed needle jet that cannot be replaced. You must go to an accessory carb. Answer makes a nice aluminum unit for your exhaust.

As for that rat-bag bike your girlfriend will be using: Why don't you just get her a nice new bike, cheapo?

KX KLANKING

Dear Mr. Know-It-All,

I am the proud owner of a 1984 Kawasaki 80. My question is, how can I stiffen the front forks? There is a black strip under my fender from bottoming (I weigh 127 pounds). If there is no way to do this, could you please tell me where I could get a stiffer set of forks?

Lance Keller Denver, CO

Why you are proud of a wretched little minibike is utterly beyond me; however, it's probably all you have, so I'll help. Raise the oil level in the fork tubes to 51/2 inches from the top (with the springs out and the forks collapsed) and use ten-weight oil. If this doesn't stop the bottoming, you can go to the next heavier fork spring, which should be available from your Kawasaki dealer. By the way, at 127 pounds you are too heavy to ride a KX80. Been hitting the burger stands in Denver, Porky?

IN THE BEGINNING...

Dear Mr. Know-It-All,

Today, while flipping through an older issue of Dirt Bike, I started to wonder, when did the first Dirt Bike magazine come out?

So, if you would, please anwer my letter by telling me when the first issue appeared on the magazine stands and what was inside it?

Jeff Kapsalis Shelburne, VT

The first issue of DIRT BIKE hit the newsstands in 1971. In it was a shootout of the 250CZ, Husky and Maico; tests of an MZ, a Bultaco Matador, a Wasp sidehack; articles on how to race, use of the front brake, and a tech article on making your DTI handle better, as well as the usual gaggle of departments and things. It was an immediate success. By the way, if you can get your hands on the first copy, keep it. They are worth \$25 or more now, depending on their condition.

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DB10-4



YAM HON SUZ HUSKY KTM M-STAR

TIRES

(continued from page 55)

SOFT-TRACK TIRES (SAND, LOAM, MUD)

This means exactly that—soft terrain. Sand tracks, muddy slop, and nice loam fit the bill here. Get some of these tires in a hard-pack situation or in rocks, and the knobs will peel off rapidly.

BRIDGESTONE: Happy with its success in the hard-pack rubber, Bridgestone has turned to the soft-terrain world and produced two excellent tires—the M39/M40 series. Both of these are used by top Pros with good results.

DUNLOP: With its 690A front, and K-690A and K-140 rears, Dunlop, like Bridgestone, has had big success on the Pro-level motocross scene. The K-690A front is designed for pure loam, mud or sand only. Get on hard-pack, and you'll skate like Wayne Gretsky and tear off knobs. The new K-140 rear has a more pliable knob than the K-690A, so if conditions demand, it can be used on intermediate terrain.

HI-POINT: For soft terrain Hi-Point has introduced its "R" series tires. They appear to be copies of the Dunlop K-140, and toplevel riders have been campaigning them with good results.

METZELER: Using a standard 3.00×21 MX works for the enduro guys; MXers prefer the Perfect Cross fronts and rears. Their soft-terrain rubber seems to be more in demand from local racers than from racers on the National tour.

PIRELLI: Once again, the Sandcross MT32 series tire is very popular in Europe and is basically an excellent chunk of rubber. This was one of the first soft-only tires

TRELLEBORG: In front rubber, Trelleborg offers either the Deep Grip or the G.P. model. The rear 944 Sandmaster is a popular choice among privateers for a goodworking rear. Again, it's very popular in Europe and virtually unknown here.

INTERMEDIATE-TRACK TIRES (HARD AND SOFT TERRAIN)

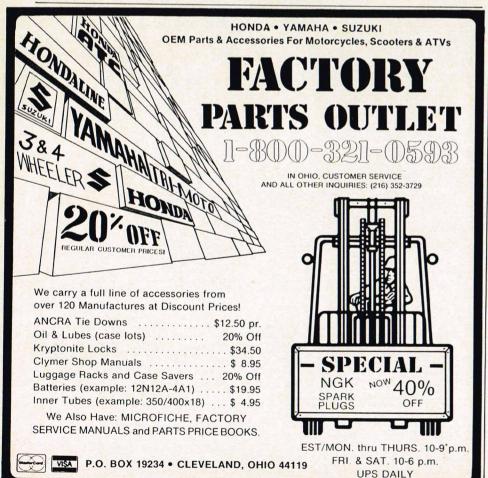
This is your basic universal-class tire, one that will work with reasonable success on all types of terrain.

DUNLOP: Most riders prefer the K-139 or the K-490 front. The K-490 rear is Dunlop's best universal-type tire. Some Pros are using the new K-140s on the back and love them.

HI-POINT: Its most popular do-it-all rubber is the standard Red Dot MX/Enduro tire. There are converts who are using the new "R" series tire for intermediate uses.

METZELER: The standard old 3.00 × 21 3E or 4E MX is the most popular universal front tire on the market. Metzeler also offers the Perfect Cross and the brand-new MXR tires. The MXR seems to work well in tacky situations with some loamy condi-

TRELLEBORG: Most popular is the 744 Ten Master. This is a good all-around tire that holds up well. Up front, the Deep Grip is okay, but the G.P. is preferred. \(\pi\)



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Crash & Burn



The heretofore pleasant relationship between Marvin and Rosalina came to a screeching halt one Sunday afternoon at the Lake Leech Recreation Park. She wanted to water-ski and he wanted to race motocross. Well, just as Marvin was about to cross the finish line for the win, Rosalina lost control of the boat and dragged the ski rope across turn six. The results? A DNF for Marvin and a tweaked prop on the 245-horsepower Merc.

Photo by Joey von K. Lith

