

BICYCLE MOTOCROSS ACTION™

AUGUST 1977 00193 CDC \$1.00

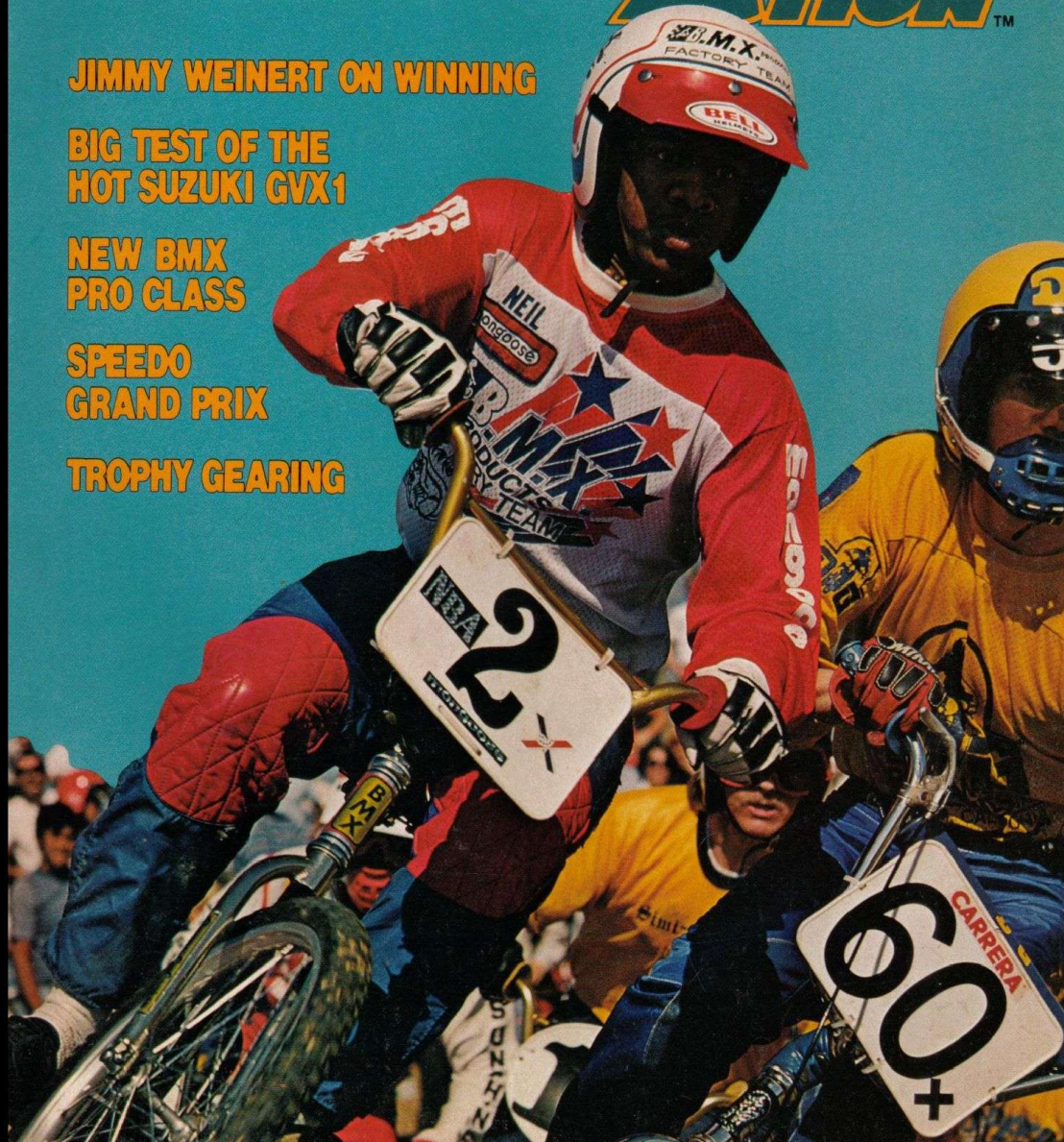
JIMMY WEINERT ON WINNING

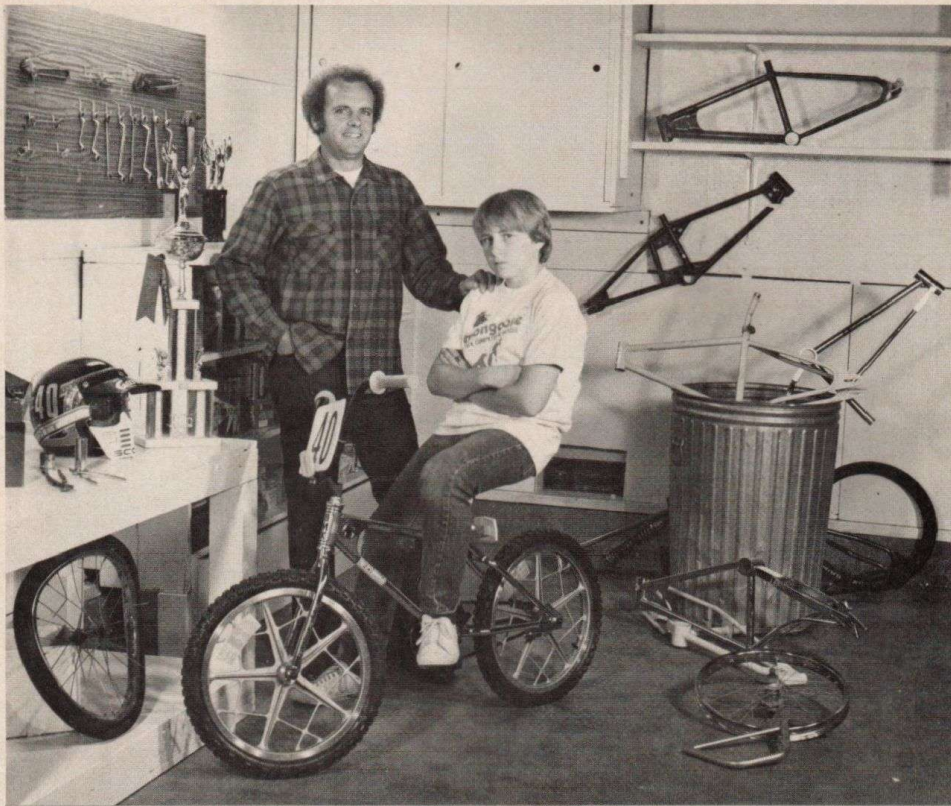
**BIG TEST OF THE
HOT SUZUKI GVX1**

**NEW BMX
PRO CLASS**

**SPEEDO
GRAND PRIX**

TROPHY GEARING





"At last... Race proven dependability."

"I have a Mongoose and it's the greatest bike I've ever raced. I have 4 trophies so far. 2 firsts, 1 second, and 1 third. I have tried just about everything that's around, but they can't take it like the

Mongoose and its Motomags." This letter from Tony K. sums up why there are more Mongooses sold than any other BMX competition bicycle.

mongoose



We're also #1 in accessory sales

B.M.X.
PRODUCTS, INC.
T.M.

FROM THE
MAKERS
OF

MOTOMAG™

BICYCLE
MOTOCROSS
WHEELS

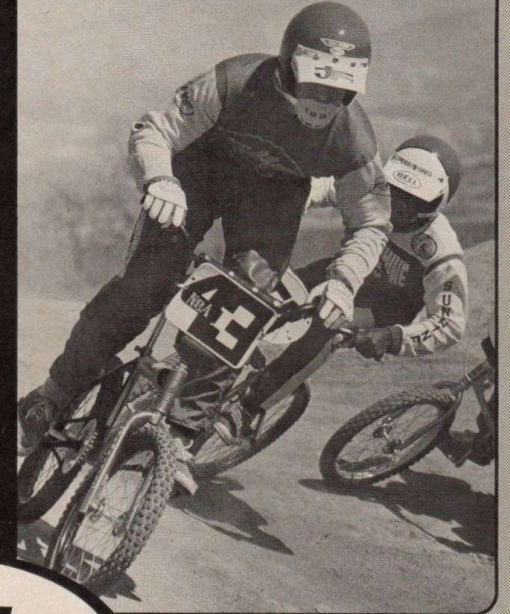
Send \$1.00 for Catalog and Decal.

21061 Superior St. • Chatsworth, Calif. 91311 (213) 341-5455

NBA NATIONAL 1&3

FMF is the name to contend with in BMX Racing. Our "Factory Boys," Scot Breithaupt #1, Jeff Utterbach #3, and Stu Thomsen, 1977 National Points Leader, depend on FMF Products when they race. And they race to win!

Stu Thomsen Sweeps 1977
NBA Super Nationals . . .



FMF

BMX DIVISION

(213) 325-1363

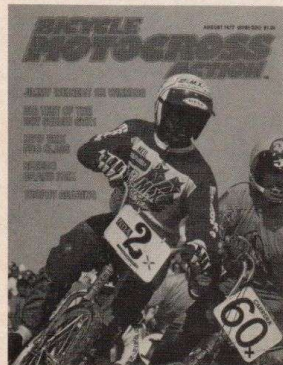
Like all FMF/BMX products, the Jr. Pro and FMF Team Replica frames have been torture tested, race tested, stress tested and just plain "Thrashed!" by the "FMF Factory Boys." At 3 and 3½ pounds, these ultra lightweight frames are constructed of 6061 T6 Aluminum, heat treated and then anodized bright FMF Red, Gold, or New Polished Silver for a chrome-like finish. Be like the "Factory Boys"—be a winner with FMF.

Mail \$1.00 for your FMF/BMX catalog and stickers.

FMF/BMX

25905 BELLE PORTE AVE.
HARBOR CITY, CA 90710





TESTS

- SUZUKI GVX1 WORKS COMPETITION 14
number one son of RM
- PRODUCT ANALYSIS 38
tuf test of the Tuf-Neck

STARS

- BRENT PATTERSON 10
number one son of Speedo

COMPETITION

- SPEEDO GRAND PRIX 26
the Corona Kid rides again

TRAX AND THE OPERATION OF SAME

- NORTHERN CALIFORNIA RAPID TRANSIT DISTRICT 19
where to make haste crookedly
- SANCTIONING ORGANIZATIONS 40
the AMA's and FIM's of BMX

TECHNICAL

- RACE TECH 43
words to impress your buddies with
- GEARING FOR BMX 20
gofast sprocket combinations
- HOT TIPS 32
Bendix hub mods

FEATURES

- MENTAL PREPARATION 6
Kawasaki's number one son speaks of winning
- PRO: PROFESSIONAL RACING ORGANIZATION 22
bucks and BMX

YOUR ORDINARY, EVERYDAY DEPARTMENTS

- EDITORIAL 5
- SCOTOMANIA 8
- PRODUCTS 9
- MUNCH AND CRUNCH 46

On the cover

Neil Bonds (Mongoose) and Jeff Botema (DG) in the thick of it at the Speedo Grand Prix. Photo by Windy ...again.



BOB OSBORN
Publisher/Editor

WINDY
Staff Photographer
SCOT BREITHAUP
Associate Editor

ROB LYNCH
Tech Editor

JACK SCAGNETTI
FLOYD BUSBY
JIMMY WEINERT
Contributing Editors

MICHAEL FAYE
Art Director

YVETTE BARNETT
CHARLOTTE CROSS
Art Production

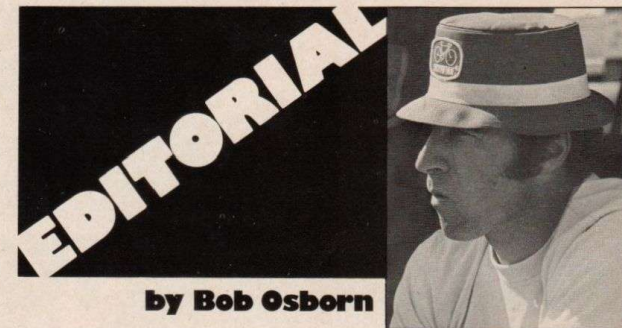
JOHN RISDON
Contributing Artist

JIM STEVENS
Advertising/Marketing Director

MARGARET WARDE
Customer Relations
BICYCLE MOTOCROSS ACTION
P.O. Box 5277
Torrance, CA 90510
213/329-7337

BICYCLE MOTOCROSS ACTION is published bi-monthly by WIZARD PUBLICATIONS, 5222 Arvada Street, Torrance, California 90503. Application to mail at second class rates pending at Torrance, California. Subscriptions \$4.50 for 6 issues (one year). Foreign subscriptions add \$1.00 per year and Canada 50¢ per year for additional postage. Copyright © 1977 by WIZARD PUBLICATIONS. All rights reserved. Nothing in this magazine may be reprinted in whole or part without the express permission of the publisher.

EDITORIAL CONTRIBUTIONS are welcome. All submissions should be accompanied by a self-addressed, stamped envelope. All manuscripts should be typed and double-spaced. Photographs must be 5 x 7 or 8 x 10 glossy black and white or 35mm or larger color slides. Please mark each photo with owner's name and address. WIZARD PUBLICATIONS assumes no responsibility for loss or damage of submitted material. Submission of the manuscript, photographs, etc., to BICYCLE MOTOCROSS ACTION is the author's warranty that the material is in no way an infringement upon the rights of others and that material is released for publication without additional approval. BICYCLE MOTOCROSS ACTION, P.O. Box 5277, Torrance, California 90510.



by **Bob Osborn**

THIS EDITORIAL MAY SAVE YOUR LIFE. READ IT.

What I have to say is heavy. For this I do NOT apologize.

Bicycle motocross racing and jumping motocross bikes are two totally different things.

In bicycle motocross racing, many safeguards are taken. Tracks are designed to be exciting but not dangerous. Reasonable rules of racing are adhered to. Bikes are padded and safe. Racers wear helmets, face masks, gloves, padding, etc.

Jumping motocross bikes is neither supervised nor organized. Very little thought is put into how potentially dangerous the situation might be. Virtually no safety equipment is worn. Everyone is testing their capabilities, and more often than not, exceeding them.

Injuries from organized racing usually involve skinned elbows and knees. Broken bones occur, but rarely.

Injuries from jumping and related unorganized activities (like racing down fire roads) usually begin with broken bones and get worse from there.

In this magazine, especially in the test section, there are photos of people jumping. We feel that with certain bikes, jump-testing adds to a more comprehensive report. But take another look at these jumping shots. In every one the rider is wearing FULL PROTECTIVE GEAR. What does not show in the photos is that the jumps and landing areas were checked out prior to jumping, and that there

were people standing by to insure that nobody got in the way of the jumper.

A 15-year-old BMX racer died last week (as this editorial is written). His name was Mark. He was a friend of mine. His death was NOT the result of injuries sustained in a bicycle motocross race. He died doing the same thing a lot of you guys do all the time—jumping without a helmet. He would have walked away from the crash with no injuries if he had just worn a helmet. But he didn't, and now he's dead. Forever.

Understand that I'm neither encouraging nor discouraging jumping. My boy does it all the time. So do all his friends. But they put some thought into what they're doing. They make sure the jump is not suicidal. When someone is jumping, the rest of them stand by to make sure nobody gets in the way. They try to discourage anyone from jumping who may not be capable. And they wear helmets.

But all you guys know that wearing a crash helmet when you're not racing is un-cool. It's sort of showing off, right? Well, let me tell you something. Dead is un-cool. Brain damage is un-cool. Turning yourself into a vegetable is un-cool. Having a steel plate in your head is un-cool. Being a slobbering idiot the rest of your life is un-cool.

Can you guess what has happened since my boy and his friends

continued on page 34



GET YOUR
MOJO WORKIN'

MENTAL PREPARATION



**WORDSOFWI
SDOMFROMO
NEWHO'SBEE
NTHERE...AC
OUPLEORTH
REETIMES!**

By Jimmy Weinert

1974-75 500CC
NATIONAL CHAMPION

1976 SUPER-SERIES
STADIUM CHAMPION

In addition to holding the 500cc National Championship for two years in a row and the Super-Series Stadium Championship last year on those noisy, smoky things, Jimmy Weinert also markets a primo-quality line of BMX products, and is partners with Jerry Barlett in Laguna Distributors.

What 'James the Jammer' has to say about mental preparation is heavy, 'cause he's been there.

"You have to keep telling yourself that you can be No. 1, and when you attain it, you must try even harder."

Bicycle motocross is growing very rapidly and is fast becoming a serious and professional sport. The technology that has gone into building BMX equipment is growing as fast as the sport itself. With all the dedication that has gone into developing BMX, one has to wonder what it's all about.

I have a lot of respect for these young people who pedal their hearts out each week. I wonder how some of them can race 3 or 4 times a week, all year. In my racing I look forward with anticipation to the three months I have off, but being a professional racer, I have my obligations and I must fulfill them.

I think the key to success in any sport is mental preparation. You have to keep telling yourself that

you can be No. 1, and when you attain it, you must try even harder. It's very important to get the proper rest, eat good foods, and

"I told myself that I was going to win that race and become champion again."

stay in shape. Conditioning plays a very big part in racing. When your body gets tired, so does your brain. But it works both ways—when your brain gets tired, so does your body. So, what's a person to do? I've already mentioned eating, sleeping, and conditioning. When you do these three things, your brain will function perfectly, but you must keep telling yourself that you are the best.

When I go to a motorcycle race I tell myself, "Self, you are the best; you are in the best condition, your motorcycle is perfect, and you're going to win." With an attitude like that, it is very hard to be beaten.

A good example of my mental preparation was when I was trying to win my second 500cc National Championship. We were in Ohio and I had a 100-point advantage. I broke my motorcycle that day, lost the lead, and went down to second position, 30 points from the leader.

For the next week I trained in Columbus, Mississippi, which is a very hot and humid place in the month of September. Then we went to Louisiana. I told myself

that I was going to win that race and become champion again.

There were five riders who could have won the championship: Billy Grossi, Steve Stackable, Pierre Karsmakers, Kent Howerton, and myself. I had to win that race to win the championship.

I went to the race on Sunday with the attitude that I was the best and I was going to win. As it came out, I won the race after two furious motos in 100-degree heat and very high humidity. My training and mental preparation had paid off!

So, whatever you have to give up to be No. 1, or just to be good, it's worth it. Think of yourself as Numero Uno and it will get you there nine times out of ten. •

MOVING?

KEEP YOUR SUBSCRIPTION COMING

NAME _____

OLD ADDRESS _____

OLD CITY _____

OLD STATE AND ZIP _____

NEW ADDRESS _____

NEW CITY _____

NEW STATE AND ZIP _____

NOTIFY US AT LEAST
SIX WEEKS IN ADVANCE.

MAIL TO:
BICYCLE MOTOCROSS ACTION
P.O. BOX 5222
TORRANCE, CA 90510

ARE YOU LEADING A DULL, HUMDRUM EXISTENCE?

ARE THINGS PRETTY SLOW?

ARE YOU IN A RUT?



GET ABOVE IT!

GET INTO BMX AND
GET IT ON WITH A
SUBSCRIPTION TO

BICYCLE MOTOCROSS ACTION

BICYCLE MOTOCROSS ACTION

P.O. Box 5277

Torrance, California 90510

\$4.50 for one full year Check enclosed
Canadian subscriptions add 50¢ per year for additional
postage. Foreign subscriptions add \$1.00.

Name (print) _____

Address _____

City _____

State _____ Zip _____

\$4⁵⁰
**FOR ONE
FULL YEAR
(6 ISSUES)**

SLICK DEALER PLAN AVAILABLE

SCOTOMANIA

by Scot Breithaupt



TRAINING CAMP

Howdy, hello, and welcome to Narlyville, USA.

You are now at this very moment reading the exciting, hi-zoot, zany, zapping 4th issue of the already fabtably famous *BMX Action* magazine. If you're a normal all-American newsstand nomad or just a nitwit novice racer, you've probably read my first three columns.

In my first issue I told you how to go racing as a beginner so you don't get crushed by a 200-pound superjock professional pedal pusher. Issue Number 2 was the 1st Annual Bicycle Motocross Word Contest of *Bicycle Motocross Action*, otherwise known as the 1st Annual BMXWC-BMXA. And in Issue No. 3, I cleaned out my garage ...

Feast your eyes, for you hold the fanatical, farfetched Fourth Issue in your famished little hands.

This time I will tantalize your tangy teenage tastebuds by telling you about the most treacherous, technical training camp designed to twist your riding technique to complete barnstorming, berzerk, bonzai blasts of bursting energy.

I've been racing over six years now and I've tried thousands of different methods of training. A few years back, a mysterious man came to me at the races and said he would train me to be National No. 1. Of course I wanted to be No. 1, so I listened on...a ha, wala, and all the good stuff...Well, this year I got the NBA National No. 1. His training program worked so

well that he has now set up a complete BMX training camp! This BMX wonder wizard is none other than Charlie Narly, owner of Narly's Training Camp. Charlie works with only five riders per year, so it's hard to qualify for his program.

For 1977 his riders will be Perry Kramer, Billy MacIntyre, Stu Thomsen, "Dirt Clod" O'Hare, and yours truly, of course.

Last Saturday was our first day of training for the upcoming summer nationals. I woke up with a thud, rolled off the bed, face first, onto the floor. After I realized I wasn't dreaming, I crawled to the bathroom and soaked my hungover head in the cold shower. It was 7:00 a.m. and I had a feeling that I should have slept in.

Stu and Billy met at my house at 8:00 a.m. so we could be at Perry and Dirt Clod's by 9:00. We were to meet Charlie Narly at the secret training camp at 10:00. It was going to be a long day.

From Perry's we booked over to the local MacDonald's for a gourmet breakfast. I ordered an Egg McMuffin and a pile of fries. The pile of fries ended up being weapons of war in a surprise attack on Perry and Stuart. Dirt Clod blew everyone up with a Big Mac attack. He splattered his leftover Big Mac in the center of the table. Flying pickles and mustard covered all of us. Then Dirt Clod jumped up, claiming victory; little did he know I had part of my Egg McMuffin left. Quickly I advanced

on enemy forces and covered Dirt Clod with egg and ham. All the other guys retreated to the car, then came the all-American MacDonald's manager! He wiped us all out! Needless to say, Dirt and I jammed for the car before all h... broke loose.

The time had come to head towards the training camp. Everyone was nervous, waiting to meet Charlie Narly. We drove up the back roads in case somebody was following us. Thirty minutes later I pulled over in the middle of nowhere. We all unloaded our bikes and headed to the top of the highest hill. This wasn't any ordinary hill because once you reached the top, it was a three-mile course of crazy, creepy bumps and jumps jolting your body into a cringing crinkle of crimson crippled crossbones. Naturally it was a "Narly" track. As we crested the top, we looked for Charlie. He was nowhere to be found.

We started to put on our helmets and all of a sudden, Charlie Narly appeared. Immediately he started in with exercises for us. By the time we were done, we were too tired to ride. He let us rest for a couple of seconds and then started his unique program. Charlie has a neat method of training. It's like hide-'n'-seek. He hides and we try to catch him. It sounds easy cause he's running and we're on bikes. Don't let that fool you because this guy's unreal. He's so fast no one can see him. To make it more exciting, we yell as we chase him. We all line up like the starting of a race, then he disappears. We start yelling, "Get Narly!" and take off. You can hear us race down the hill yelling, "Get Narly!" all the way. In the two years I've been doing this, I've never been able to "Get Narly." One of these days I'm gonna get that dude.

Sometimes Charlie shows up at the races to help us in practice. You can tell he's there 'cause we

continued on page 36

TREASURES OF TANTALIZING TRICKERY

PRODUCTS



OURY BMX GRIPS

These are the same grips used by motorcycle motocross stars around the world, except you don't have to tape the 'throttle' side of your bars anymore since OURY realized that bicycle motocross is hot stuff.

OURY grips are made of the finest surgical rubber to help reduce hand and arm fatigue and blisters. Their BMX grips are an FMF exclusive and come in 7 high zoot, tooty-fruity colors: red, yellow, green, blue, white, black, and orange. Get 'em to match your eyes, or your black and blue marks.

Available at your local, friendly, good-looking FMF dealer, or contact: FMF/BMX, 25905 Belleporte Ave., Harbor City, CA 90710.



ATTACHMENTS AND SEPARATIONS

There are lots of ways to put things together: nuts and bolts, glue, safety wire, welding, cotter pins, chewing gum, duct tape, brazing, screws, the tails of doves, etc. But only one way offers you ease of installation, good looks, and semi-permanence. That's PRESTON PETTY PRODUCTS Tie Straps.

These nylon straps are strong, and as long as you leave them alone, they're permanent. But you can simply snap them off with a pair of wire cutters when you want to; hence, semi-permanent.

What more could you want when a dozen are in a \$1.50 package? Slip on down to your PRESTON PETTY PRODUCTS dealer, or for more information, write: PRESTON PETTY PRODUCTS, INC., P.O. Box 89-BM, 403 North Main Street, Newberg, OR 97132.

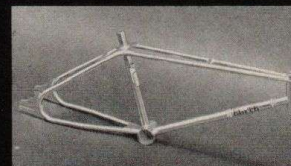


SOME DO, SOME DON'T. DID DO.

Ever had a chain snap on your right off the line? Or maybe halfway down a straight when you're in front? Instant munchilation!

The bald fact is that some chains just don't cut it in bicycle motocross competition. DID chains do. This is the same outfit that manufactures the super-chains for motorcycles.

DID chains are nickel-plated, rust-resistant, and come with either 94 or 112 links plus the good split-clip master link. The exclusive distribution rights for DID bicycle motocross chains in the western states has been sewed up by none other than LAGUNA DISTRIBUTORS. If your local BMX shop doesn't have them, contact: LAGUNA DISTRIBUTORS, 27601 Forbes Rd. #24, Laguna Niguel, CA 92677.



A BEAR OF A FRAME

The PANDA BIKE CO. of Northern California has added a spiffy new frame to its extensive line of bicycle motocross equipment.

The PANDA Elite frame is a double top tube, 4130 chrome-moly job that tips the scales at a shade under 4 pounds. This frame is available with either a one-piece crank hanger or one that will accept 10-speed cotterless cranks. In case you decide to run a rear freewheel, provision has been made to hang your caliper brake in its proper place.

According to PANDA, the Elite's geometry places the rider rearward for superior handling, control, balance, and leg room.

The Elite comes nickel plated with red, white, blue, and black stickies. Dealer inquiries should be sent to: PANDA BIKE COMPANY, 1450 Franquette Ave., Concord, CA 94520.



SCHWINN COMPETITION SCRAMBLER

The big gun of the bicycle industry, namely SCHWINN, tested this bike in its prototype stage for the better part of a year before unleashing it on the public. Top riders and BMX adults all over the U.S. of A. raced, thrashed, and evaluated it. Then SCHWINN ran it through their own extensive testing laboratory.

The result? A super tough, extremely fine handling, competition machine, the most unique feature of which is the hand-brazed, chrome-moly frame. Without going into a bunch of detail, I can tell you that we've raced and thrashed one for over a year now and had absolutely zero problems with it.

Want to check 'em out? Trip on over to your local neighborhood high-zoot SCHWINN Market.



SANORRIFIC NEW GOOSE CERVIX

Waging a never-ending battle against the evil forces of too much weight and too little strength, the good guys at DG PERFORMANCE SPECIALTIES have developed a revolutionary, new, spiffy gooseneck for bicycle motocross competition.

Forged of the exotic space-age alloy Tinsalloy, this job is supposed to be almost as light as a 10-speed gooseneck and yet as strong as any BMX stem available. Ah, such trickiness!

The front-mounting clamp is secured with 4 hardened Allen bolts.

These stems will come in sizes to fit alloy bars or the flared center-piece steel bars.

Available from authorized DG dealers only. For information contact: DG PERFORMANCE SPECIALTIES, 5552 La Palma Ave. East, Anaheim, CA 92806.

P.S. You know we're going to run a Product Analysis on this!

SPEEDO'S NO. 1 MAN

BRENT PATTERSON



KING OF THE 15 YEAR OLD NORCAL HILL

By Osborn and Windy

About a year ago Brent Patterson was riding around with some of his friends. Somebody told them about a BMX race scheduled for that day. They cruised over, Patterson entered, won 1st in his class, and decided that this stuff was a kick!

A star was born. But it wasn't quite that easy. As Patterson started racing regularly, he found that classification at most Northern California tracks was determined by height, weight, and age, like the original Yamaha Gold Cup Series.

He was fourteen at the time, and big. The 'big' put him in the expert

class with the likes of Oakley, Harrigan, and Busby. And those guys are fast.

With a definite power disadvantage, and unwilling to settle for 2nd place finishes, Patterson had to find other ways to win. Hard workouts, planning, style, and determination did the trick.

This early racing up in class probably accounts to a large degree for his current success. In most people's books, the quickest 15-year-olds racing BMX today are Brent Patterson, Tinker Juarez, and Brian Lewis, not necessarily in that order.

Brent has a full factory ride from

Speedo Racing Products which he has earned in spades. His most recent major races read like this:

- NPSA NATIONALS
1st 15 Expert
- MODESTO CITY CHAMPIONSHIPS
1st 15 Expert
- CALIFORNIA CUP
1st 15 Expert
- PEPSI COLA
WEST COAST CHAMPIONSHIPS
1st 15 Expert
- NORCAL CHAMPIONSHIPS
1st 15 Expert
- MONGOOSE GRAND NATIONALS
1st 15 Expert
- SPEEDO GRAN PRIX
1st 15 Expert

This guy can rock 'n roll.





BMXA: What are you runnin' there, Brent?

PATTERSON: A Champion chrome-moly frame, Speedo chrome-moly forks, aluminum rims, Bill Wood front hub...

BMXA: A Bill Wood front hub? With sealed bearings? Good looking hub.

PATTERSON: Campy cranks, Shimano freewheel, Schwinn rear hub, and the new Tough-Bike gooseneck.

BMXA: You mean the Tuf-Neck? What do you think of it?

PATTERSON: I don't know. I just put it on last night.

BMXA: Oh.

PATTERSON: Speedo aluminum handlebars, solid aluminum seat post, Union pedals, and leather pads.

BMXA: Yeah, that's class. Rough-out red leather. Who makes those?

PATTERSON: Speedo.

BMXA: What kind of tires are those?

PATTERSON: Cheng Shin's, the new ones. 20X1.75's.

BMXA: Hey, outstanding. With that knob pattern, those things should be hot. Are they?

PATTERSON: I don't know. I just got 'em last night.

BMXA: What did you finish last year in points?

PATTERSON: Number 14 in NBA (Northern California). But last year we didn't race for points, we raced where the competition was. This year my brother and I are going after NBA National number 1 and 2, and Northern California NBA number 1 and 2.

BMXA: Just how serious are you about BMX?

PATTERSON: Very serious. You

know that monthly thing Mongoose has? Where the top points guy each month who rides a Mongoose gets a hundred dollars? I'm going to ride a Mongoose in the open class for that.

BMXA: That's neat of BMX Products to do that. There's getting to be a little money in bicycle motocross lately. O.K., how do you train for BMX?

PATTERSON: I work out on an exercycle. About five miles a day. Hard. Also on the exercycle I do one mile of starts every day. Plus I ride a lot.

BMXA: What gearing do you run on your race bike?

PATTERSON: I usually run easier gearing than everybody else. Like for this track I've got 44-16 which I think gives a gear number of about 55.

BMXA: Does working out on an exercycle help get your RPM's up to where you can turn the low gears?

PATTERSON: Yeah, that's what I do. I spin it for a while, then I put it on hard for a while, then spin it, and like that.

BMXA: If you were interviewing you, what would you ask about? How's your love life? What do you do when you're not racing BMX?

PATTERSON: Uh...the other sports I like are water skiing and motorcycles. I want to start racing motorcycles.

BMXA: When you start racing motorcycles, are you going to drop BMX, or do both, or what?

PATTERSON: Probably after next year I'm going to...uh...just drop BMX. No...I don't know...I don't know.

BMXA: Have you noticed that all kinds of guys quit BMX for motorcycles and now...

PATTERSON: Yeah, now they're back to BMX. I know.

BMXA: How about a verbal thing on how you handle a race?

PATTERSON: Well, first I memorize the starter so when I'm on the line I know exactly how he's going to start the race. Then before the race I plan spots where if I'm in second, I can pass without falling.

BMXA: How about describing your sponsorship from Speedo. Just exactly what do you get?

PATTERSON: Everything. Bikes, helmets, jerseys, pads, entry fees, travel costs. Like this weekend, we came down Friday night so we could practice on the track Saturday and be ready for the race on Sunday.

BMXA: Where are you staying?

PATTERSON: Six Pence Inn.

BMXA: Who's paying for that?

PATTERSON: Speedo. Plus they buy our lunches and dinners and everything.

BMXA: So what do you think of Speedo? Are they grouches? Are they pretty neat?

PATTERSON: They're terrific. They have good stuff, too. Look at the welding. I think it's better than all the other forks.

BMXA: That's about it, Brent. You want to say howdy to anybody out there?

PATTERSON: Hi Beth.

BMXA: Who's Beth?

PATTERSON: Well...uh.....

It seems that a lot of BMX racers are thinking about someday racing motorcycles. But not just yet...not just yet. •



SUZUKI GVX1 WORKS COMPETITION

Mello Yellow? More Like Suzuki's Bazooka!



Eisenacher and Suzuki, motoflying to glory and a 1st place trophy.

Story & Photos
By Bob Osborn

Once each year since 1974 a motocross bicycle has been introduced by a major Japanese motorcycle manufacturer.

Yamaha was first with the Moto-Bike, a fully-suspended bicycle that was a blast to ride but prone to tweaks and sheared crank pins, heavy, and generally boggish in a bicycle motocross race.

The next Japanese biggie to jump in was Kawasaki. These bikes sported rear shocks, an all-aluminum heat-treated frame, and a fake shock—triple clamp assembly instead of front forks. What with all this suspension paraphernalia, the Kaw just didn't get it when it came to flat out motocross racing.

Twinkle-toeing into the picture late in 1976 came the Suzuki Works Competition Bicycle—the GVX1. Besides how to name a bike so it sounds faster than anything in the world, had Suzuki learned anything from its predecessors? Well, hold your Fruit-of-the-Looms, young heroes, 'cause this is a different breed of Japanese cat!

The new Suzuki motocross bike is not only delightful to your eyeballs, but it fairly blossoms with trickiness.

The Aspen Yellow frame is chrome-moly with deeply fishtailed space-welded double gussets at the steering head. The dropouts are long-slotted for switching sprockets without changing the



length of your chain. There is a cross tube between the seat stays that can be drilled to accept a caliper brake for freewheel conversion.

Phront Phorx are tubular chrome-moly jobs that curve forward to provide 1 1/2 inches of rake, absolutely perfect-garcia when combined with the frame's 73-degree steering head angle. Those guys at Suzuki did their homework. Color is the same mellow yellow as the frame and has the words 'SUZUKI WORKS BMX' emblazoned down the front. Neat. Very motocross.

The frame and fork combination will absorb wondrous amounts of thrashing, are spot-on in the steering geometry and weight distribu-

tion departments, and look mucho hot. The only possible bug in the soup is the 5-pound 6-ounce frame weight which could have been reduced a pound or so. Had Suzuki done this, they would have sacrificed some durability, so it's only a very tiny bug, and because very tiny bugs don't eat much, your soup (or frame, in this case) will last a lot longer.

Cranks are 6 1/2-inch chrome Takagis, heat-treated, of course. Pedals are the chrome KKTs with chrome-moly shafts. Both cranks and pedals are super-tough BMX stuff.

Tires are 20X2.125 Grippers with the Goodyear tread pattern. Good shoes. Rims are Araya heavy-duty steel with 105-gauge spokes.

Are you getting the picture yet? The GVX1 was built to do anything that you've got enough nerve or dumb to try, and still be in good shape when the smoke clears.

A reduction of the blinding speeds attained during motocross competition is accomplished with a Shimano coaster brake.

The gear combination supplied with the Suzuki is 40-18 which gives the amazing gear number of 44.4. With this gearing you could ride up a telephone pole if you could get enough traction. For motocross it's way too low unless you can turn 20,000 rumps (RPMs) with your legs. Suzuki didn't blow this, it's part of the CPSC requirements for a street legal bike. Sort of. Anyway, change the back



BMXA: Tell me, Mr. Jones...have you leaped any tall buildings lately?
MR. JONES: Not really, just a few medium-sized ones to keep in shape.



Mello Yellow, Japan's finest BMX bicycle. This is one quivering mass of racing machinery. It'll take you where you want to go. Posthaste!



Ike and Suzook at the Western States Championships (Morris), doing some trail-blazing for the 16 novice class.



Classic style through powder. The Suzuki is quick, accurate, and responsive.

It all comes down to this moment. The split second when you realize you're riding one of the finest BMX machines available.



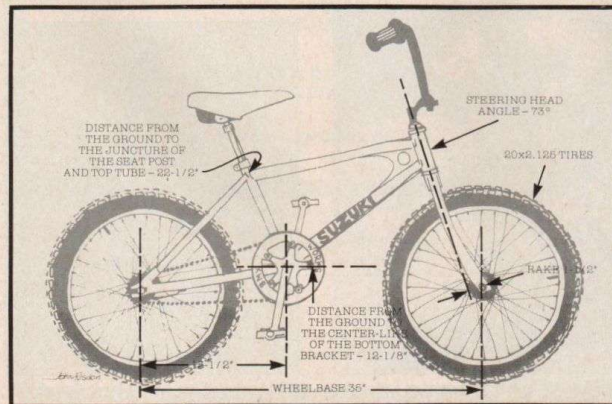
Bulletproof Takagi 6 1/2-inch cranks, KKT pedals, and a black 'Works' chain guard that is really more for the street than motocross.



The far turn at Simi. Come in hard, hit the mid-turn jump at its nearest edge, kick out the rear, aim the front down the coming straight, and drive hard. Another fabtabulous DeCoster move executed with much class by R.L.



Suzuki's phront phorx are chrome-moly, tubular jobs. Steering head angle, rake, and the resulting trail were spot-on for quick, accurate steering.



sprocket to something like a 14 and you'll be at least close to competition gearing. The chain guard on the front sprocket looks good, but according to Don 'Bowlegged' Jones, is kind of 'streey.'

There were no complaints from our test riders about the seat. However, the bars and gooseneck were subjected to a bit of verbal abuse. The Sakae gooseneck is not as bulletproof as an Ashtabula or one of the double-clamp jobs, and the handlebars are too narrow and too low for anybody much over 12 years old. Also, the angle of the grip area does not allow for maximum body leverage when



'Long Gone' Eisenacher, jamming to a 1st place trophy on the GVX1. Yarnell Track.



You can always recognize Yarnell by the gnarly track surface, a fair amount of which the Suzuki just spread over the countryside when Eisenacher got a little sideways.

pulling into the pedals. (Bowlegged Jones rated them 'doofy.'). Try some DG or Two Wheeler's bars or BMX Products alloy bars. The test team, including Jones, rated the grips 'cool.'

Cost of this bike is in the neighborhood of 150 dollars, and I should probably stick in here somewhere that the Suzuki GVX1 Works Competition Bicycle (whew!) is supplied with the various and sundry reflectors that make it street legal as per the edicts of the CPSC. But they are easily removed when trimming down for competition.

And speaking of competition, folks, let's get on with how this bright and beautiful bicycle boogies in a berserk, blistering, bouncy BMX blowout. (Eat your heart out, Scot.)

The combination of a short wheelbase and 73-degree steering head angle produced some very exciting moments for our almost fearless test team during the getting-used-to-the-beast part of testing. Going over the jumps the handlebars seemed to have an attraction for belt buckles, the steering was QUICK, and going through fast turns the rear wheel was not at all content with just following.

After a number of end-swappers and semi-loopers, the mighty BMXA test team began adjusting to the Suzuki's eccentricities. Once they had it wired, the GVX1 turned

continued on page 39

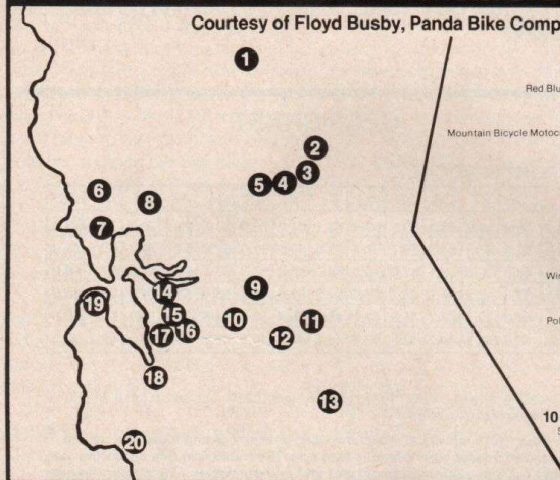


What style! What grace! More Don Jones tall building leaping.

THE NORTHERN CALIFORNIA RAPID TRANSIT DISTRICT

WHERE TO RACE IN THE NON-DISNEYLAND HALF OF THE STATE

Courtesy of Floyd Busby, Panda Bike Company, Concord, California



- | | |
|---|---|
| 1 RED BLUFF
Red Bluff BMX Raceway (Independent)
916/527-5652 | 11 OAKDALE
Pioneer Arena (NBA)
209/869-1457 |
| 2 GRASS VALLEY
Mountain Bicycle Motocross Association (Independent)
916/272-1118 | 12 MODESTO
Kings BMX Raceway (NBA)
209/527-2910 |
| 3 AUBURN
All American BMX
916/782-8387 | 13 MERCED
Merced BMX (BMX)
209/383-0579 |
| 4 ROSEVILLE
All American BMX
916/782-8387 | 14 CONCORD
Concord BMX (Independent)
415/671-3325 |
| 5 SACRAMENTO
McGills Cycle Park | 15 RHEEM
Carroll Ranch (NBA)
415/686-0581 |
| 6 WINDSOR
Windsor Lions Club (Independent)
707/528-2250 | 16 LIVERMORE
Livermore BMX (NPSA)
415/443-1187 |
| 7 VALLEJO
Police Athletic League BMX Track
707/552-1573 | 17 HAYWARD
Hayward BMX (NPSA) |
| 8 NAPA | 18 SAN JOSE
Hyman Park (Independent) |
| 9 STOCKTON
Delta BMX Raceway (NBA)
209/466-1624 | 19 SAN FRANCISCO
McLaren Park BMX Track (Independent)
415/865-1384 |
| 10 SAND HILL RANCH
Sand Hill BMX Raceway (NPSA)
415/687-2159 | 20 APTOS |

PEDDLEPOWER SR FRAME

FROM THE MASTERS OF BMX INNOVATION

Three years of race torture testing on the hottest California tracks went into the perfection of the new PEDDLEPOWER SR FRAME

AEROSPACE DESIGN • 4130 C/M
LIGHTWEIGHT • RUGGED

Quality competition products since BMX began

Please send me a package of stickers and more information to:

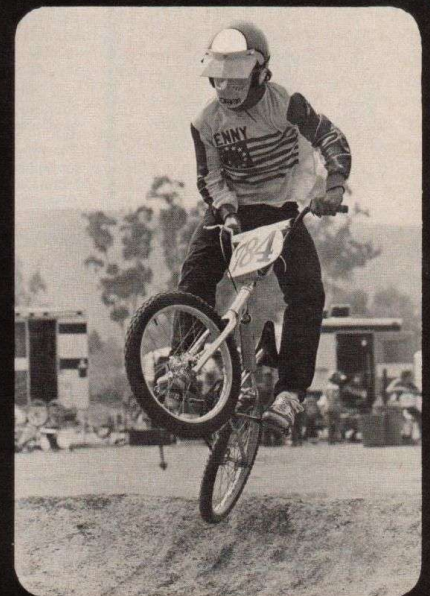
Enclosed is \$1.00 to cover shipping and handling

Name _____

Address _____

City _____ State _____ Zip _____

PEDDLEPOWER COMPETITION PRODUCTS
325 E. Grove, Orange, Ca. 92665



GEARING for BMX

This is a long, dull article with no photos. Don't read... unless you want to go faster than greased moose poop on a BMX track!

Yes, friends, we are gathered once again to explore the mysteries of leverage, inertia, muscular capabilities, gear ratios, and mostly how to novocain all your compo at the next BMX race.

Last month the most factory magazine in the world gave you the total nitty-gritty on selecting cranks. That was step number one in converting your energy and muscular capabilities into the most blinding speed possible on a motocross track. Step number two is picking your hottest sprocket combination.

Primo gearing is nothing more than the right balance between something that will get you off the line like an explosion, and down the straights totally flat-out.

If you gear just for the start, everybody will dust you in the first straight. If you gear just for the straights, you'll be left cold and lonesome at the gate. The secret word is COMPROMISE—a single gear combination that will come close to solving both objectives.

Let's start with some ballpark gear combinations, and then, through race testing, tune them exactly to your capabilities and the crank length you decided on.

All you really little buggers can start with something around a 41-16 (51.2 on the chart).

8 to 10's try a 40-15 (53.3 on the chart).

11 and 12-year-olds, maybe a 44-16 (55.0).

Everybody over 12 start with a gear combination somewhere around 41-14 (58.6).

You can get these same gear ratios using larger sprockets, but if you stick to the smaller ones, you will shave off a little weight in the chain and sprockets.

		FRONT SPROCKET												
		36	37	38	39	40	41	42	43	44	45	46	47	48
REAR SPROCKET	13	55.4	56.9	58.5	60.0	61.5	63.1	64.6	66.2	67.7	69.2	70.8	72.3	73.8
	14	51.4	52.8	54.3	55.7	57.1	58.6	60.0	61.4	62.8	64.3	65.7	67.1	68.6
	15	48.0	49.3	50.7	52.0	53.3	54.7	56.0	57.3	58.7	60.0	61.3	62.7	64.0
	16	45.0	46.2	47.5	48.7	50.0	51.2	52.5	53.7	55.0	56.2	57.5	58.7	60.0
	17	42.3	43.5	44.7	45.9	47.0	48.2	49.4	50.6	51.8	52.9	54.1	55.3	56.5
18	40.0	41.1	42.2	43.3	44.4	45.6	46.7	47.8	48.9	50.0	51.1	52.2	53.3	

You probably already know how to use this gear chart, but just in case you don't, here's an easy explanation:

Find your front sprocket size and follow that column down to where it crosses the row for your rear sprocket size. The number in this box is the gear number for that combination of front and rear sprockets. The higher the gear number, the harder the gearing. Got it?

Now, for you guys who already know how to use a gear chart, or always want to know why a thing works the way it does, here's a harder explanation:

Let's use a 40-14 sprocket combination as an example. 40 divided by 14 equals 2.857. This means that if you're running 40-14 gearing, your gear ratio is 2.857, or to say it another way, every time your cranks pass through one full revolution, your back wheel will complete 2.857 revolutions.

You with me so far? Now if we multiply 2.857 by 20 inches (the diameter of your rear tire), we come up with 57.1. How about that? Now you know where gear numbers come from.

For you mathematical wizards, let's take this mess one step further. If we multiply 57.1 by pi (3.14), we get 179 point something, which is the distance in inches your bike will travel with one full revolution of the crank if you have 40-14 gearing and 20-inch tires. Pretty fascinating, huh? Hey...wake up!

See if you can hook your old man into going with you to your favorite flat track for some test riding. Pick a day when there are no races. Take some extra sprockets and your toolbox. The best deal here is to take the next larger and next smaller sprockets for both the front and rear. And take your safety gear, 'cause you're going to be ripping.

When you get there, take a couple of hot laps. Wear your safety gear and really get it on, just like you were racing. You and your father pay attention to your leg ac-

tion on the straights. Pay special attention at about the two-thirds point down the longest straight.

When you've done this, get together with your dad and the two of you cuss and discuss how your gearing looked and felt. When you hit the two-thirds point on the longest straight, you should have been pedaling very close to your maximum RPM's without over-pedaling.

If you guys decide that your gearing was way too hard to accomplish this, change to a one-tooth-larger back sprocket. If you

peaked way back by the start of the straight and were over-pedaling the rest of the way, change to a one-tooth-smaller back sprocket.

Changing rear sprockets is rough tuning. Changing front sprockets is fine tuning. The reason for this is that one tooth on the rear sprocket is approximately equal to three teeth on the front. When you start your fine tuning with front sprockets, you'll find out why a crank spider is so neat—you don't have to pull the cranks every time you change the sprocket.

When you were smoking around the track, if your gearing was fairly close, don't mess with the rear sprocket. Get right into fine tuning. If your gearing was a little too hard to reach max RPM's at the two-thirds point, drop one tooth on the front sprocket. If you peaked before the two-thirds point, add one tooth up front.

The reason for the two-thirds distance is that at this point in a moto you should be wound to the max. After passing this point, you will have to back off some for the next turn. Two-thirds of the way down the longest straight is the most wide-open, flat-out place on the track. That's where you need your top end.

So, make the changes and try it again until you are squeezing the maximum possible speed out of your body and bike at that two-thirds point. When you've accomplished this, you are very close to your primo gearing for a flat track. The only modification to this basic flat track gearing will concern starting.

For this you need a race. Best way to go here is to wait for a regularly scheduled motocross event.

Once again, you need someone to observe what you're doing so you can get two opinions (two heads are better than one).

O.K., you're on the line for your moto and your dad is somewhere close to observe what happens. Race your moto and then get with your old man to talk things over. If you were dusted at the start, but

passed a few people later in the moto, you're probably geared slightly high. Drop one tooth on the front sprocket. If you blazed off the line only to be passed by a bunch of guys in the straights, you're probably geared too low. Add one tooth to the front sprocket.

Now you're really down to the nitty-gritty of fine tuning your gearing. Keep in mind that the start is the most important part of any BMX race. Best over-all gearing will be a compromise between best starting gears and best top end gears. But, because the starts are so important, you should consider this when you determine your final gear combination. lean about one tooth on the front sprocket towards a better starting combination (slightly lower gearing).

Now you should have your own personal primo gearing for most flat tracks. Every track has its individual characteristics and you may have to pick up or drop a tooth for some tracks, but I doubt it. If you do, make the change on your front sprocket, because changing

even one tooth on the rear changes your inches traveled a bunch.

Once your best flat track gearing is determined, downhill tracks are easy. Change to a front sprocket with one or at the most two more teeth.

Unless you have the bucks to keep a huge selection of front sprockets in your toolbox, you're going to need a gear chart to keep with you when you have to figure out how to get the right gearing from the sprockets on hand. If you don't want to get this copy of *BICYCLE MOTOCROSS ACTION* all greasy, drop a line to:

RASCAL PRODUCTS
P.O. Box 770
Gardena, CA 90247.

Mention the most factory magazine in the world and they'll send you a gear chart that's portable. While you're at it, you might as well ask for their brochure of BMX accessories.

That's it, young heroes. Go out there and tear 'em up.

Webco has been in the high performance business since 1954, and we're here to stay. That's an important fact to consider when buying any product intended for rough treatment... whether it's a seat post or a complete moto cross bicycle.

Webco does more than simply make parts. We are test and development experts; and when we design and build anything, it is the best of its kind. Our chromoly moto cross



We back our bikes with 20 years of racing

bike, the *Ultimate*, is the lightest and strongest machine you can buy at an economical price. Racers who win on Webco bikes ride standard production equipment; not fragile featherweight prototypes that need constant rebuilding. Webco's *Ultimate* is built to take it.

The *Ultimate* has everything you expect in a racing bike—track geometry, nimble handling, long cranks, safety pads—plus optional Webco Mag wheels and the new Webco chromoly fork. Send \$1 for our latest catalog of bikes and related high performance accessories.



The *Ultimate*

WEBCO MOTO CROSS SPECIALISTS
BOX 429 · VENICE, CALIF. 90291 (213) 599-7724

PRO: Professional PRO: Racing PRO: Organization

THE NEWEST PROFESSION IN THE WORLD

(Most photos shot at the NBA Western States Championships, Morris Track, Bakersfield, California)



All-around neat guy Bobby Encinas (Shimano), NBA SoCal #1 plate holder.



'Earthquake' Stu Thompson (FMF), 1977 NBA Western States Champion.



'The Pomona Cowboy' Bob Hadley (Adicks), Vice Pres. of PRO.

By the BMXA FACTORY Staff

Professional BMX racing has arrived. That's right, sport fans, there is gradually getting to be some money to be made in bicycle motocross racing.

For the last few years most of the sanctioning organizations have been awarding savings bonds to their yearly top-point finishers. Monthly contingencies are now being given by manufacturers like BMX Products, R&R Racing Products, and Tuff-Wheels (Skyway) for point leaders who race their equipment.

Lately the NBA has renamed the 15-and-over open class. It is now known as the Pro Class, and for those racers signing up, there is a 100-percent payback of entry fees to the top three finishers. At small races, a Pro Class winner can take home up to 15 or 20 dollars. At large races, this 100-percent payback can run up to 80 or a 100 bucks for 1st, maybe 40 or 50 for 2nd, and around 25 for 3rd. Not too bad.

Well now, sure as bears poop in the forest, if you have a profes-

Jimmy Weinert sponsored David Clinton, whuppin' it on. ►





WAHOO! 'The Corona Kid,' Kevin McNeal (Torker). Kevin's accomplishments include winning almost every annual major race there is at one time or another, never remembering to bring a number plate, and forgetting his jersey most of the time. Very unprofessional, McNeal.



Wild and wooly Coy Hudson (Wheels N' Things/Centurion). It's guys like Coy and the other members of PRO that make this sport as competitive, exciting, and lightning-paced as it is.



National hero David Clinton (Jimmy Weinert), past NBA #1 national plate holder, current SoCal points leader.

sional class, it won't be too long before you have a professional organization.

As usually happens, the Southern California open class racers have hole-shot everyone by forming the first Professional Racing Organization for bicycle motocrossers. Amazing as it sounds, they are calling their organization PRO. (Potentially Radical Ostriches? Partially Retarded Orangutans?)

This organization was conceived and is operated by BMX racers only. No sponsors, no parents, no adults. Just the racers themselves. Right there you gotta figure they'll probably accomplish a bunch.

PRO membership in the future will be determined by application, qualifications, and a vote. The charter membership reads like the *Who's Who of BMX Racing*. All are Pro Class riders and 15 years old and up. These guys are the stars, the trend-setters in bicycle moto-



Son of a gun, even the pros unload once in a while. Byron Friday (Shimano) and his trusty new Red Line prototype decided to sit this dance out.

cross, the best of the best, the factory racers.

According to the head honcho of PRO, Scot 'A Finger in Every Pie' Breithaupt, the aims of this new organization go something like this:

- To establish a Pro Class with 100% payback at all sanctioned races and a Pro Class with purses at national level events.
- To separate the professional racers from the amateur classes.
- To improve the situation of PRO racers as relates to sponsorships, advertising, and contingencies.
- To conduct themselves in a professional manner.
- To learn some business common sense.
- To set a good example for the younger racers.
- To upgrade the sport of bicycle motocross.

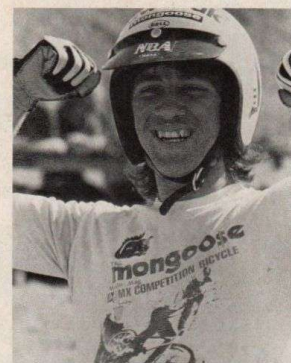
continued on page 45



The youngest PRO member, 15-year-old Stinker...uh...Tinker Juarez (Mongoose).

The Founding Fathers of PRO

- Scot Breithaupt (FMF), President
- Bob Hadley (Addicks), Vice President
- Bill Wouda (DG)
- Bill Macintyre (Littlejohn)
- Jeff Bottema (DG)
- Stu Thompson (FMF)
- Perry Kramer (Mongoose)
- Brian Curnell (Mongoose)
- Leo Green (Torker)
- Kevin McNeal (Torker)
- Tinker Juarez (Mongoose)
- Coy Hudson (Wheels N' Things)
- Ted Guilmette (Suzuki)
- Bobby Encinas (Shimano)
- Byron Friday (Shimano)
- John George (Shimano)
- David Clinton (Jimmy Weinert)
- Harry Leary (JMC)
- Dennis Dain
- Neil Bonds (Mongoose)



It's ol' crook-tooth, Brian Curnell (Mongoose), displaying his rippling-muscle body for all the world to enjoy and try to copy. But don't be scared, even our skinny editor could beat him up if he wanted to.

It's himself, one of the all-time all-timers, Jeffrey Bottema (DG). ►



Lean, mean Leo Green (Torker). Leo goes only two ways: fastly and furiously.



Handsome devil, built like a Sherman tank, Harry Leary (JMC).



Hey, Pa. Ain't that the Corona Kid? An' he brung hiz jersey! Land o' Goshen! Ah wonder if'n he 'membered hiz number plate?





Speedo
Racing Products
presents...

THE SPEEDO GRAND PRIX

starring
Bill Harry, Jeff Bottema, Kevin McNeal, and a cast of thousands
DIRECTED BY CURRAN/TROY

Filmed live in the beautiful La Mirada Regional County Park, La Mirada, California

"An exciting and exhilarating display of spectacular racing..."

Charles Champion
BMX TIMES

"After earlier production problems, in the form of a torrential downpour, the show turned into a highly entertaining and competitive event well worth waiting for..."

Billy Bermshot
BICYCLE BULLETIN

"...outrageous, fantastic, entertaining..."

Rex Ride
CINCINNATI
COMPETITION NEWS

The Speedo Co. premiered with a colossal production in their first attempt at a major attraction. The complimentary critic reviews were well deserved.

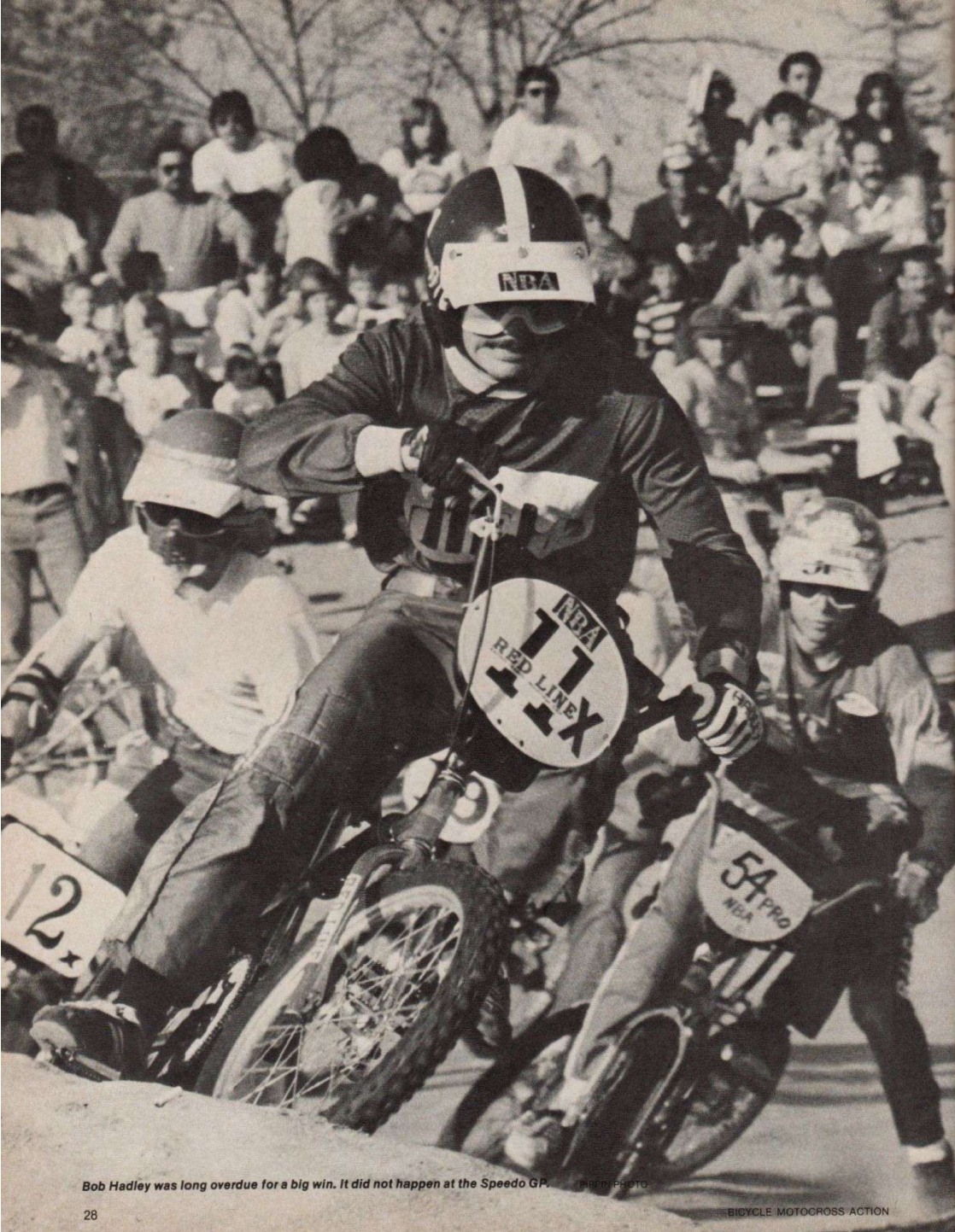
Executive producer, Vern Stewart of Speedo, was excited after the show. "It was fantastic. I plan to produce another one in the Northern California area sometime in mid '77," said the jubilant Stewart.

Due to a cast of over 600 racers, the directors, Curran and Troy, were forced to cut the show short. With nightfall rapidly approaching, only two preliminary motos were complete when they went into the semi and main events. This was a disappointment to many racers who missed their third chance to push their way into the mains and fame and fortune.

There was also confusion as to why the semi and main features



Bottema was HOTHOTHOT!



Bob Hadley was long overdue for a big win. It did not happen at the Speedo GP.

PIPPIN PHOTO



Yessir, sports fans, BMX is getting to be a big deal. This is just part of the over-2000 people who came to Speedo's GP.



You don't mess around with Jim. At least now when he's calling the finish and waving the red and white tablecloth checkered flag, James D. (Marketing/Advertising, BMXA) was hooked into cycling instead of pushing magazines.



Wheels N'Things/Centurion-sponsored Jeff Schiedmer dusted everyone in the 7-year-old main except Gary Renteria (DG).



Open class riders Scot Breithaupt and Neil Bonds stare in open-mouth amazement as 15-year-old Tinker Juarez wheelies by.

PIPPIN PHOTO



Couldn't identify this guy, but he's got one fine set of threads.



JMC's wildman, Harry Leary, hanging it out in the first berm.



Sr. sidehack winners, Ledbetter and Chastain were bogged in 2nd place when this moto-photo was snapped.



Some heavy dudes showed up with trick machines in case there was a push-worm class.

the middle of a public park. The Parks and Recreation involvement was evident in that the safety aspects of the race were unbeatable. The entire program was supervised by trained medics. Any accidents or mishaps were immediately attended to by these medics or a representative of the staff. This was appreciated by participants and spectators alike.

A fascinating aspect of this production was the unusually high amount of competitive action throughout the entire program.

The main feature proved to be a perfect climax as the unknown un-
continued on page 44



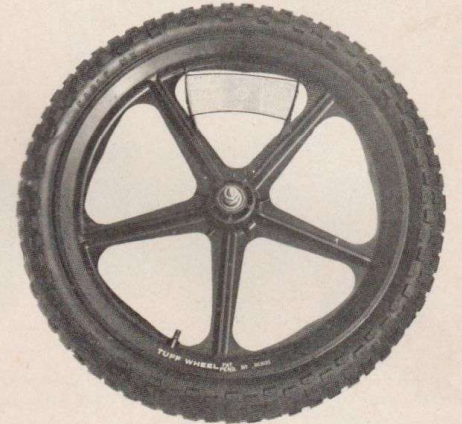
C'mon, anybody can do a one-hander, but watch THIS, you guys!



It's himself, DG's pint-sized thunderstorm, 9-year-old Stevie Skibel, jamming to a main event win.

BMX Champion...TUFF WHEEL

This 20" Tuff Wheel made from SUPER TOUGH Zytel © nylon is specially compounded for SKYWAY by DuPont. TUFF WHEEL is LIGHTER than any mag wheel and offers MORE impact resistance than any wheel made! The perfect answer for the serious bicycle motocrosser! The rear TUFF WHEEL is designed to take the # 70 or # 76 Bendix brake unit, while the front TUFF WHEEL uses the SKYWAY HEAVY DUTY AXLE or the Heavy Duty Shimano axle. We include a 90-day guarantee against breakage and defects and a Life-Time guarantee against warpage.



A super tough lightweight



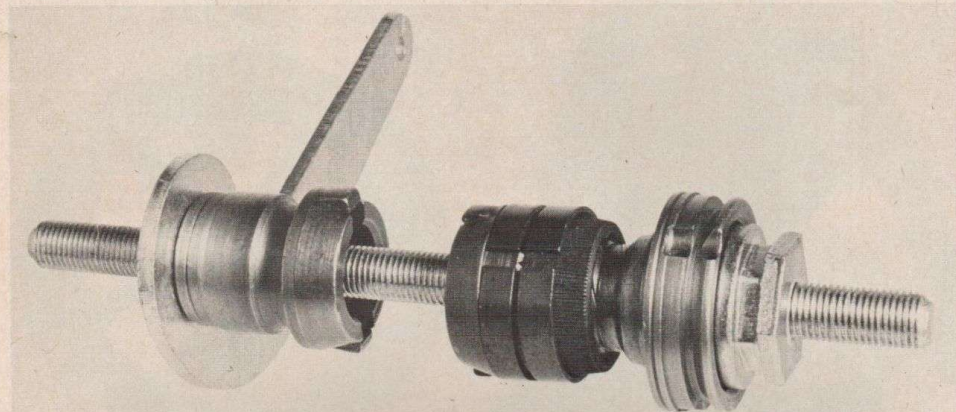
SKYWAY
RECREATION PRODUCTS
4451 Caterpillar Road, Redding, California 96001
Telephone (916) 243-5151

TRICK AND SLICK WITH A FLICK OF YOUR BIC!



HOT TIPS

Motofying the Bendix Hub



Bendix coaster brake hub internals: (Left to right) lock nut (hidden behind brake arm), brake arm, brake-side expander, retarder assembly, drive screw, adjusting cone, lock nut. Not shown are the brake shoes, ball bearings with retainers, and of course the hub shell.

Take a new Bendix hub, preferably one that is not laced to a wheel. Hold it by the brake arm in your left hand and give the hub a spin. If the bearings are properly adjusted, it should rotate quite freely. This is the freewheeling aspect of the Bendix, and it works neat enough.

Now, while still holding the brake arm in your left hand, rotate the hub forward by turning the sprocket clockwise with your right hand. This is the drive aspect of the Bendix, and it doesn't work worth a hoot. For a street bike it's passable, but just. For a motocross bike, there's way too much friction.

The internal parts that are causing this friction will wear-in in time and the friction will lessen, but even then there will be more drag than is acceptable for serious motocross racing.

Does this mean you should chuck your Bendix? Negatory, Big Ben. If you like a coaster brake and prefer the longer throw of the Bendix when braking, then all that is necessary is a factory-type moto-

fication of a couple internal parts, which will cost you a big fat nothing.

First a long explanation of how the stuff inside a Bendix works. If you don't care how it works and want to get right to the meat of this thing, skip down to where it says, NOW WE COME TO THE MAIN POINT OF ALL THIS DRIVEL.

Check the moto-photo above. See the thing that the brake arm is attached to? It's called the brake-side expander, and because it's held in place by the brake arm, it does not rotate.

The part that has large threads on one end and accepts the sprocket and lock ring on the other end is called the drive screw.

The gizmo (actually two gizmos with a spring clip holding them together) that threads onto the drive screw is called a retarder assembly. The individual parts are the drive-end expander, retarder spring, and drive clutch.

You with me so far? Well, hang in there 'cause now it gets gnarly.



The retarder assembly, unassembled: (Left to right) drive-end expander, retarder spring, drive clutch.

See the tabs on the brake-side expander and the drive-end expander? You already know that the brake shoes go in there, but check this: If the brake-side expander cannot rotate because the brake arm holds it in place, then the brake shoes cannot rotate, and they in turn keep the drive-end expander from rotating, comprehend?

If you have that bit of information firmly imbedded in your brain, then you should see that if you back-pedal, the threads on the drive screw will force the retarder assembly toward the center of the hub, and the taper of both expanders (which are coming together), will expand the brake shoes until

continued on page 42

King of the Hill-Leader of the Pack

David Clinton has earned those titles in BMX. In the last 26 races he's entered, David has won 22 and finished second in the other 4. And he did it on a "Jammin' Jimmy" Weinert bike.

But we're not telling you anything new. You know the real hot dogs choose the machine that can do the job. So when you're looking for the trick set-up be sure and go to your local dealer who handles the two great "Jammin' Jimmy" Weinert bikes and components featured below.



JTB-1

- Frame: Chrome Moly
- Aircraft quality steel — weight 3 lbs. 10 oz.
- Forks: Chrome Moly 4130 aircraft tubing—weight 2 lbs.
- Finish: Super Gold powder epoxy baked on at 400°
- Araya Alloy Gold rims to match available
- Available in component form only
- Color coordinated pack available



STADIUM-1

- Frame weight 5 lbs.
- Strong light weight MIG welded chrome Moly forks
- Spoke alloy rims or Tuff wheels
- Colors: Orange or yellow
- Available with color coordinated pads
 - Takagi bottom bearings
 - Takagi 6 1/2" crank
 - Takagi alloy sprocket
 - D.I.D. Chrome chain
 - Knobby 20 x 2.125
 - Color coordinated bars
 - Hex grips
 - Rat trap pedals
 - Tange head set



Laguna Distributors

27601 Forbes Rd., #24 Laguna Niguel, CA. 92677



WHY IS DG THE HOTTEST BIKE IN THE COUNTRY?

PERFORMANCE!

All DG BMX competition products are team tested. Week in and week out DG is a proven winner. See your exclusive DG dealer for the complete line of DG racing products.



JEFF BOTTEMA



PERFORMANCE SPECIALTIES INC.
5552 La Palma Ave. East ■ Anaheim, Ca 92806
714/996-4430

EDITORIAL

continued from page 5

started wearing helmets for jumping? At first there were a few chuckles. Then a few more people started wearing them. Now, anybody around here who jumps without a helmet is considered crazy. Wearing a helmet while jumping has become cool.

I know, sure as anything, that some of you guys are thinking you're so good at jumping that you'll never crash as bad as Mark did.

In answer I have only one thing to say: Mark was a 15-year-old expert. He used to race the likes of Tinker Juarez and Brent Patterson. He was good.

Well, have I reached any of you? Are you considering wearing a helmet when you go jumping? Talk it over with your friends. Sooner or later one of those helmets is going to prevent brain damage or save a life. Maybe yours.

Think about it. Please.

DEALERS (east of Mississippi only) PROFITS

THE COMMON SENSE APPROACH TO BMX

- SAVE FREIGHT TIME AND COSTS
- TOP QUALITY BMX MERCHANDISE: REDLINE • MONGOOSE • WEBCO • ETC.
- HONEST ANSWERS TO YOUR QUESTIONS
- 4 YEARS SERVING BMX



BMX EAST 683 Industrial Dr. Tallahassee, Fl. 32304
Phone **904-222-2367**

JT Racing/BMX

Bell RT (Red, Blue, White).....	\$39.95
JT 5-Snap Bubble Visor (Smoke).....	2.50
Scott Goggles (Model 53).....	12.95
Scott Mask (Blue, White, Red, Yellow).....	6.95
Baruffaldi Goggles.....	7.95
JT 5-Snap Team Peak (Red, White, Blue Smoke, & Yellow).....	3.95
"707" Rockguard.....	6.95
Helmet Sticker Kits (Blue, Red, White, Yellow, & Black).....	1.00
JT Sticker Bag (JT, DC, Scott, Bell, PMF, & more).....	2.95
Oakley Grips (Red, Black, Yellow).....	3.95
BMX Shoes (Yellow/Black) Sizes 6 1/2-13.....	24.95
Sizes 1-6.....	23.95
JT/bmx GLOVES	
Mikkola Replica (Red/Black) Padded Sizes 8, 9, 10, 11.....	28.85
Unpadded Sizes 5, 6, 7.....	18.95
Champion 2 (Blue/Yellow, Red/Yellow, Orange/Black/White) Padded Sizes 8, 9, 10, 11.....	23.85
Unpadded Sizes 5, 6, 7.....	18.95



Send \$2 for color catalog of pants, pads, and all other BMX goodies from JT Racing.

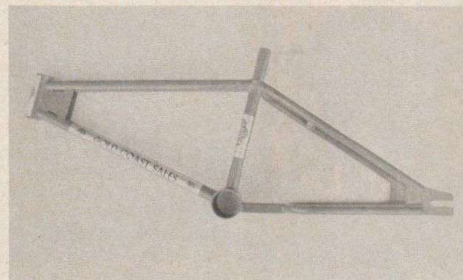
JT COUPON

Name _____
Address _____
City _____ State _____ Zip _____
Item _____ Size _____ Color _____
Item _____ Size _____ Color _____
Name on Gloves _____ Amt. Enclosed _____
Charge my: Master Charge American Express BankAmericard
_____ Exp. Date _____

*Do NOT send cash!! Send Money Order to avoid shipping delay. Calif. residents add 6% State Sales Tax. Will ship C.O.D. same day! Call us UN-collect for super-fast service. Orders under \$5.00 addl. 50¢ handling.
JT RACING IMPORTS (714) 479-9696
353 W. 35th Street, Suite D, National City, CA 92050

GOLD COAST SALES

OUR NUMBER 1 INTEREST IS
KEEPING YOU NUMBER 1



BONZAI FRAME

501 Ridge Road
Lantana, Florida
33462

(305) 582-6172

MEET THE CHALLENGE
YOU TOO CAN BE NUMBER 1

GOLD COAST SALES is proud to announce the birth of its newest product, the GCS BONZAI FRAME.

Each frame is carefully assembled by precision craftsmen at the Bonzai factory. The frame features a 12 1/2" Ground Clearance and the modest weight of only 4 lbs. 8 ozs. The prototype frame was tested for 6 months which resulted in quick and easy handling characteristics. Gold Coast Sales backs this super frame with a full 90-Day Guarantee.

The Bonzai Frame is manufactured in 5 dazzling colors: Red, Orange, Yellow, Light Blue and Dark Blue, and is available at quality Bike Shops throughout the country.

Available in Full Chrome Moly (Super Bonzai) and Full Chrome Moly with Precision Bottom Bracket (Super Bonzai II).

This Frame has been a track proved winner since October 1976 with Zero Frame Breakage.

IF YOU REALLY WANT QUALITY, HIGH PERFORMANCE
BMX EQUIPMENT, ASK YOUR DEALER FOR

TWO WHEELER'S



HIGH RISE COMPETITION HANDLEBARS, 4130 chrome-moly, silver brazing, deep-knurled center piece. Finished in satin nickel plating. 1 pound 11 ounces.

RADIUSED BOX FORKS, 4130 chrome-moly stem, 1018/1020 high-carbon steel collar and tubes, heli-arc welded with stainless steel rods. Finished in triple show-chrome plating. Exceeds all CPSC requirements. 2 pounds 1 ounce.

TWO WHEELER'S
7625 E. Rosecrans Ave., Suite 21
Paramount, CA 90723
(213) 634-6525

WE MADE IT FOR YOU

TORKER

QUALITY • Designed to aerospace standards

STRENGTH • 4130 chrome-moly and stress relieved

PERFORMANCE • Over two years of race research and development

The bike that the California champ and NBA/MONGOOSE GRANDNATIONAL winner Kevin McNeal rides

The last bike **YOU** will ever need comes in flamboyant red and blue. Shoot us a line on what's happening in your area with \$1.00 for assorted decals and brochure.

JOHNSON ENGINEERING
P.O. Box 3455
Orange, California 92665



DEALER
INQUIRIES
INVITED
PHONE (714) 637-6846

SCOTOMANIA

continued from page 8

always yell "Get Narly!" when he's on the track. You can try to catch him, but it's hazardous to your health if you try too hard to "Get Narly."

Stuart was the closest to get him. We were all jamming down the training hill at about 40 mph when Stuart saw Narly taking a rest. Stu started cranking faster and faster. He came whippin' round the craziest corner in the place. Narly told him to slow down, but Stu thought he could make it. He forgot about the big ditch on the outside of the corner. Naturally, Stu bit dookie and did a lipskid down the hill. Old Narly laughed and kept running. We all jumped over Stu as he was still rolling and tumbling down the hill. After we finished, Stu came riding down, torn up with bleeding elbows and ripped knees. He started to tell us how he was "Gettin' Narly." All of a sudden, that ditch opened up and tried to swallow him. But we all told Stu he never had a chance because you have to be a complete barnstorming, berzerk-o bermshooter to really "Get Narly."

Next time you see us out at a track and we're yelling, "Get Narly!", look for a little baldheaded guy with a long red moustache and six fingers on his left hand. If you can catch him, you know you're "Getting Narly".....

Scott

**HOT NEW
BICYCLE MOTOCROSS ACTION
STICKIES**



For Two 1" x 3" Stickers, send a
STAMPED Self-Addressed
Envelope and 25c to

BMXA STICKEES
P.O. Box 5277
Torrance, California 90510

PEDALER'S WEST INTRODUCES ...

THE LITTLEJOHN 26" FIREROAD BMX BIKE

1. New Style — Old Style
2. Heliarc'd on Aircraft Jigs
3. 90 Day Guarantee
4. Great for Beach or BMX



For Stickers
write to **PEDALER'S WEST
OR LITTLEJOHN FRAMES**
6879 Beck Avenue
No. Hollywood 91605



The 26" Fire Road BMX from Gary Littlejohn —who still brings you the 20" Rigid & Mono-shock models and the Littlejohn Sidehack.

Join PEDALER'S WEST REDLINE RACING CLUB FREE!

HOW TO START A TRACK (BOOK) • RED LINE STICKER
Send \$2.00 for Red Line Products Catalog
Send self-addressed stamped envelope to:
PEDALER'S WEST • 412 N. Maclay Ave
San Fernando, CA 91340

**MOLDED FROM MILLARDIUM,
A SUPER-TOUGH BLEND
OF DUPONT ZYTEL
WITH TEFLON
AND SILICONE
ADDED**

ADDICKS SPROCKETS

ADDICKS ENGINEERING • POMONA • CALIFORNIA



DISTRIBUTED BY
CYC, Gardena, CA
Laguna Dist., Laguna Niguel, CA
Kobe, San Jose, CA
Moore's Cycle, Oklahoma City, OK
Wii-Go, Santa Clara, CA
John T. Bills, Glendale, CA
Hans Johnsen, Dallas, TX
Pettee Cycle, Englewood, CO
Bicycle Parts Pacific, San Diego, CA
Cycles Peugeot, Gardena, CA

- Reduces friction
- Lightweight
- Self-lubricating
- Almost indestructible
- Increases chain life
- Smooth and quiet
- Fits Dura-Ace, Takagi, Addicks and Sugino spiders
- Available in 39 to 48 teeth sizes
- Mighty-Comp and Campagnolo, 42 to 48 teeth only

HELPFUL HINTS
for using Addicks Sprockets.
Use 5/16" x 3/4" bolts with self-locking nut and flat washer. Place the washer between the nut and the sprocket. Tighten the bolts down very snugly and check them after the first day's use, then again before each race.

Distributors inquiries should be directed to:
ALAN F. COHAN CO. (213) 360-1700

Product Analysis: THE SUPERBYKE TUF-NECK



By Bob Osborn

In a previous issue of BMXA we ran a product release of the Tuf-Neck. We said that if this gooseneck is as good as Superbyke says it is, they've really got a hot item.

The notorious BMXA test team has been running Tuf-Necks on their racing and thrashing bikes for about four months now. You are about to find out if the Tuf-Neck measures up to Superbyke's promises.

But first, a brief description. The jaws or clamps of the Tuf-Neck are aluminum, not heat-treated. They are clamped together (over the handlebar tube) with four beefy, hardened Allen bolts. An Allen wrench of proper size is supplied with the package. The stem is 1010/1018 mild steel which is press-fitted into the bottom aluminum plate under 40,000 pounds pressure and then pinned in place. The Tuf-Neck retails for about 23 dollars. Stem bolt and wedge are not included.

STATEMENT NO. 1: WEIGHS LESS THAN ONE POUND.

To be exact, the Tuf-Neck weighs 14½ ounces, without the stem bolt and wedge. For comparison, the Ashtabula forged gooseneck weighs 15 ounces and the Cook Bros. chrome-moly double-clamp gooseneck weighs 19 ounces, that's both without stem bolts and wedges.

STATEMENT NO. 2: WILL WITHSTAND 80,000 POUNDS PRESSURE.

80,000 pounds of what kind of pressure? We can say that during the four-month test period, none of the Tuf-Necks cracked or tweaked, although we did experience a couple other problems.

STATEMENT NO. 3: NO WELDS TO BREAK.

Can't argue with that. What did happen to one of our Tuf-Necks

was the pin that holds the plate to the stem (in addition to the press fit) worked inward until it came into contact with the stem bolt. Before this was discovered, the stem bolt was loosened and tightened several times, resulting in a deep groove being cut into the stem bolt. This happened to our fearsome Tech Editor, Rob Lynch. He discovered it after the second moto at Van Nuys. So as not to lose the pin, he tapped it the rest of the way out and rode his third moto relying on the press fit to hold the clamp on the stem. Without the pin, the gooseneck had a loose, wobbly feel despite the 40,000-pound press fit. Later Rob tapped the pin back in place and has had no further problems with it.

Not so much a problem, but still annoying, was the initial creaking of all the Tuf-Necks. This was probably caused by the stem bolt stretching. After the bolts were snugged up several times and everything seated in, they quit creaking.

STATEMENT NO. 4: THE HANDLEBARS WILL BEND BEFORE THE TUF-NECK WILL RELEASE ITS VISE-LIKE GRIP.

If the right-sized Tuf-Neck is used (1" or 7/8"), if the bars are cleaned of grease or oil, and if the Allen bolts are cinched down super tight. One time R.L. landed so hard that he tweaked a mag wheel and knocked the bearing cups loose in it without the bars shifting in the Tuf-Neck. Another time Don Jones landed on the front wheel so hard that the alloy bars sheared off at the crossbar, and yet the Tuf-Neck held firm.

continued on page 45

SUZUKI GVX1

continued from page 18

into a very accurate machine for hasty transportation.

The time had arrived to make a few motofications and take the Suzook out to the field of honor. First the reflectors came off, then the cranks were switched to 7-inch Takagis. BMX Products alloy box bars and an Ashtabula gooseneck were installed and the gearing was changed to 46/17 for the lightning-legged 16-year-old Ike Eisenacher (eyes-n-nokker), who was elected to do most of the race testing.

After a bunch of races and a bunch of trophies, we've got a bunch of info from which to draw a bunch of penetrating, fairly accurate conclusions. Namely:

Right out of the box the Suzuki is plenty competitive for the average racer and will take as much thrashing as the strongest bike you might want to compare it with.

At 33 pounds, the Suzuki is a bit heavy for serious, white-knuckle, wild-eyed competition. 20X1.75 tires, alloy rims and 80-gauge spokes, alloy bars, and maybe a freewheel conversion would drop the weight to the ultra-competitive level.

The quick steering and short wheelbase take some getting used to, but once mastered, provide such accurate and responsive handling characteristics that your brain will be bogged.

Once the bars are switched, the short wheelbase and resulting location of the bottom bracket produce a power/leverage position that gives blazing acceleration if you've got enough marbles in your pocket.

So, what does this all come down to? Well, lemme tell 'ya, with a price tag in the 150-frogskins area, and considering the fact that you get chrome-moly forks and frame, and taking into account the el superbo handling characteristics after you get used to it, this Suzuki GVX1 is a red-hot bike at a red-hot price! Dollar for dollar, point for point, you can't beat it.

Honda, where are you???? ●

Anybody wanting more info about the Suzuki GVX1 can write to:

Suzuki, BMX Dept.
13767 Freeway Dr.
Santa Fe Springs, CA 90670

P.S. You do not have to be a Suzuki Motorcycle dealer to obtain a Suzuki bicycle dealership.

AUGUST 1977



CLASS...

TECHNICAL INFO ON THE A'LACER SUPER PRO

We made an Aluminum frame Stronger than a Chrome Moly frame by structurally making it stiffer.

- 4.2 pounds is the Best weight to stiffness ratio.
- Stiffness reduces energy losses.
- All our welds are Stress relieved.

Many frames claim lighter weight, But weight is of little importance when the frame weighs less than 4½ lbs.! Look to reducing the weight of your moving parts before you compromise your frame.

The A'LACER SUPER PRO carries a LIFETIME Guarantee (\$89.95 retail). Dealer Inquiries Invited.

A'lacer Corp.
Lawrence Village Plaza
New-Castle, PA 16101
(412) 654-2535

EVENT INSURANCE

- Spectator • Promoters
- Premises • Parks
- Tracks • Owners
- Landlords • Sponsors
- Participants
- Race Officials

FOR IMMEDIATE COVERAGE: complete Bicycle MX Event liability and medical coverage, call or write today:

TOM ALLREAD
E. Broox Randall & Sons, Inc.
(213) 462-2111 Ext. 250
1132 N. Vine St., Hollywood, Ca 90038

Insurance Agents and Brokers
Since 1922

BROOX RANDALL

SEND FOR ASSORTED STICKERS - \$1.00
CATALOGUE - \$1.00

WE'RE PROUD TO BE #1 WITH QUALITY MX COMPONENTS!

COOK BROS. RACING

1609-B E. Edinger Ave., Santa Ana, California Zip 92705 · Phone 714/835-2700

What do they do?
 What do you get?
 Should you join one?
 What's in it for an individual track?

BMX SANCTIONING ORGANIZATIONS

By Jack Scagnetti

All major sports have sanctioning bodies or associations that organize, operate and control activity to conform to standard rules, regulations and principles of the sport.

To mention a few which readers will recognize: National Hot Rod Association (NHRA), major sanctioning body of organized drag racing; National Association for Stock Car Racing (NASCAR), stock car racing; SCORE International, off-road racing; United States Golf Association (USGA), golf; American Bowling Congress (ABC), bowling.

Sanctioning bodies are vital to the growth and stability of major sports. In addition to scheduling major events of their own, they sanction activities of individuals and groups within the membership. They establish rules and see that they are strictly enforced. They vote upon new rule suggestions or modifications of old rules. They consult with city, county, state and federal governments to see that their sport is not unduly affected by laws and restrictions. They publicize the sport.

No sport can experience continued growth and popularity without an effective sanctioning organization behind it. Somebody has to enforce rules. Somebody has to establish standards for equipment to avoid unfair advantages. Somebody has to schedule events to avoid conflict of dates. Somebody has to keep records. Somebody has to recognize national and regional champions.

Prior to the formation of the National Hot Rod Association, drag racing was an unorganized activity that was constantly in trouble with law enforcement officials. Races

were held on the streets, posing dangerous mishaps for both competitors and bystanders. When the NHRA became established and moved the sport onto safe race tracks and set down guidelines for safety equipment, organized drag racing activity showed a dramatic growth and became a respected sport.

Bicycle motocross, the fastest-growing individual sport of the 1970s, could well have remained as it began—an unorganized "do-your-own-thing" activity at neighborhood vacant lots or on side streets. Youths jumping street curbs on unsafe bicycles and wearing no helmet or other protective gear could have resulted in such a rash of injuries that parents would've turned thumbs down on buying bikes.

Fortunately, the formation of sanctioning organizations came early enough in bicycle motocross to prevent tagging the sport as

"dangerous," as was the case with early, unorganized skateboarding. Parents were quick to respond with cooperation in helping to buy complete bikes or bike parts and driving youngsters to the races. Serious injuries, thanks to safety rules for both bicycles and riders, became so rare that insurance premiums have remained very economical at a time when they are rising elsewhere.

The purposes of bicycle motocross sanctioning associations are simple—but important:

- For a more organized sport.
- So each rider can be classified fairly and properly.
- To maintain a record of point standings for determining winners of events and of yearly awards.
- To enforce rules to ensure fair play and safety of all competitors.

The following is a list of sanctioning bodies for bicycle motocross racing. To the best of our knowledge, it is complete and accurate. Each organization was contacted by telephone or mail prior to the writing of this article. Those organizations who responded in time are described in more detail in the text. All of these organizations are equipped to sanction races and keep points for their member tracks and people anywhere in the U.S. of A. except as otherwise noted.

BMXA (Arizona only) **NBA**
 1822 E. Broadway P.O. Box 411
 Tucson, Arizona 85719 Newhall, California 91321

BMXA (San Diego only) **IBMX**
 1056 E. Main P.O. Box 3045
 El Cajon, California 92021 Orange, California 92665

FBMXA (Florida only) **NBL (East of the Mississippi only)**
 70 Melrose Drive 1179 S.W. First Way
 Safety Harbor, Florida 33572 Deerfield Beach, Florida 33441

ABMXC (Arizona only) **NPSA**
 1217 W. Hatcher Road 508 Vine Street
 Phoenix, Arizona 85021 Dunedin, Florida 33528

The cost of joining an association is very reasonable when you consider what you get and what expenses are involved in running a sanctioning body—office help, postage, telephone, insurance, travel, advertising, printing, computer time for tabulating points, etc.

Let's take a look at the National Bicycle Association (NBA), which since its founding in November 1973, has grown to more than 6,000 members. Based in Newhall, near the Los Angeles area, the NBA draws about 1,200 members in the L.A. area and approximately 1,300 in Northern California. The rest come from Arizona, Washington, Oregon, Texas, Oklahoma, Colorado, Kansas, Ohio, Florida, Georgia and Rhode Island.

It costs \$7.00 to join the NBA (the fee is renewable annually). Members receive a rule book, membership card, classification by age and experience, a monthly newspaper which publishes point standings quarterly of national and district rankings.

Race sponsors wishing to have their events sanctioned can receive a sanctioning kit from the NBA for \$10.00. The kit includes a rule book, scoring sheets, information on how to run a race and assistance in obtaining insurance. Events held within a 100-mile radius of Los Angeles can receive personal assistance on the planning and organization of a race.

Riders who are not NBA members may compete in NBA races but must compete in the expert class in their age group.

Riders who want to travel and receive points in another district of the NBA may do so by paying an additional \$3.00 to join the extra district. The rider competes in the

same classification in each district.

In most sports, there is usually one sanctioning body that dominates the organizing, sponsoring and sanctioning of races. In bicycle motocross, the NBA appears to have a strong hold on retaining its rank as No. 1.

Another prominent California-based sanctioning body is the International Bicycle Motocross (IBMX) in Orange. IBMX membership for promoters includes tabulation of all accumulated points, membership recruiting incentives in the form of commissions, a new innovated electronic gate system, and a complete set of sanctioning rules and race aids. IBMX has a National Travel Fund for individual riders. Transportation is provided for the top riders in their respective areas to two national racer per year (winter and summer). Jaycees, Lions Clubs and other community service-oriented organizations have been cooperating with the IBMX.

In the southern states and part of the midwest and east coast, the National Bicycle League (NBL) is starting its third year as a leading sanctioning association. NBL is operating predominantly east of the Mississippi with tracks in Florida, Georgia, Tennessee, Missouri, Illinois, West Virginia, North Carolina and New Jersey. The NBL is headquartered in Deerfield Beach, Florida.

Whether you're an individual rider or a race promoter, it's wise to be sanctioned. We doubt that there is any major competition vehicle event, amateur or professional, that is not officially sanctioned by a recognized association. Insurance companies prefer to work with promoters who are sanc-



Sanctioning organizations maintain rules that require racers to wear safety gear and ride safe bikes.

tioning their events. Businessmen who contribute to contingency awards and special prize money prefer races that are sanctioned. City officials and the news media are much more likely to be cooperative with race events that are sanctioned. So, what are you waiting for? Sign up now!

BMX



Ask
Ronnie
Ames

BMX PANTS: Top quality heavy duty nylon. Padded leather knees. Snap in hip pads. Nylon tricot lining. Velcro leg closures.
BMX JERSEYS: 100% vented nylon. Padded elbows. Custom made in any color combination and quantities desired. Highest quality plastisol ink silk screening.

SEND FOR FREE BROCHURE

BW

**BILL
WALTERS
LEATHERS,
INC.**
 7359 Varna Ave. No. Hollywood
 Calif. 91605 (213) 982-3738

they come in contact with the inside surface of the hub, causing it to slow or stop.

NOW WE COME TO THE MAIN PART OF ALL THIS DRIVEL and if you skipped down to here, you're a turkey and won't understand anything I'm talking about. Hee, hee.

You ready for this? When you pedal forward, the threads on the drive screw will pull the retarder assembly toward the sprocket end of the hub where the knurled bevel of the drive clutch will engage a machined, tapered surface of the hub and drive the hub (and bike) forward.

Ah, but herein lies the problem. The drive clutch is rotating forward (to drive the hub forward), BUT THE DRIVE-END EXPANDER IS HELD IN A STATIONARY POSITION BY THE BRAKE SHOES. This means the drive clutch must rotate inside the spring clip that holds the retarder assembly together. And this causes a bodacious amount of friction.

ous amount of friction.

So let's do a factory number on your Bendix. Pull out the retarder assembly and take it apart. Polish the flat (not beveled) surfaces of the drive-end expander and the drive clutch. These are the surfaces that contact the spring clip. This can best be accomplished by using a fine emery cloth (about 320), and then some fine polishing with steel wool. When you're done, you want smooth, shiny surfaces.

Now for the spring. What you must do is bend it open until it just barely holds the retarder assembly together. It's going to take a gorilla to bend this sucker, so if you're anything less than six feet and 200 pounds, maybe you'd better get your old man. Anyway, however you accomplish this, don't use heat or you'll mess up the spring steel.

Once the spring clip is opened to a delicate fit, smooth all the inside edges and surfaces so that while

the various parts are rotating, friction will be at an absolute minimum. The best way to do this is to use a rat-tail file to take down the sharp inside edges, and steel wool to polish the inside surfaces. Really do a number on this operation because this spring clip is the key to the whole thing.

Once all this junk is done, grease the inside of the spring clip and the surfaces of the drive clutch and drive-end expander that the spring contacts, and stick it back together. If you've done everything right, this outfit should go together quite easily. If it's hard to get those things inside the spring clip, open it a bit more and try again.

Now, clean up everything, grease the bearings lightly, and reassemble the entire hub...if you still remember how. If you don't, keep messing with it and you'll get it sooner or later.

That's it. You are now the faster owner of a motofied Bendix Hub. •



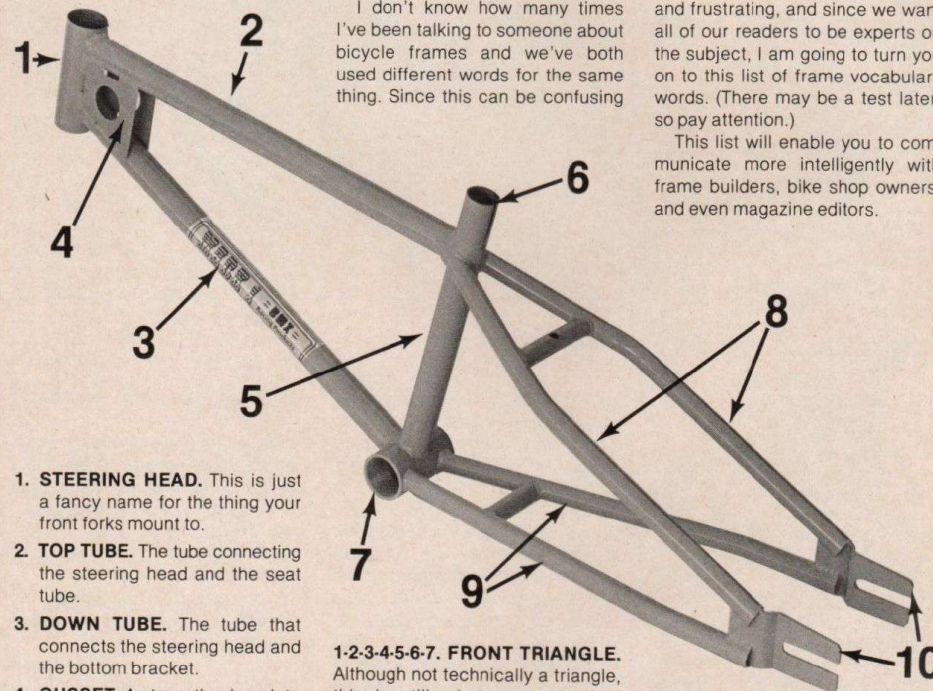
by Rob Lynch

Tricky terms to impress your buddies with...

I don't know how many times I've been talking to someone about bicycle frames and we've both used different words for the same thing. Since this can be confusing

and frustrating, and since we want all of our readers to be experts on the subject, I am going to turn you on to this list of frame vocabulary words. (There may be a test later, so pay attention.)

This list will enable you to communicate more intelligently with frame builders, bike shop owners, and even magazine editors.



- 1. **STEERING HEAD.** This is just a fancy name for the thing your front forks mount to.
- 2. **TOP TUBE.** The tube connecting the steering head and the seat tube.
- 3. **DOWN TUBE.** The tube that connects the steering head and the bottom bracket.
- 4. **GUSSET.** A strengthening plate added to a high stress area.
- 5. **SEAT TUBE.** This is the tube your seat post goes into.
- 6. **SEAT TUBE MAST.** The part of the seat tube that sticks up above the top tube. This is what your seat post clamp clamps to.
- 7. **BOTTOM BRACKET.** This is the outfit that your cranks mount in. Also commonly referred to as the crank hanger.

1-2-3-4-5-6-7. **FRONT TRIANGLE.** Although not technically a triangle, this is still what you get when everything so far listed is welded together.

- 8. **SEAT STAYS.** These are the tubes running from the rear dropouts to the seat tube.
- 9. **CHAIN STAYS.** These run from the rear dropouts to the bottom bracket.
- 10. **DROPOUTS.** This is what your axles bolt to at both ends of the bike.

8-9-10. **REAR TRIANGLE.** This is what you get when you weld together the seat stays, chain stays, dropouts, and spacers if used.

Now if you take part numbers 1-2-3-4-5-6-7 and stick them not in your ear but to part numbers 8-9-10, presto! you have one complete bicycle frame. Pretty nifty, huh?

Royal Rates Products
presents

BMA

Mail Order

We have everything from parts to complete bicycles. Dura-Ace to Mongoose, handlebars to sidehacks —with prices you can afford. Send for free information and stickers.

Send to:
Royal Rates Products
P.O. Box 2041
Canyon Country, California 91351

Bikecology

BIKECOLOGY BIKE SHOPS

INTRODUCING THE

FREE

BIKECOLOGY BMX DISCOUNT MAIL ORDER CATALOG

America's LARGEST volume discount 10-speed headquarters now gives the BIGGEST BMX collection at the cheapest prices ever assembled! EASY AND FAST TO USE . . . Every popular, quality part!!!

SPECIAL INTRODUCTORY OFFERS!

ALUMINUM COLOR BMX BAR

Transparent powder coated in Red, Blue and Gold, U.S.A.

\$9.88
Shipping Included

"SCRAMBLER" type . . . the best kind!

ALUMINUM ANODIZED SEAT POST

3/8" fits all 20" bikes, several knurls permit cutting to exact length desired. Red, Blue and Gold

\$3.99
Shipping Included



ARAYA 80g ALUMINUM ANODIZED RIM

20" x 1.75 factory colored Red, Blue and Gold.

\$7.88
Shipping Included

TO ORDER:

Checks, money order, BankAmericard and Master Charge. California residents — add 6% tax.

FREE CATALOG WITH EACH ORDER

- **4 SHOPS IN WEST LOS ANGELES** •
- BEVERLY HILLS**.....9101 Olympic Boulevard
Beverly Hills, CA, 90212 (213) 278-0915
- SANTA MONICA**.....1515 Wilshire Boulevard
Santa Monica, CA, 90405 (213) 451-9977
- MARINA DEL REY**.....4214 Lincoln Boulevard
Marina Del Rey, CA, 90291 (213) 821-0766
- CULVER CITY**.....5179 Overland Avenue
Culver City, CA, 90230 (213) 559-8800

Bikecology Bike Shops, Inc.
Mail Order Dept.
2910 Nebraska Avenue
P.O. Box 1380
Santa Monica, CA 90406



RUSH me your FREE BMX DISCOUNT CATALOG

Name _____
Address _____
City _____
State _____ Zip _____



SPEEDO GRAND PRIX

continued from page 30

derdog came from behind to battle with the super-heroes. In this case it was none other than DG's boy wonder Jeff Bottema being narrowly defeated by All-American Mr. Nice Guy, privateer underdog, Bill Harry. Bill's magnificent performance has since been rewarded with a contract for future shows from JMC.

This final spectacle had the spectators standing and screaming in excitement as these two dominated the action, fighting elbow to elbow, tooth and nail to

the finish. Harry beat Bottema by two inches!!!

Including early production problems and late direction problems in its premiere showing, this show still proved to be simply spectacular. This is one writer who is excited by the anticipation of a future production.

Congrats to Curran/Troy, Speedo, La Mirada and the cast of thousands.

Terry Twilight
BMXA Show Editor



RESULTS SPEEDO GP

Expert Classes



Jr. Sidehacks Colutte/Enochs	10 Expert Mark Higgins John Nist Paul Melby	12 Expert Mike Koron Eddy King Todd Denning	14 Expert Scott Clark Jeff Utterback Jim Richardson	16 and over Expert Bill Harry Jeff Bottema Kevin McNeal
Sr. Sidehacks Ledbetter/Chastain	9 Expert Steve Skibel Joe Dean Jaques David Wilson	11 Expert John Begin Steve Oakley Steve West	15 Expert Brent Patterson Craig Small Drake Turnage	Open Kevin McNeal Bobo Moreno Jeff Bottema

PRO: PROFESSIONAL RACING ORGANIZATION

continued from page 25

It is also the intention of the members of PRO to become public relations representatives for BMX, not only through their personal conduct, but by holding safety seminars and racing clinics for newcomers to the sport. With all the traveling these guys do, this phase of PRO should be very effective.

Another area where PRO can be effective is to act as a kind of union; to consider grievances of its members, such as unacceptable racing tactics of other members, or contingency money that was promised but not paid by some manufacturer. Individually these guys would have a tough time solving this kind of problem, collectively they may have the horsepower to do it.

As PRO earns recognition as a legitimate and dynamic force within bicycle motocross, and as the attraction of these ultra-competitors is realized by race promoters, Pro Class racing for sizable purses at large events and 100- and 200-percent paybacks at local sanctioned races will probably become a standard practice.

All in all, if PRO is handled wisely, it sounds like something that can be good for the sport and good for its members.

Anybody wishing more information about PRO can write to:
PRO (Professional Racing Organization)
3215 E. Ocean Blvd.
Long Beach, CA 90803.



DIG IT

BMX BIKE STAND

This one takes care of all those other stands who think "They're Big Enough." They Ain't!

- Keeps Bike Erect to Protect Moving Parts.
- Painted With A Durable Epoxy Coating Of Safety Orange.
- 100% Hell-Arc Welded Construction.

PATENT PENDING

I.o.b. Azusa, Calif. 91702

\$9.95

The Frame That The JMC Team Rides!

Under 3 1/2 Lbs.

JMC-BMX FRAME

The "Near-Biggies" are forced to keep a respectful distance ... A Few Miles To The Rear!

- Elliptical Beam Down Tube Delivers Maximum Torsional Stability.
- 4130 Chrome Moly Construction.
- Precision Bottom Bracket.
- Your Choice of Conquest White, Liberator Red, or Freedom Blue.

I.o.b. Azusa, Calif. 91702

\$89.95

Mail Check Or Money Order To:

JM CYCLERY

164 S. Irwindale Avenue
Azusa, California 91702

DISTRIBUTOR INQUIRIES WELCOME: Call (213) 969-1915

IMPORTANT NOTICE:
In California Add 6% Sales Tax To Above Prices. Allow 1 to 2 Weeks For Delivery. Please Specify Color Of BMX Frame.

PRODUCT ANALYSIS

continued from page 38

STATEMENT NO. 5: 100% UNCONDITIONALLY GUARANTEED. For one year.

SUMMARY: According to Superbyke, the problems stem (pun intended) from the stretching of mild steel stem bolts and the lack of a washer under the head of this bolt. This is more of a factor with the Tuf-Neck than other goosenecks due to the additional leverage inherent with this design.

At the time of this writing, Superbyke has begun adding a stem bolt, washer, and wedge, all heat-treated, to the Tuf-Neck package, at no additional cost to you, by the way. Additionally, they have increased the wall thickness of the stem.

According to Superbyke, these changes will solve the problems. Time will tell.

HANK & FRANK



SINCE 1925
Sales and complete repair service

BMX SPECIALISTS
Home of the combined
Hank & Frank — Silver Shield racing team

HANK & FRANK BICYCLES

106 E. 14th Street
Oakland, CA 94606
(415) 893-3866
and
3377 Mt. Diablo Blvd.
Lafayette, CA 94549
(415) 283-3333

MUNCH & CRUNCH...



Maybe I should move this nose before someone gets hurt.

Photo by Steve Johnson (Torker BMX Racing Products)



- 1ST: NBA GRAND NATIONALS
- 1ST: CALIFORNIA CUP
- 1ST: NORTH CALIF. PAL CHAMPIONSHIPS
- 1ST: PEPSI COLA WEST COAST CHAMPIONSHIPS
- 1ST: SAN FRANCISCO BICENTENNIAL CHAMPIONSHIPS
- 1ST: NPSA NATIONALS — HAYWARD
- 1ST: MERCED NPSA NATIONALS
- 1ST: MONGOOSE/NBA NATIONALS
- 1ST: SPEEDO GRAND PRIX

A STAR IS BORN ☆

BRENT PATTERSON riding for SPEEDO Racing Products for 8 months, has become the #1 15-year-old in the nation.

SUPERB TUBULAR FORKS

Weight: 1.8 pounds

SPEEDO Racing Products is into the BMX fork market with these slick 4130 chrome-moly jobs. With SPEEDO forks you get your choice of single or double axle dropouts. You also get an iron-clad, unconditional 60-day guarantee. They are available in 5 delicious flavors: polished nickel, blue, red, green, or yellow.



SPEEDO

RACING PRODUCTS HAYWARD, CALIF.

2477 AMERICAN AVENUE • HAYWARD, CALIFORNIA 94545

Also available from Speedo Racing Products: SUEDE PADS, ALLOY HANDLEBARS, PLUS AN OUTSTANDING NEW RACING FRAME DISTRIBUTORS' INQUIRIES INVITED

SUEDE PADS, ALLOY HANDLEBARS, PLUS AN OUTSTANDING NEW RACING FRAME

DISTRIBUTORS' INQUIRIES INVITED

R & RS REALLY FLY



CHECK OUT OUR COMPLETE LINE OF FACTORY RACER BICYCLES

R & R Factory Racer Bicycles win more races than any other bike on the track. All the top teams from California to Florida have chosen R & R Factory Racer Bicycles for their racers. We've won more national races than any other bicycle manufacturer.

You know when you've chosen one of our Factory Racer Bicycles you'll be riding a "Team Proven Winner." With our line of seven Motocross bicycles we have the one that's just right for you. If you're the skilled racer looking for the ultimate, the Scorcher Factory Racer fills the bill. The Scorcher is a lean machine, built with Chromemoly frame - forks - handlebars, Dura Ace cranks and alloy components. If you're just getting started in BMX, then the Smoker is your bike. The Smoker Factory Racer is built with our proven steel frame, heat-treated reinforced fork-stem-crank and heavy duty 105 ga. wheels. If your skill lies between the ultimate and the beginner we have four more complete bikes to fit your needs. Even a Factory Racer Sidehack if you're daring enough to ride one. Send for our color catalog today.

Don't follow the rest of the pack - be a leader with R & R Factory Racer Bicycles.

R & R RACING PRODUCTS
7043 Vineland Avenue, Dept. 217
North Hollywood, CA 91605

- Enclosed is my \$2.00. Please send me iron-on transfer and 77' R & R Factory Racer's color catalog.
- Enclosed is my \$1.00. Please send me just a 77' R & R Factory Racer's Color Catalog.

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

Authorized Dealerships Available