

All About Mini Bikes



[Http://Www.AllAboutMiniBikes.Com](http://www.AllAboutMiniBikes.Com)

MiniCycle

MiniCycle

APRIL 1974/75¢

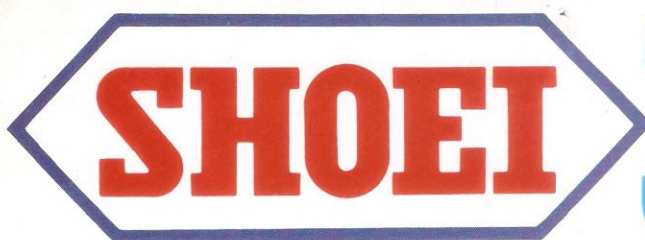
K47745

GENE McCAY: He's No. 1 / **MR-50 HOP-UP**
HELMETS: Fitting Small Heads / **ATV RACES: 3, 4, or 6 Wheels**
HARLEY-DAVIDSON Z-90 / **HUSQVARNA & YAMAHA MX-125's**



MC-1 SHERK 68 SIN 121972 0374
SHERRET, KENNETH D
68 SINCLAIR AVE
ST THOMAS ONT
NSR 3A8 CANADA

**OLD MUDDY
AND PRIX**



HELMETS (say "sho-ee")

3 MINI SIZES SAFETY STYLES



CHECK THESE FEATURES

The only major line to offer three real children's sizes (not simply small adult's). Good fit is a safety factor

Three safety styles to meet all riding conditions

Meets or exceeds accepted safety standards

Prices more than competitive with similar helmets

All fiberglass construction (not cheapie molded plastic)

Lightest fiberglass helmet available (less tiring)

Liner design of most modern materials, resulting from extensive research program

Utmost comfort encourages more constant use

Production line testing ensures quality control

Most popular colors (white, orange, yellow, red, blue, black and metalflake colors)



MINI HELMET DISTRIBUTORS (distributor inquires invited/dealers call for closest distributor)

American TBA
Rt. 222 South
Redding, PA 19608

Boyes & Rosser
1012 Auckland St.
New Westminster, B.C.
Chariot Cycle
303 Selkirk Ave.
Winnipeg, Canada

Clarke Simpkins Honda
760 Alderbridge Way
Richmond, B.C.

Dixie International Co.
1721 Woodland Ave.
Columbus, Ohio 43219

Hap Jones Distributing Co.
2 Clinton Park
San Francisco, CA 94103

Hap Jones Distributing Co.
P.O. Drawer A
Prattville, AL 36067

Hap Jones Distributing Co.
P.O. Drawer T
Norwood, N.J. 07648

Helmet House Ltd.
2037 Pontius Ave.
Los Angeles, CA 90025

Hortman Bros. Dist. Co.
P.O. Box 338
Moultrie, GA 31768

Garco Dist.
1603 Euclid Ave.
Des Moines, Iowa 50313
Montreal Motor Sports
278 Beau Bien Ave.
Montreal, Que., Canada

M.C. Supply Co.
1715 E. Florence
Los Angeles, CA 90001
Speed and Sport Co.
27 Scott Street
St. Catharines, Ontario
Rocky Cycle Co., Inc.
1250 Elko Drive
Sunnyvale, CA 94086

Jerry Bases Distributing
11307 Vanowen St.
N. Hollywood, CA 91605
Speed Center U.S.A.
3001 Red Hill Ave.
Costa Mesa, CA 92626
P.K. Racing Products
507 N. Azusa Ave.
La Puente, CA 91744



Send 25 cents for descriptive information
on entire Shoei line plus Shoei decals in
English and Japanese to...

SHOEI SAFETY HELMET CORP., 1717 Pontius Ave., Los Angeles, Calif. 90025 (213) 477-6051

Member: Motorcycle Industry Council; Safety Helmet Council of America; National Hot Rod Assoc.; Specialty Equipment Manufacturers Assoc.



Now, more than ever, it's time to own **HODAKA . . .** the down-to-earth **Dirt Bike** that can be your **Go-To-Work Bike**

Why go to all the trouble of adding the necessary lighting equipment to your present dirt machine in order to make it street-legal. Don't bother . . . **WOMBAT** is the answer to the need for a multi-purpose, economy vehicle. One you can depend on. Whether it's a weekend in the out-back, or reliable transportation to work or school.

If you're trying to convince someone else you should have a motorcycle, be sure to point out just how much sense it makes to have a machine you can commute on and use for recreation, too.

That's what our durable **WOMBAT** is all about. Designed basically as a trailbike a decade ago . . . **HODAKA's** popularity with knowledgeable riders has proven it to be a versatile performer. **HODAKA's** proud history includes many National Trailbike Championships . . . Roadrace wins, including victory at Daytona, and being the first trailbike to conquer the big bad Baja Peninsula.



More? How about this:
A stock **WOMBAT 125** carried 425 lbs. (Frank Wheeler plus 200 lbs. of gear) around the desolate perimeter of the Australian continent. That's 10,000 miles! Time: 21 days. And that's without a nursemaid truck hovering behind. We think that's the kind of guts and reliability you'll be looking for when you're ready to spend your hard-earned dollars.

For 25¢ and this coupon, you'll discover why a clan of weather-beaten mountain men in Oregon proudly hold to their unbending philosophy of design and quality control.

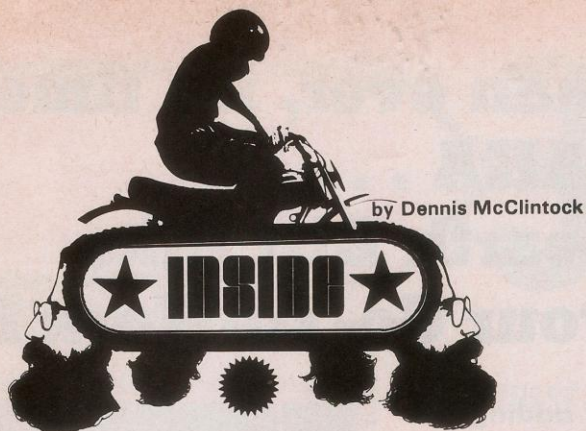


Get the "Hodaka Story" and the address of your nearest dealer. Send 25¢ to **HODAKA MOTORCYCLES**, Box Y-4, Athena, Oregon 97813.

Name.....
Address.....
City.....State.....
Zip.....Phone.....

Gone are the days of the dime chocolate bar and Regular at 30¢ a gallon. But you can still heed the Call of the Wild and ride all the way from backyard to boondocks and back on a **HODAKA**. It's time for down-to-earth thinking. See your **HODAKA** dealer. Find his listing in the Yellow Pages or mail the above coupon. Canadian readers should write to Gemini Ind., Ltd., 2525 Stephens St., Vancouver, B.C. Australian inquiries can be sent to Sport and Road Pty., Ltd., P. O. Box 209, S. Melbourne, Australia 3205.

APRIL 1974/3



The Uncommon Common Plug

From the people who supply electrical equipment to
Honda, Suzuki, Yamaha and Kawasaki



With all the bad news about high fuel prices, fuel shortages, and ecological problems, regular tune-ups and maintenance of your bike is more important than ever.

When you replace your worn out spark plugs, we hope you'll replace them with ND plugs. They're original equipment on a majority of the bikes sold in this country. For a lot of good reasons.

One very good reason is ND's high purity alumina insulator, with its excellent heat stability and superb heat conductivity. That translates into some very important words in these troubled times:

More miles per gallon.

Even a biker can't afford to ignore those words these days.

Ask your dealer for ND Spark Plugs.

NIPPONDENSO of Los Angeles, Inc.
1815 Anderson Avenue, Compton
California 90220 (213) 639-3630



When I left the post office to become a magazine writer, I brought along one useful item: the rubber suit that protected me from the "rain and sleet and snow" that mailmen are supposed to trudge through. On January 5 and 6 I put that suit to work again. We went out to the World Mini (Muddy) Grand Prix and promptly sunk up to our ankles in mud. Circle Industries loaned us a motor home for the weekend, and we had a fine time keeping our muddy boots and clothes off the woodwork. But pity the poor racers who had that gooeey stuff splashed all over their bodies. See the report on page 31.

Mini-Speedway; Page 50: Since the Speedway races were held at night, I had to take all the pictures with a flash unit. Two weeks in a row, the flash wouldn't work. When you've only got one short four-lap race to shoot, you can't take time to fiddle with the machinery.

Harley-Davidson Z-90; Page 23: We got a sudden surge of letters a few months ago asking if we had forgotten about good old Harley-Davidson, the "Great American Freedom Machine". Well, here's one of them ready to offer a simple solution to the gas shortage. In an upcoming issue, we'll take a look at their smaller machine, X-90, nicknamed the "Shortster."

MR-50 Hop-Up; Page 27: The Honda MR-50 started out as a tame, little beginner's bike, one step up from the Pee Wee mini-minis. But it looks so much like a scaled-down racer that it was inevitable that someone would turn it into one. The NMA has even started a new racing class for the mini-Elsinore. Hacienda Honda isn't the only shop with ideas for warming up the little beast, but they're usually among the first with Honda mods. Too bad the "junior mini-cycle" class was called off at the mud-rain-ruined Grand Prix. Joey Hamilton, who rode the Hacienda-fixed bike in practice, looked like he had a slight edge over the competition.

Gene McCay; Page 20: Despite all the "National Champions" and "World Champions" that have been named in past few years of mini-cycle racing, we have to admit that Gene McCay's title is the only one with a ring of truth in it. The Y-AMA system still isn't all it could be, but it has made us aware of the quality of riding in all parts of the country. A year ago, I would have bet that the National Champ would be from California or Florida. This one's from Tennessee, and the other two class winners are from Alabama (Audie Ward, 60cc) and Indiana (Kenny Blissett, 100cc).

PUBLISHER/ADVERTISING
PATRICK J. MACKIE

EDITOR
DENNIS McCLINTOCK

TECHNICAL EDITOR
TOM MOHR

FEATURES EDITOR
BRICK PRICE

CONTRIBUTING EDITOR
JIM GILBERT

CONTRIBUTING PHOTOGRAPHERS
ROLAND STEADHAM
KASEY ROGERS
JACK WARD
ZACH HALOPOFF

OFFICE MANAGER
MICHELLE MURRAY

ART/PRODUCTION
MANNY GILLHERME

CIRCULATION MANAGER
JUNE REED

MINICYCLE is published monthly by Friday Publications, Inc., 27762 Forbes Road, Suite 11, Laguna Niguel, California 92677/P.O. Box 2869, Laguna Hills, California 92653. Telephone number (714) 831-0530 or (714) 831-0531. Reprinting in whole or in part is expressly forbidden except by permission of the publisher. Entire contents copyrighted by Friday Publications, Inc. Second class postage paid at Laguna Hills, California, and Effingham, Ill. **SUBSCRIPTION RATES:** \$7.50 for one year in U.S. and U.S. possessions. Canadian and foreign subscribers add \$1.00 per year. Single copy price 75 cents. All subscriptions and subscription correspondence should be addressed to MiniCycle Subscription Service at the above address. Please allow at least six weeks for change of address. When notifying a change of address, state old address as well as new address and enclose, if possible, an address label from a recent issue. **EDITORIAL CONTRIBUTIONS** are welcome and should be addressed to the Editor, MiniCycle, at the above address, accompanied by a return addressed envelope and postage. All material will be handled with reasonable care. However, the publisher assumes no responsibility for return or safety of editorial material.



PAGE 35

FEATURES

- 18 **YAMAHA TRIALS SCHOOL**
Mick Andrews on a mini-trials bike?
- 20 **GENE McCAY: HE'S NO. 1!**
Tennessee produces a champion
- 27 **MR-50 HOP-UP**
Racing in a class of its own
- 31 **WORLD MUDDY GRAND PRIX**
"It never rains in California"
- 35 **A.T.V.TT**
When two wheels aren't enough
- 37 **A WHOLE 'NUTHER THING**
More multi-wheel madness
- 40 **HELMET SIZING**
Fitting hard-hats for small heads
- 47 **MOPED**
Pedals and power
- 50 **MINI-SPEEDWAY**
Sideways in three-quarter scale



PAGE 23

DEPARTMENTS

- 4 **INSIDE**
- 6 **EDITORIAL**
- 8 **PUBLISHERS PAGE**
- 10 **LETTERS**
- 14 **TECH TIPS**
- 54 **MISCELLANY**
- 56 **BOOK REVIEWS**
- 62 **TV: THE "GO" SHOW**
- 64 **ADVERTISERS INDEX**
- 64 **LOCAL DEALERS**
- 64 **NEW "MINICYCLE" DEALERS**
- 66 **PHOTOHUNNIES**

ROAD TEST

- 23 **HARLEY-DAVIDSON Z-90**
- 43 **FIRST IMPRESSIONS: HUSQVARNA MX 125**
- 45 **FIRST IMPRESSIONS: YAMAHA MX 125**
- 48 **MONARK MOPED**

Minicycle

VOLUME 6, NO. 4/APRIL 1974/AMERICA'S FIRST MINI-CYCLE MAGAZINE

ANOTHER QUALITY PRODUCT FROM
WEBCO



JT1/JT2 CYLINDER HEAD

Fresh-cast 356 aluminum with black anodized finish. Dyno developed and track tested combustion chamber configuration and squish band. Extra mass and improved fin layout result in cooler running. Webco's mini enduro head provides both hp and torque boosts. Keeps operating temperatures down, horsepower up. Fits 58cc engines only.

#1512 Yamaha JT1, JT2 Webco head \$19.95

Webco Catalog still only \$1.00

SOLD THROUGH AUTHORIZED M/C DEALERS ONLY



WEBCO INC.
BOX 429 • VENICE, CAL. 90291



Excellent low pressure tire gauge for the ATV enthusiast. Guaranteed accurate from 0-15 lbs. in 1/4 lb. increments.

Comes complete with swivel angle chuck for those hard-to-reach places.

ONLY
\$8⁵⁰

Send cash, check or money order (Add \$1.00 for postage and handling) to:

EXPLORER ILLINOIS CORP.
106 W. St. Paul Street
Spring Valley, Illinois 61362
Dealer Inquiries Invited

6/MINICYCLE

GUEST

EDITORIAL

Mother Is Well And Living At The Track

by Samye Steward

Ed. Note: We usually don't pay much attention to the mothers at mini-cycle races, but after reading these comments from our newest correspondent in Flagstaff, Arizona, we at least can sympathize with them. We would like to share this Mother's view of "mini-cycle madness."

As recently as three short years ago, I was thoroughly convinced that all motorcycle riders traveled in gangs, terrorizing motorists and mankind, in general, and mothers in particular. You know the script: leather jackets, choppers with chicks on the back, and each rider looking like something out of a low-budget movie.

Since then, my thoughts have been eradicated, emancipated, and re-educated.

I also used to enjoy my quiet, boring Sundays, reading the paper while the TV was blaring. Now, my Sundays are filled with such excitement that this 35-year-old mother may never see the ripe, old age of 35½!

What changed my thoughts about motorcycles? What changed my Sundays? We're now a mini-cycle racing family, and we'd like you to follow a typical racing weekend.

First, meet my family: husband, Larry, five sons from five to fourteen years old, and five motorcycles, with another on the way. Now, racing day is tomorrow, and Mother is making a list:

- 1) Wash T-shirts with decals on them.
- 2) Have three oldest boys round up leathers (in our case, vinyls made by father), boots, gloves, helmets, clean clothes for after races, etc.
- 3) Plan what food to take (in case there's no concession stand at the track, and besides, it's cheaper!). MENU: (depending on Mother's mood) usually consists of fried chicken, boiled eggs, cheese, potato chips, and fruit; or vienna sausage, cheese, crackers, and cookies. And of course, the ever-present ice chest with the necessary thirst quenchers.
- 4) Decide what to wear (Mother, you like to look chic, but forget it!) Dress comfortable, according to the weather, which will probably change before you get there.
- 5) Make boys take a bath (wasted effort—they will be so "grungy" in a few hours that you won't recognize them, anyway).
- 6) Put the boys to bed early, so they'll be well rested for the drive to wherever the race may be.
- 7) At midnight, go to the boys' room and threaten them, telling them they can't go to the races if they don't go to sleep, then realize that it was three radios playing, and you've just awakened them by telling them to go to sleep!!

Father doesn't need a list. For three hours, he's been banging away in the garage, making last-minute adjustments on the bikes. By midnight, everything is loaded on the pick-up. Father is exhilarated, Mother is exhausted, and before you know it...Racing Day arrives.

Father, sons and 'cycles are ready and raring to go in the wee hours of morning. Mother drags out of bed, drinks a cup of coffee, then endures the miles-and-miles of driving to the track.

After everybody has some practice, the racing begins. While this is going on, Rod, age 5, is eating, going to the bathroom (which, of course, is nowhere near the track), and wanting to go home every 15 minutes. Between heats, Larry is adjusting bikes, the boys are renewing old friendships, and Mother is getting sunburned.

Eventually, the racing is over, and our sons come off the track, tired and dirty. They can't each win a trophy each time, but they have tried, and that is what is important to us. They competed; they won or lost; and maybe they learned something about sportsmanship (which is really put to the test, at times). But they're already planning where to go for the next race.

Meanwhile, the boys will be out in the garage, learning what makes their bikes work, taking the engines apart and putting them back together, and spending a great deal of time each night with their dad. And just possibly they won't have a need to look elsewhere for their thrills. Cycling isn't their only outlet, but take it from me, it's a great one! □

NOW! THE FAMOUS FULL BORE MOTORCYCLE BOOT — JUNIOR VERSION

The same unique protective features, the same highest quality leather, the same unmatched Full Bore workmanship — they're all available now in mini-boot size!



**FULL
BORE**

YANKEE
MOTOR COMPANY
P.O. Box 36 • Schenectady, New York 12301
24030 S. Frempton Ave., Harbor City, Calif. 90710
©A BANGOR PUNTA COMPANY



A Better PeeWee



The Improved Villa Bimbo

(still the same low price)

We improved on a good thing. Moto Villa's Mini-Bimbo Mk II handles and pulls much better than anything in the same class. Better, even, than our own first machine.

This one has * Two degrees more fork angle for greater stability * Longer swing arm for better rear suspension * Lower seat for smaller riders and lower cg * Single upswept exhaust (MX-style) with quite muffler * Clamp-on, easy-action brake levers for simple adjustment and replacement * Frame-mounted fold-up footpegs (no "dig-in") * Super-strong, fully triangulated, double-loop, frame * Molded number panels * Easier starting 50cc two-stroke engine with stronger, smoother, power curve for low rpm pulling * Plus all the former features like automatic two-speed gear box, full suspension, and front and rear brakes.

What more could you ask?

Oh, yes! A low price. How's this. . .

\$239.00

plus freight and set-up

THE IDEAL
FIRST MOTORCYCLE
FOR YOUNGSTERS UP TO
9-YEARS-OLD

Write for the name
of your nearest dealer:

VILLA IMPORTS, INC.,
P.O. Box 3396, San Jose, Calif. 95116.
(409) 998-4333

DEALER INQUIRIES INVITED

8/MINICYCLE



PUBLISHER'S PAGE

TWO BITS OF GOOD NEWS

The first bit of good news is the announcement that the American Motorcycle Association is going to have a 125cc American National Motocross Champion in 1974. Stand up and Cheer. At last, recognition that the lightweight motorcycle is a legitimate racing machine. It's about time.

The AMA's 125cc program fits into the international racing scene. The Europeans have long had a 125cc championship and the last race of the AMA series will count towards the World Cup Championship. It is expected that this race will attract Europe's best to tangle with our's.

This is good news to *MiniCycle* magazine's readers because the natural progression from mini-cycling is into 125cc machines. In the past, "our" people had to diddle around with their lightweight motorcycles, riding for little recognition in local races, until they could progress into the bigger machines. Because of this, young riders, who were interested in obtaining the recognition that AMA racing gives, often forced themselves onto bigger machines before they were really ready.

Until now, 125cc riders raced as amateurs and the best they could hope for was to run in a non-National open class in support of the "real" Inter-AMA's. That is no longer true. It seems that the manufacturers have been urging a professional 125cc class on the AMA and they have been heeded.

Another nice thing about the new 125cc program is that it consists of only four events. That means that a serious rider (or serious sponsor) will not have to spend a fortune to be eligible. The four-race 125cc National Championship series is as follows:

April 6, Hangtown Classic, Plymouth, California.

June 30, Sears Point International Raceway, Sonoma, California.

July 7, Baldwin Cycle Park, Baldwin, Kansas.

July 21, Mid-Ohio Motocross Park, Lexington, Ohio.

On July 28, the 125cc World Cup Championship, American round, will be held at Zoar Motocross Park, Springville, New York. By then, we should have a pretty good idea of which Americans stand a chance against the Europeans. It is our bet that some former mini-cycle riders will be among them. Because we feel that the 125cc people are an extension of our readers, *MiniCycle* magazine will attempt to cover the series.

Riders who are interested in competing, and who have not yet heard about the 125cc National Motocross Championship, should contact Professional Racing Coordinator Dave Welsh at the AMA, P.O. Box 141, Westerville, Ohio 43081, or telephone Area Code 614, 891-2425. Tell Dave we sent you.

NUMBER TWO

The second bit of good news is that this space will be vacated by the publisher and taken over by our Tech Editor, Tom Mohr. Tom has a number of bees in his bonnet and one is that he needs somewhere to expound freely about technical or semi-technical subjects. This will be unique for *MiniCycle* in that he will have free rein (or a fairly free rein) to editorialize on the magical myths of the "motorcycle wrench".

Tom is a real asset to *MiniCycle* in that he knows when somebody is laying a snow job on us, technically. Apparently, this whole business of "raising the ports .0000000005", or "how many revolutions the frim-fram has to make before it osmo-

(Continued on page 61)



The XL-70 and XL-100. Country cousins.

Head for the back country. And take along either of two great on /off-road bikes.

The new Honda XL-70 has a lot of motocross looks going for it: Motocross handlebars. High-riding fenders. Upswept muffler. Racing stripes. And a dependable, four-stroke engine with four-speed trans. Plus lighting, instrumentation and safety features that can give you

a safer feeling when you're doing your favorite number.

The XL-100 packs more cc's —for greater response when and where you want it. More of the same great motocross-style looks. Overall, it's a tough, lean machine that's bound to be a tempting contender for anyone in the market for fun! See the Honda XL-70 and XL-100 at your Honda dealer's.

HONDA
Good things happen on a Honda.

For safety, we recommend that you always wear a helmet and eye protection, keep your lights on and check the local laws before you ride. For a free color brochure, write: American Honda Motor Co., Inc., Dept. JL, Box 50, Gardena, California 90247. ©1974 AHM.

APRIL 1974/9



WORLD MUDDY GRAND PRIX

The past weekend (Jan. 5 & 6) had to have been the worst in the life of the organizers of the World Mini Grand Prix. Our sympathies were with them during those trying days of mud, rain and snow. Who would have thought such weather would hit "sunny" Southern California?

The NMA did a tremendous job of trying to keep the races going but, we believe, they did the right thing in cancelling the event until Easter. Despite the disappointment of those who had travelled thousands of miles to enter this race, conditions were so bad that it

was too risky for the riders. Not that the competitors didn't want to ride, regardless of the mud. Still, as parents, sometimes we have to protect them from themselves.

I understand that the event is to be re-scheduled and I hope it will be a complete re-run of all three motos. My respect for the riders who competed in the only moto run during the original dates has no bounds. However, I do not feel that the results can be judged as conclusive of their ability. Mechanical problems due to the weather kept many fine riders from getting off the starting line.

That weekend was quite an experience and made me feel proud to be associated with the fine riders and pit crews. It was gratifying to mingle with the group and witness the good humor (in most cases) with which the disappointing conditions were met. It was enough to sink all but the heartiest spirits, but these people remained cheerful to the end.

Flo Irwin
Fullerton, California

\$1000 REMATCH DEMANDED

Although we are the real victims of erroneous information, published in "Dyna-

testing the 80's" (MiniCycle, Feb. '74), it is obvious that you have been duped. Neither the selection of test facilities, nor the actual tests, if any were indeed made, indicate either fair or unbiased reporting. Certainly, the reported findings are not factual. It is all too clear that in at least one instance, your reporter used data furnished by Yamaha without benefit of any test at all.

We stand by our specifications and by our claim that the Noguchi GT 80 Stage II Kit delivers double the horsepower of the stock Yamaha 80. We state further, without any qualification, that the delivered horsepower of the Noguchi will exceed the delivered horsepower of any 80, modified or not. In proof of these claims, we are prepared to put our money where our mouth is.

If you will arrange a fair and unbiased test, to be conducted by any qualified but independent test facility, with each participant supervising his own test preparation, we will put up \$1,000, to be matched by a like amount by each of the other participants—winner take all.

In the interest of fair and factual reporting for the benefit of your readers, which your publication claims as its principal goal, it would behoove your

RE-SCHEDULED *4TH* ANNUAL RE-SCHEDULED

WORLD MINI GRAND PRIX

MINIBIKES RACES MINICYCLES

APRIL 6 & 7 (EASTER)

INDIAN DUNES PARK

VALENCIA, CALIFORNIA

..... THERE WILL BE CLASSES FOR ALL TYPES OF MINIBIKES & MINICYCLES; ENTER YOUR BIKE!

BIGGEST MINI-BIKE & MINICYCLE EVENT OF THE YEAR

.....

SANCTIONED BY

NATIONAL MINICYCLE ASSOCIATION

WRITE NOW FOR
ENTRY & MEM. FORMS

• NATIONAL MINICYCLE ASSN •
23301 OSTRONIC DR.
WOODLAND HILLS, CALIF. 91364

publication to further such comparative testing and to report on it comprehensively.

David M. Townsley
Dirty Distributing Co.
Atlanta, Georgia

Ouch! But do you have any real complaints? We hate to have anybody mad at us but we conducted the test as honestly as we know how. We're willing to supervise a rematch, with our own tech editor running the dyno, since he's qualified and unbiased. Don't know if you'll get any takers, however, with such a large stake. We're working on it and hope we can get it done in time for the next issue.

QUIET WISDOM

I came across your interesting publication in the large news store where I couldn't get a magazine on go-karts. Even the name Indian is reminiscent of the script on my bikes of a distant era, when my companions rode Reading-Standard, Ace, Pope, H-D, Merkel, and Henderson-4.

Once a month they have a motocross in St. Petersburg, for all age groups. It is certainly a rewarding advance for the younger set to have grown beyond the constructing of soapbox with identical axles and wheels and no machinery. They need your recognition and encouragement.

Motorcycles, in all sizes, must conform to decibel limitations if they are to keep from being legislated out of existence. Even in remote hill country, motorcycles should be ridden with street mufflers so as to respect the life patterns of birds and beasts and human residents of the area. No motor sport should consider maximum attainable speed to be more important than rider competition.

Franklin Pierce
St. Petersburg, Fla.



BRINGING UP BIKERS

After reading one of my older issues of your magazine, I realized how much a part of me *MiniCycle* has been ever since I got involved with it. I have every issue of *MiniCycle* except three, and I even have about four issues of *Mini Bike Guide*.

The only small gripe I have is that I think that the tests could be a little bit longer and more detailed. Your magazine would also be more interesting if you tested more 100 and 125 enduros along with some more tests of torque converter equipped mini-bikes.

Your magazine influenced by choice of the mini-cycle that I now own (Honda

XR-75) and it was where I saw the ad for my last bike. I expect my next bike to be either a Honda SL-100 or an SL-125, depending on how much I grow. I know you have already tested the SL-100, but could you please test the SL-125, so I will know what it is like, also?

Your magazine has also got me interested in motocross, and that is just about the only kind of riding I do now. It's my favorite kind of riding. You don't have to publish this letter. I'd just like to say thanks to you guys at *MiniCycle* for helping me to grow up right by helping me with bikes.

Jon Herron
New York, New York



NOGUCHI

HI-PERFORMANCE KITS.



The ultimate in performance for Yamahas. Noguchi's hi-performance kits available for Yamaha 80, 125 and 175cc machines. Contact your Noguchi Performance Center.

NOGUCHI STAGE II 1974 KIT FOR YAMAHA MX 125 A (shown below). Kit includes: Chromed Alloy Cylinder, Alloy Cylinder Head, Head Gasket, Cylinder Gasket, Piston w/pin and clips, Piston Ring, Large Volume Carb Manifold, Reed Valve Gasket, Mikuni 28mm Aluminum Carb, Carb Clamp, High Pipe or Low Pipe, Main Jets (2), BLENDZALL Racing Castor, Noguchi Decals.



NOGUCHI PERFORMANCE CENTER



Exclusive World Wide Marketing for Noguchi
3125 Marjan Drive, Dept. MBG
Atlanta, Georgia 30340
Phone: 404/458-9866

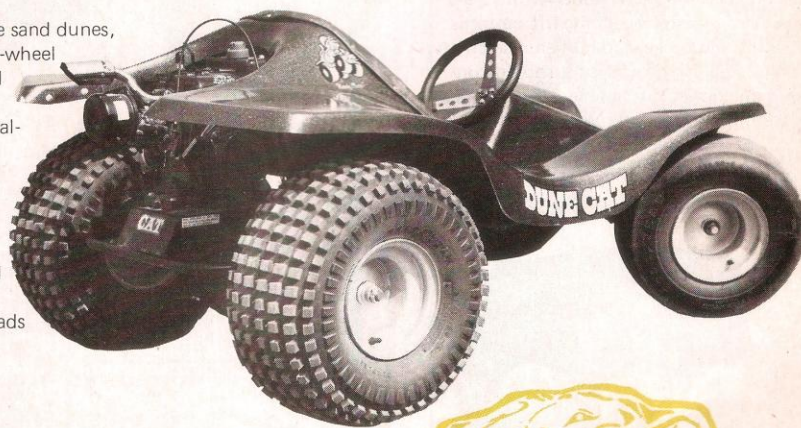
GET WITH THE ACTION



muskin DUNE CAT

THE NEW KICK FOR ALL AGES

Enter a week-end race, zoom across the sand dunes, go climb a hill, or just cow-trail in four-wheel safety. Get the kind of mini-four-wheel action only the Muskin Dune Cat can deliver. Standard features include: metal-flake fiberglass body; automotive-type differential for independent rear wheel drive; torque converter power transmission gives automatic variable gear ratios; 5 hp four-cycle engine; wide, low-pressure tires for minimum ground damage. Plus a top speed in excess of 30 mph. And, the Muskin Dune Cat loads into any standard station wagon.



for more DUNE CAT information, write ...

muskin CORPORATION

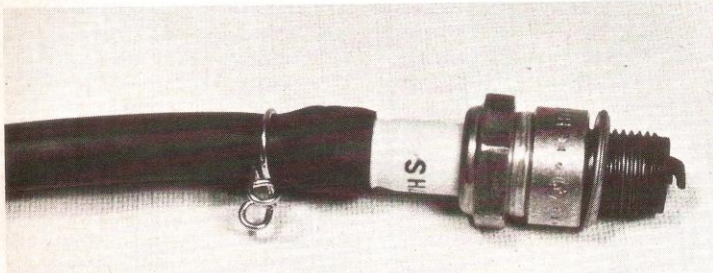
225 ACACIA STREET (P.O. BOX 311) COLTON, CALIFORNIA 92324

See list of regional representatives, opposite page.
12/MINICYCLE



The "CONFIDENT CAT"

TIP★BITS



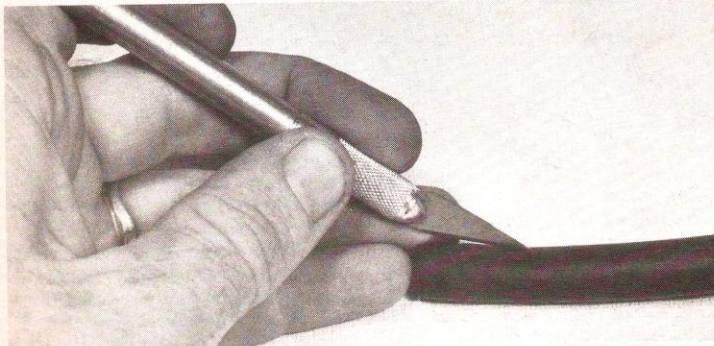
FUEL-PROOF SPARK PLUG TOOL

This simple tool gives plugs a new twist

Double-jointed mechanics are in great demand wherever two-stroke mini-cycles are repaired. The problem stems from a basic design problem. Many of the machines are assembled at the factory with the spark plugs already installed in the engines. Had the designers been able to work on the bikes themselves they would have learned a simple truth. When the plug is removed part way it is

physically impossible to get a proper plug wrench under the upper frame tube for removal (* # ! & # ! -Ed.). Even the most sophisticated of tools won't work in this situation.

A piece of standard fuel line can act as a flexible drive when placed over the spark plug's insulator. A plug wrench will be needed to loosen the plug initially and for final tightening. The threads should be coated with *Never-Seez* compound or graphite to make installation easier and to prevent seizing.



"GOODBYE NICK!"

Protect those wires

Wherever fuel lines or cables are subject to rubbing there is a chance for trouble. The constant vibration of a dirt bike can wear out wire insulation in a hurry and cause a short circuit. The problem becomes even more dangerous when a worn and leaky gas line is present. When the two are combined there is a chance for a fire.

Fortunately some new cycles come with sheaths around cables to prevent this. For those not so equipped there

is a quick and inexpensive remedy. Tubing is available in a wide range of sizes from small vinyl air hoses to giant heater hoses. Choose a size convenient for your application and slit the hose lengthwise. Spread the hose apart as you insert the wires along the length. The hose should be stiff enough to stay closed on its' own but secure with duct tape and cable clamps to be sure.

Some sources for tubing are garden hoses, aquarium air lines, surgical supplies, auto supply, air-conditioning and motorcycle parts departments. ☐

muskin CORPORATION
225 ACACIA STREET (P.O. BOX 311) COLTON, CALIFORNIA 92324



The "CONFIDENT CAT"

Ask a Muskin representative about our complete line of off road recreational vehicles.

The Hy Sherer Organization
311 Broadway, P.O. Box 207
Newburgh, New York 12550

Henry Ellis & Assoc.
1424 Merchandise Mart
Chicago, Illinois 60654

Robert Raboy Sales Corp.
130 So. Easton Rd.
Glenside, Pennsylvania 19038

Kagan, Maloney, Russo & Assoc.
8820 So. Sepulveda Blvd.
Los Angeles, California 90045

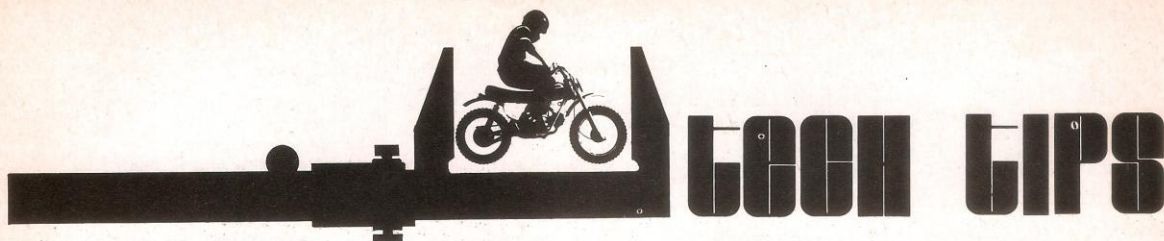
Joseph Stroum Co., Inc.
911 Western Ave.
Rm. 416 Maritime Bldg.
Seattle, Washington 98104

Bailes and Franken & Assoc.
Box 218
251 Alhambra Circle
Coral Gables, Florida 33134

T-N-T Sales
3300 Oakridge
Waco, Texas 76708

Robert W. Fritzler, Co.
15915 West 54th Ave.
Golden, (Denver), Colorado 80401

DEALER INQUIRIES INVITED
APRIL 1974/13



STICKY SITUATION

Q I would very much like to have some information, on how to fix a problem. It's a problem that is quite small, but can be quite big. I have a YAMAHA MINI ENDURO, and the throttle sticks on full. I have bought a new throttle cable, top part and bottom part. I have adjusted the carburetor, I have got a new seat in the carb., but it continues to stick on me. WHAT CAN I DO? I would also like to know where I can obtain parts for my JT1 YAMAHA. All your advertisements show parts for the newer YAMAHA MINI models!! All help would be greatly appreciated.

Bill Plaisant

South Glastonbury, Conn.

A A sticking throttle is no laughing matter no matter what size machine you have. The best place to

start is with the carburetor itself. First remove the outer crank case cover and the rubber dust boot above the carb. Disconnect the throttle cable at the handle bar. Remove the top of the carb and take out the throttle cable. Now, with your finger, place the slide in the carburetor, making sure the throttle cut away is facing the outside opening. Move the slide up and down in its place and see if it moves freely for the entire distance. If not, check the slide for dents, burrs, or excessive wear. If the slide appears to be okay but still sticks check out the inside of the carb for the same defects. While moving the slide up and down, try loosening the carb mounting bolts. Sometimes, overtightening will distort the body of the carb causing the area that the slide moves in to be out of round, binding the slide. If this is the case, proper retightening should cure the problem. If not, the body may be permanently damaged and have to be replaced. If none of the above appear to be the problem, make sure the twist grip moves freely on the bars and the cable is not bent or improperly routed causing a bind. Extreme care must be used when reassembling after repair or inspection. Many times the rubber dust boot will cause the outer part of the cable to hang up on the top of the adjuster, not allowing the slide to reach the bottom. It is best to make sure this is correctly installed before replacing the outer cover.

Many racing products are available for your JT1. Although the ads are updated for the new machines and new equipment, most of the accessory manufacturers have stocks on hand for the earlier models. I suggest you write to them directly. One that comes readily to mind is Fun n'Fast, 18143 Napa St., Northridge, CA 91324.

"LOOKS" AREN'T EVERYTHING

Q I have a problem with my Honda XR-75. My bike is running somewhat lean. I have been able to tell this by "readings" and checks on the spark plug. I have tried a number 105 main jet which is one point over the

stock 100. Around the point where the head meets the block there is a very slight ring of oil that I can only see when dirt gets on it. My bike is 8 months old and I have not replaced the gasket between the head and the block nor have I replaced the piston rings. I have checked my fuel system for fuel starvation and I don't think my head is warped. My bike is competely stock and it has just been repaired from a pretty bad crash. (I wasn't riding it during the crash.) Most of my riding is either motocrossing, flat out trailing or riding in deep sand and up steep hills. None of the things I have done including moving my needle on my slide, seem to make my plug read that my engine is running richer. Could you please tell me anything to do to get my bike running richer before I blow a hole in my piston. Thank you.

Jon Herron

New York, New York

A First of all, how lean is "somewhat lean?" Proper determination of rich or lean mixture for a particular engine is a bit more complex than first meets the eye. Merely looking at a spark plug and seeing a color other than the supposedly desirable "chocolate brown" is not necessarily an indication of a critically lean or rich mixture. Spark plug readings are a valuable tool to the engine tuner, but not the most reliable or only method available. There are many characteristics of engine performance which indicate proper spark plug design and spark plug heat range that all contribute to the color detected on the plug. A great deal of experience is required to "read" spark plugs for proper tuning. If your engine is running properly, not missing, normal power, not running hotter than usual, etc., chances are you are jetted properly, especially if your engine is stock and in good condition. First of all make sure you are using the manufacturers recommended spark plug, not one that is "hotter" than specified. For very hard running it is advisable to go at least one heat range "colder" than standard. Ignition timing can also cause "lean" plug readings. Make sure your timing is correct. Assuming all of the above is in good order and

SMOKE THE 2-STROKES

Track-proven cams for all mini-cycles from



Grind 68, Honda XR-75 HiRise

The winning machines are WEB-CAM equipped!

Hondas...XR-75; SL-70; XL-70; all 125cc. Hottest Briggs & Stratton cams around. Trick valve spring shims for XR-75 prevents valve float. WEB-CAMs fit all hop-up kits, makes 'em screamers.

Immediate delivery!

For special "MiniCycle" deal send 50 cents for catalog and decal to:

WEB-CAM Inc., 1999 So. Ritchey Street, Santa Ana, Calif. 92705 Dept. 4-74

Name
Address
City State Zip

you still think your engine "looks lean" have it checked by your dealer. However, a good running Honda will generally show a light plug reading definitely toward the lean side. Champion spark plug racing division publishes a great little guide to plug reading. It might help you better understand what to look for.

EXHAUST PUT DOWN?

Q I have a Honda XR-75 with a Bassani megaphone which I think helps its performance very much. I also have many friends with Bassanis, which some have had a long time, with no ill effects to their engines. It always seems like whenever some one asks you about what kind of megaphone or expansion chamber you recommend, you either avoid the question or put modified exhausts down completely. Why? I have heard they are hard on valves and points, is this true? Also are reground (racing) cams that "obtain quick closing and increased valve lift" hard on engines and valves? Your mag's the greatest! Thanks for the help.

Jim Dumas
Garland, Texas

A Our objection to megaphone and expansion chamber exhausts has to do entirely with the concept of "less sound — more ground." Racing exhausts are great for racing. They do not have to hurt power to be quiet. It is quite possible to have an efficient exhaust system without offensive noise. As long as you have a racing machine that is used strictly for racing we highly recommend the use of megaphones and expansion chambers that are silenced to meet the rules of the race event. But anybody who puts a loud pipe on his bike just to race around making noise deserves any kind of put down he gets.

Megaphones are not hard on valves and have no connection whatever with the ignition points. It was wrongly believed for awhile that open exhaust allowed cold air to reach the exhaust valve after the engine was shut off causing the valve to warp. This is typical of the shade-tree engineering that somehow seems to surround the hot-rodder causing many old wives' tales to be accepted as fact. The warm air and surrounding surfaces in the pipe and port keep "cold air" from reaching the exhaust valve before it has cooled down enough to be affected by it.

Racing cams with fast opening and closing rates create additional stress on the valve train but not necessarily enough to be considered "hard" on these parts. Any engine modification aimed at higher

THE BLOND

Hey Guys and Gals, If you wanna' do it in the dirt faster and get into the Winner's Circle more often, just let

Hacienda Honda set you up with ... their exclusive BLONDE. You'll get lightened and balanced crankshaft, lightened, polished valves, 22mm manifold, 22mm carb, racing cam, 80cc high comp. piston kit, dyno-tuned megaphone w/silencer and filtron air cleaner ... It's the hot set-up just like our Racing Team runs ... (and just like a lot of those guys that run against us.)

THE RED HEAD

And if you're a new Mini Cycle rider and want to get about 40% more horses from your Honda XR 75, get our great REDHEAD ...

Just change to our super cam and straight pipe exhaust w/silencer and you're off and running. To get all the information, write to "HH Blonde" or "HH Redhead". Prices, a FREE decal and FREE catalog will be mailed to you real fast. (Be sure to give your ZIP code.)

HACIENDA HONDA

507 No. Azusa Ave.
La Puente, California 91744
(213) 968-6461

rpm and power output tend to shorten the life expectancy of an engine. The use it is put to and the strength of the materials, among other factors, determine the reliability of a racing engine.

FORMULA PIPER

Q Having just read through my brother's older *MiniCycle* Magazine (Nov. 72), I noticed a very good article on "Tuned Expansion Chambers." In one of the last paragraphs, it mentioned that there are mathematical formulas to work this all out on paper (shape of the cones, etc.). I was wondering if you would send me these formulas the

article is referring to. If not, would you please tell me where I would be able to get these formulas.

Marty Pasqualone
Arcadia, California

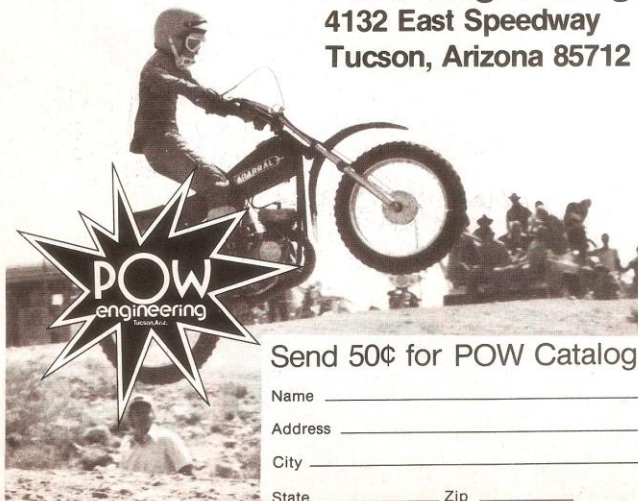
A There are nearly as many theories and formulas for deriving tuned expansion chambers as there are engineers studying them. The entire scope and concept of expansion chambers is very complex as are the formulas. We will attempt to shed some light on this whole area of tuning and try to give our readers some insight as to how these formulas are derived in some later issues. Although there are a great many people

building these chambers, and some of them are quite good, many areas of design are still a matter of opinion and controversy among these individuals and engineers who are the most knowledgeable in this field. However, if you want to learn about expansion chamber formulas and get some math practice I suggest you purchase a copy of Gordon Jennings, "Two Stroke Tuners Handbook", available from Webco, Inc. Be prepared for some heavy math and ultra-technical theory. It will give you an idea of how much is involved in the design of expansion chambers and a wealth of other two stroke knowledge that you can benefit from. If you find it too technical at this point, be patient. We will present a simpler, step by step explanation of these mysterious music makers later on.

THE HOT SET UP

POW Engineering, the foremost Fuji 80 and Fuji 100 specialist, now has available in limited quantity POW Cylinder Kits with reed or piston timing. Hi-compression heads, barrels, dykes ring pistons, reed valves, carburetors and up or down style pipes. Also complete engines—and by special order, Works Chaparral Race Bikes, currently campaigned in the Southwest by Danny Boaz, Smilin' George, Jeff Hewitt, Rick Trammel and Richy Varner.

POW Engineering
4132 East Speedway
Tucson, Arizona 85712



Send 50¢ for POW Catalog.

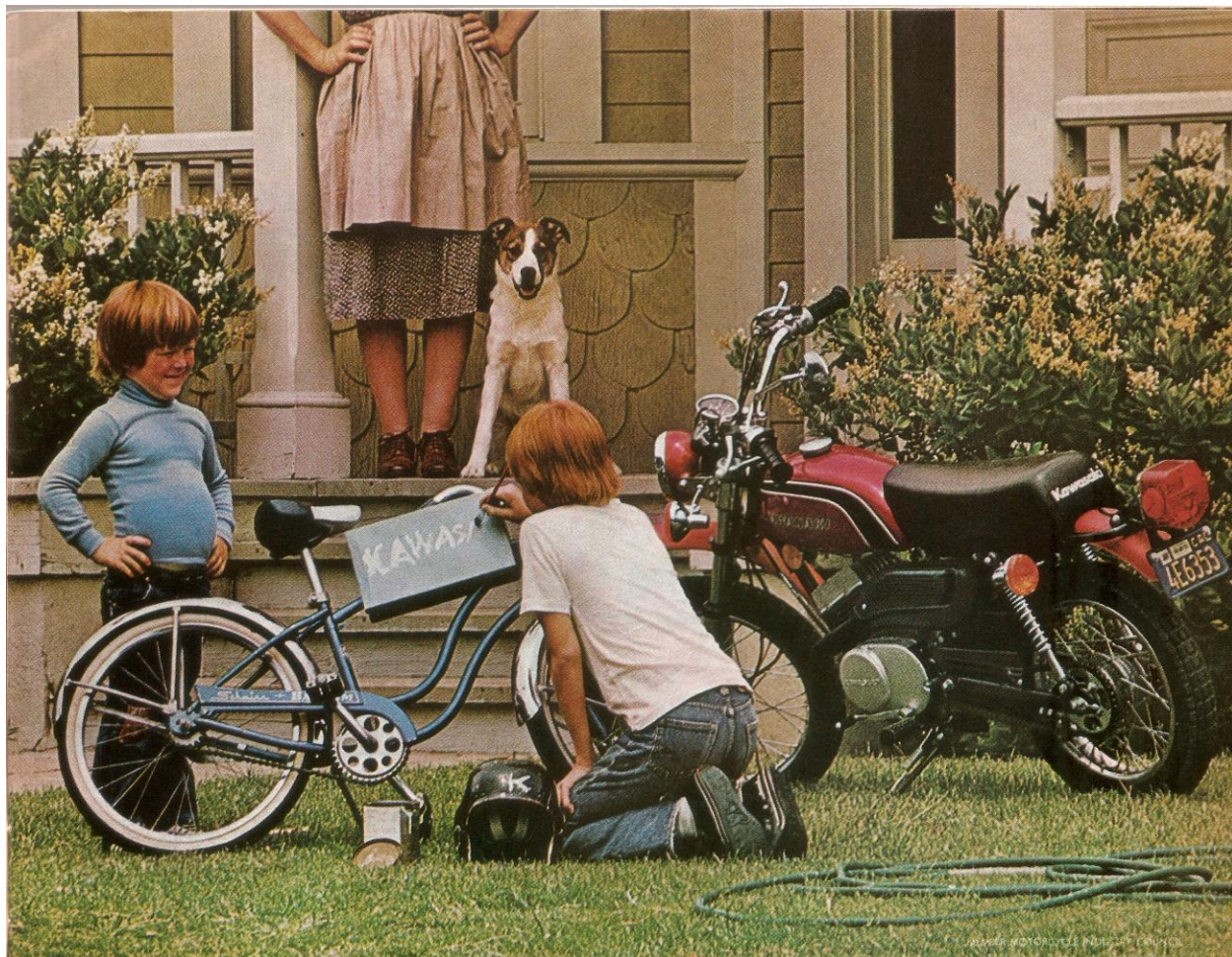
Name _____
Address _____
City _____
State _____ Zip _____

CHAIN PAIN

Q I did not think I would ever be writing to you because I thought I had the perfect bike because I never had any trouble before. Well, I have a 1972 Honda SL-70. Recently, my chain has been coming off a lot, and I was wondering if you had a cure to my problem. I am afraid to ride on the road because if my chain locks up you can say good-bye to my bike.

Tommy Melton
Marryville, Tennessee

A Sounds as though you are experiencing chain wear and alignment problems. What probably has happened is that when your chain had worn enough to need adjustment it was adjusted improperly and misaligned. The proper amount of slack on your SL-70 is about 1/2 - 3/4 of an inch measured on the bottom section of your chain in the middle between the sprockets. The SL-70 has alignment marks scribed into the swing-arm tabs and corresponding notches in the chain adjusters themselves. When you have the proper amount of slack, make sure you have both adjusters exactly the same in relation to the index marks. Then tighten the axle nut very securely and recheck the tension and alignment, if these haven't moved, tighten the adjuster nuts up snug. Now, rotate the wheel a little at a time and check the chain for tight or loose spots. If you find that the chain gets a lot tighter or looser in some spots it is time to replace it. A damaged or worn chain will wear out your sprockets and wheel bearings very quickly. It's better to replace the chain early than to wait too long and have to replace a lot of other expensive parts. ☐



"Hero Worship"

Motorcycle fever is catching.

Because whatever your size—big, middle, or small—when you see the delight someone else takes in his motorcycle, you want to size one up for yourself.

And that's good. Because whatever your size—big, middle, or small—Kawasaki has a motorcycle that's just your size.

We even have small bikes that come in different sizes. Small bikes for the trail. Small bikes for

both street and trail. Even a mini-trail bike that can be tucked away in just about any vehicle except another motorcycle.

All consuming attractively small amounts of fuel. And all selling at attractively small prices—starting at only 299*.

And, if you're a big person, one of the most attractive things about these small Kawasaki bikes is giving one to someone close to you. Who is also smaller than you.

You can have the time of your life watching your youngster making lazy circles in a vacant lot. Discovering the pride he

takes in caring for a fine piece of equipment that's all his own. Teaching him some old-fashioned ideas like safety and responsibility.

Or seeing the look on his face, when the other kids are looking up to him.

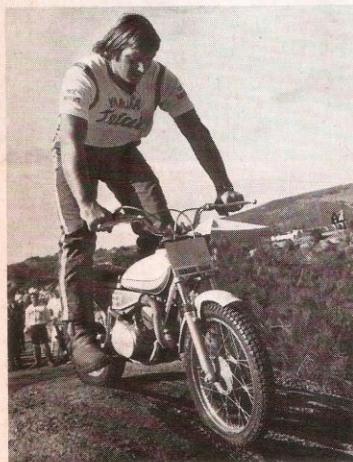
*Suggested retail price for MC-1M (model shown slightly higher). FOB West Coast POE. State, local taxes, dealer prep, options extra.

Kawasaki
lets the good times roll.

APRIL 1974/17



Demonstrating the procedure for a tight spot, Andrews sacrifices a "dab" for a 360 degree turn.



Dwarfing the TY-80, Mick Andrews encourages the little machine to behave like a 250.

Once again, Yamaha leads the way in promoting motorcycle riding to the general public. This time they are instituting a Learn to Ride *Trials School*. Based on their fabulously successful LTR program, which seeks to introduce people to the basic elements of riding, the Trials School goes one step further. It shows the public something about dirt riding.

MiniCycle magazine has long maintained that trials riding is *the* best way to master *all* types of off-road riding. In fact, the trials rider has an advantage even on the street. And when it comes to motocrossing, desert riding, hill climbing, or any other type of racing, the rider who has been taught, and learned, trials riding properly has a definite edge over a rider who hasn't.

There is no better way to build riding confidence. Compared with go-fast racing, trials is infinitely safer. It can be-

come a real family participation sport. It is ecologically much more acceptable, from the viewpoint of noise and damage to land, and it can be carried out in a small area that is virtually useless for anything else.

For these, and other, reasons, everybody should be super happy that a major company like Yamaha has decided on a national program to spread the good word. Of course, it is not coincidental that Yamaha has recently introduced two new trials machines, the TY-80 (tested in the December '73 issue of *MiniCycle*) and the TY-250. However, it is still true that the profit motive often produces good results.

Yamaha's first Trials School was held in January, near San Diego, California. Star of the show was ace trials rider Mick Andrews, the Englishman who helped Yamaha develop the TY-250. They could have made no better choice. Mick is a true gentleman and his fame hasn't affected his friendly patience with people who ask him dumb questions. On a trials motorcycle he is a true artist. Most of the people at the School had never seen an expert trials rider in action although, in contrast to the regular LTR schools, the majority appeared to have motorcycle experience, judging from their gear. There were gasps of amazement when Mick Andrews made his machine sit up and beg.

YAMAHA'S TRIALS SCHOOLS



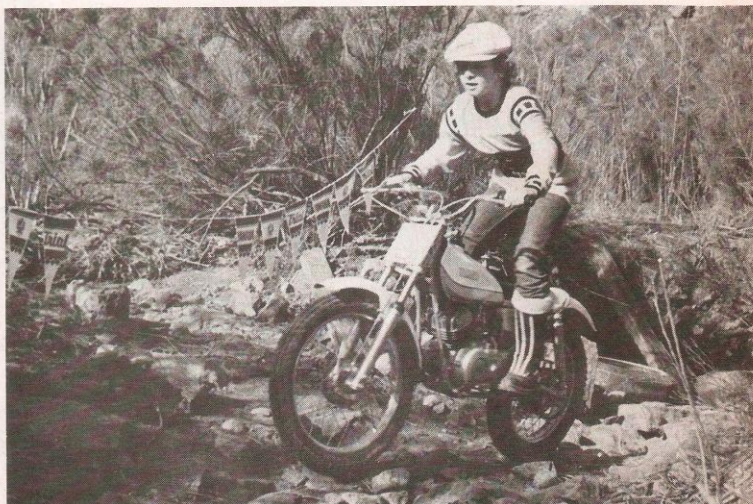
Part of the line-up waiting for a shot at the TY-80.

Mick spent most of the two-day School in front of a microphone explaining what trials was all about and answering questions. A roped-off area, near the riding sections, contained about 100 seats and they were nearly always full as Mick talked.

After the participants had their fill of listening, they lined up for a ride on the machines. Unlike the regular LTR program, the Trials School charged \$1.50 to ride (or a buck if the ticket was obtained from a Yamaha dealer). The machines were provided by local dealers and the volunteer instructors came from two local trials associations, the Bog Wheelers and the San Diego Trials Riders. Both the Yamaha trials machines were available and there were nearly as many youngsters riding the TY-80 as there were adults for the TY-250.

In terms of numbers, the first LTR Trials School was almost embarrassingly successful. There were about 1,800 riders over the two days and nearly as many watchers who "just dropped in". Dave Miller, Yamaha's man in charge of the program, had anticipated about one third this many riders and so there were line-ups waiting for machines.

Future plans for the Trials School are a little hazy at the time of writing since the first School was a trial run (pardon the pun). As things stand, there will be between three and ten more held



Paul Carruthers, who has a famous dad called Kel, negotiates a tricky section on the TY-80.

Novice tries his hand at trials on the TY-80. Notice ready hand of instructor.

around the country, with the next one likely to be held in Michigan during April. For scheduling and other information write to Dave Miller, LTR Program, Yamaha International Corp., 6600 Orangethorpe Ave., Buena Park, California 90620. □



Whoever said "nice guys finish last" never met Gene McCay. Gene didn't earn Y-AMA's National Number One position by being a pussycat, but off the track he hasn't forgotten how to say "yes, sir." Try to pry that out of the California hot-shoes. Not that California kids are rude or impolite, but they don't have the same old-fashioned kind of respect for elders that Southern youngsters display.

Gene McCay and his family came all the way out to Southern California, to race in the World Mini Grand Prix, from Lexington, Tennessee. Like many other people, they spent a lot of time at their

motel waiting for the weather to clear.

When we first saw Gene in person, he was one of about 20 youngsters goofing off in the parking lot of the Ranch House Inn. They couldn't race, so they had to let out the energy some way. Gene and Brian Myerscough were pedaling around on bicycles, dodging snowballs thrown by the other boys. When they were all together, getting a little rowdy from being cooped up, you couldn't tell which were locals and which were from the other side of the country. Among themselves, boys are boys.

We hated to take Gene away from the fun, but we wanted very much to meet

him. This was his first time in California (the snow-storm was a surprise to everybody since Indian Dunes temperatures are usually in the 80-100 degree range) and we hadn't gone to any of the Y-AMA races Gene rode.

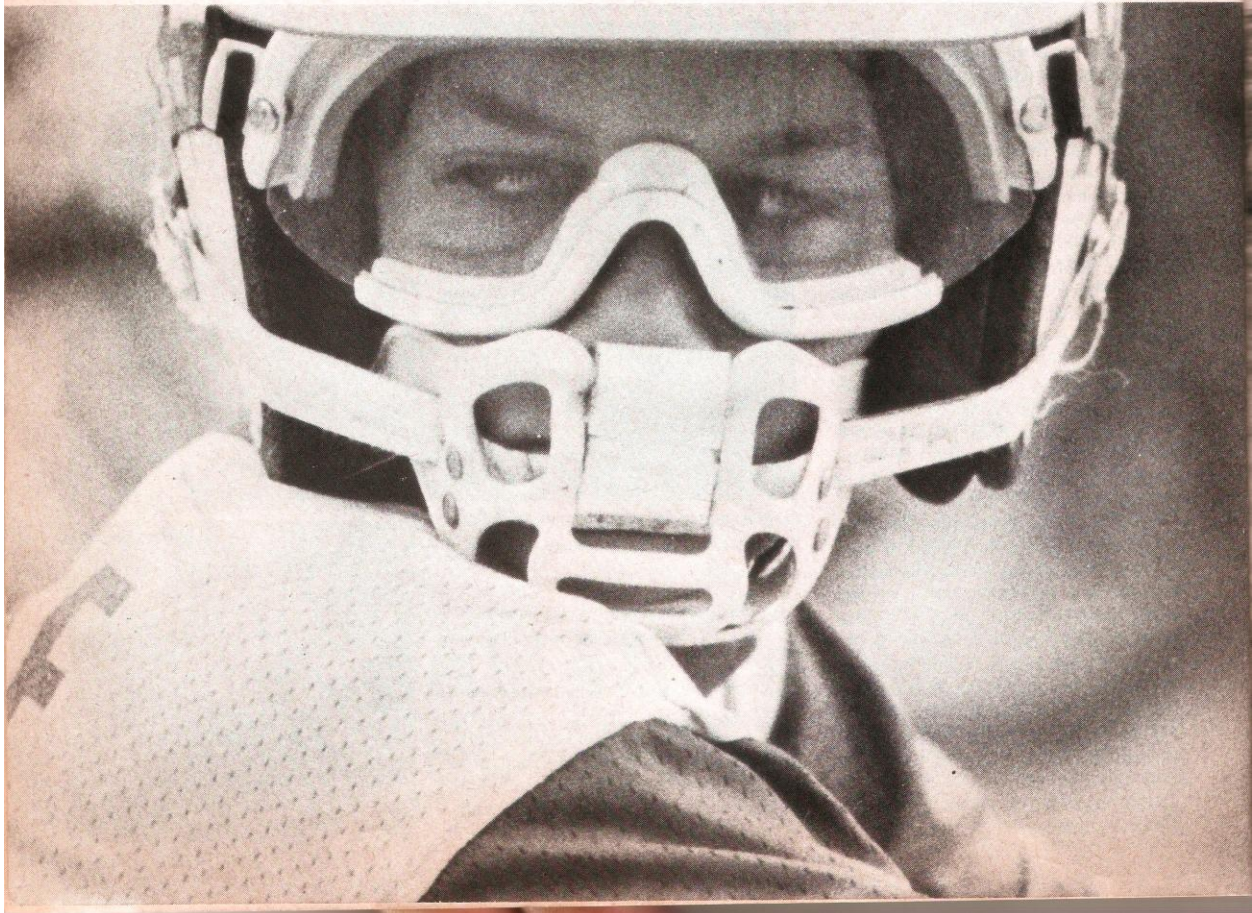
Gene is a medium-built 13-year-old, with short hair and a Tennessee twang in his voice. There is nothing about his appearance which distinguishes him as a mini cycle racer, but the same can be said of all the other racers. But you can tell that Gene is healthy and active.

Since we were all socked-in at the motel, we had plenty of time to talk to all the out-of-staters, including the

Gene McCay: Y-AMA's Number

Tennessee Produces A Champ

Waiting for his race to begin, Gene eyes the competition from under his protective gear.



McCays. By the time the weekend was over, we had learned some interesting facts about this champion.

His riding career starts like many others, on a Honda 50 Mini-Trail. Later he moved up to a CT-70, which was the first bike he raced, in Jackson, Tennessee. Six months later he transferred to a 60cc Yamaha Mini-Enduro, which he still races.

Gene was doing pretty good on the 60, so one race promoter suggested he try to race it in the 100 class. Gene did, and won.

Gene's father, Dariel McCay, then started looking for a larger bike, and

found a Yamaha 90. Gene started racing that bike regularly in the 100 class.

In 1971, Gene entered the 90 in the Arkansas Series, a ten-race series through Arkansas and Tennessee. Gene won the 100 class and had enough points to be declared Overall Champion. He was 11-years-old at the time.

By this time, Gene wasn't racing the mini-cycles very much, and he still doesn't, at home. He's gotten so good from riding the larger bikes, there isn't much competition in the local mini classes.

National mini-cycle events attracted Gene's attention, because the level of competition was much more challenging. He went to Jacksonville, Florida in November, 1972 to compete in the first Winternationals. He captured two trophies, one a first-place Cypress Knee. Gene went so fast in winning a stock class that somebody protested his SL-70. Gene's dad tore down the bike and proved it was stock, then accepted the protest fee.

Gene entered the American Motorcycle Association Youth Division's National Series for 1973, and the McCays made it to six of the eight races. Gene concentrated on the 80cc class, riding a Honda XR-75.

Creasy's Honda is the sponsor of Gene's racing efforts. They prepare his

Gene McCay, soaked with rain and mud, followed Myerscough across the finish line at the World Muddy Grand Prix.

er One



bikes before each event, then they are re-checked by Dariel McCay. Dariel handles the mechanic chores at the races. Gene lets him know how the bike is performing on the track, so he can fix any problems.

The Y-AMA series covered a lot of territory, and Gene rode quite a few good tracks. His favorite was Mid-Ohio Motocross Park in Lexington, Ohio (site of one of AMA's 125cc Championship races). Other racers agreed with his choice, although the track was probably the toughest on the circuit. Bikes really took a pounding. Apparently these top mini riders appreciate a tough, challenging course.

McCay named as his toughest competitors the four boys who followed him in final points in the 80cc class. Audie Ward was second, as well as first in the 60cc class. Rhett Radford was third, in both the 80 and 100 classes. Jeff Hope was fourth and Shaun Kelly was fifth.

We wondered if winning the national championship had any major effect on Gene's life. His mother, Linda McCay, said Gene worked very hard to earn the top position, so he was proud of his accomplishment. However, it didn't give him a swelled head, or change his attitudes toward his friends and fellow racers.

Meanwhile, Gene is moving up to bigger and better things. He's had a Honda 125 Elsinore since last November, which he admits is still a little big for him. But as he grows into it, he is learning how to make it perform. Gene has attended several riding schools down in the mid-south, including instruction by Wyman Priddy, Tony Wynn and Gary Bailey, all nationally recognized motocross racers.

Gene apparently picked up a lot of good techniques from Bailey. He had a chance to race against his teacher a short time later and led for three laps. Then

Bailey went by and eventually won, with Gene not far behind. We would like to have seen Bailey's face during those first three laps.

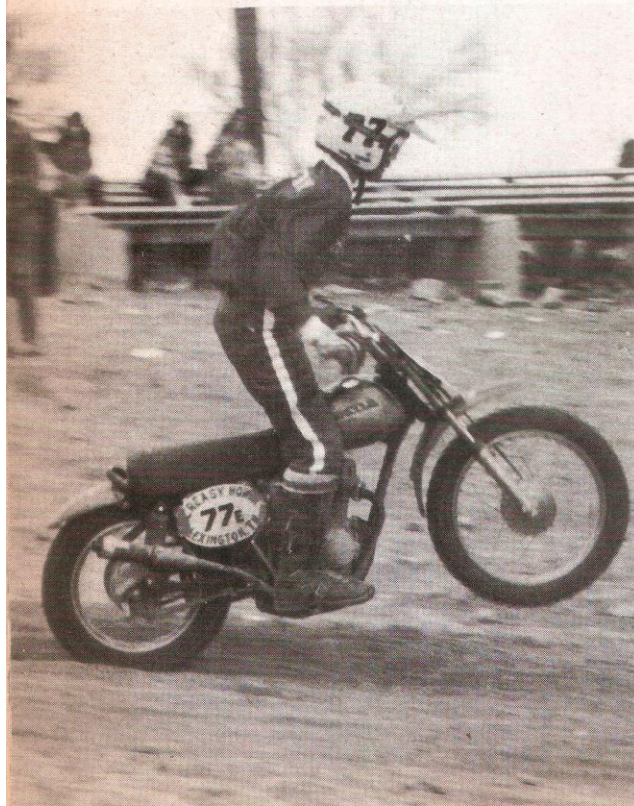
Gene said he rides mainly for the fun of it, but a couple people have hinted he might try for a professional license when he is old enough (16). Maybe there is another Number One plate in his future.

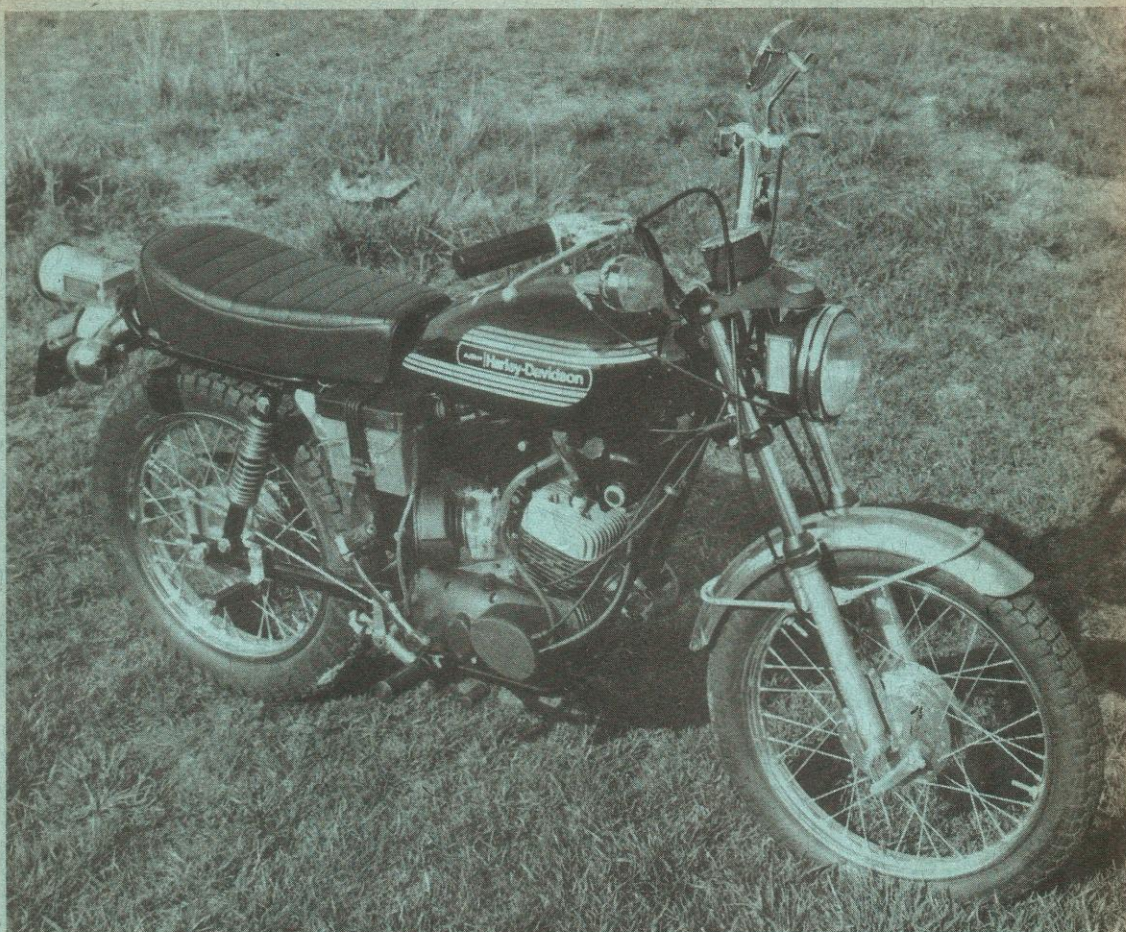
Until then, he has time to do a lot of other things which are important to a 13-year-old boy. He plays football (running back), baseball (first baseman), basketball (guard), and he likes to swim and skate. He also has a collection of miniature cars and a drawer full of motorcycle papers and magazines (including MiniCycle) which he refuses to throw away.

Sound like anybody you know? Yes, sir, he's a whole lot like most of the other riders who read this magazine, except for one important thing. He's Number One. ☐

Gene's favorite track on the Y-AMA circuit was the tough and challenging Mid-Ohio Motocross Track.

McCay confirmed his Number One title by winning the 80cc class at the final National in Phoenix, Arizona.





Harley-Davidson Z-90 is a lightweight, street-legal bike directly descended from the big Harleys.

Harley Davidson Z-90

The Sportster That Shrunk

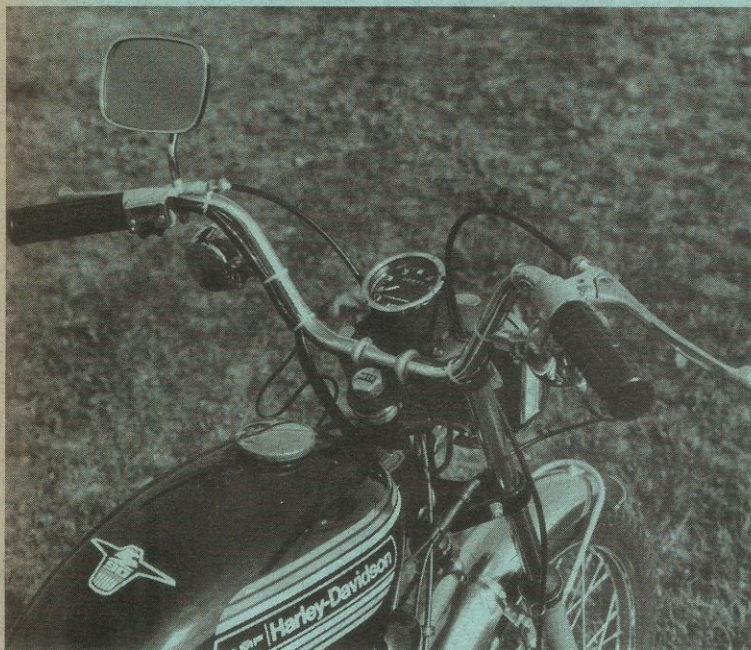
So you finally made it! 16 years old! Now, for that all important driver's license! With that in your pocket you start thinking about some kind of wheels to propel you on the streets and highways. Boy, those big super bikes are neat and so are the cars some of your older friends are herding around, but your budget just won't allow for a 750 or a V8, so you come back to earth and start shopping the small bike market. After all, you've had a lot of fun on your dirt bike and you know that small bikes are

just as much fun as big ones, and a lot cheaper to buy and maintain. While you were down at your local Harley-Davidson dealer gawking at Sportsters and Super-glides, did you happen to notice a small black motorcycle that looks a lot like a Sportster that shrunk? Better go back and see what that thing is all about.

The Z-90 is a 90cc two-stroke, with oil injection, designed for riding on or off the road. Although made in Italy it is a genuine Harley-Davidson, styled after the ever popular H-D Sportster. The

MINICYCLE
test

Harley Davidson Z-90



tank, bars, controls and head light/instrument panel are all very similar to the larger Harleys. It's finished in gloss black with red trim and has enough chrome and bright-metal to set it off nicely. Except for the huge, naked, Yuasa 12-volt battery and connecting wires hanging out the right side, appearance is indeed pleasing. Maybe we're a little picky but we've gotten used to having these items tucked out of sight on most of the Japanese machines. However ugly that giant battery may appear, it certainly is adequate for its job. The horn on the Z-90 is one of the loudest we've heard on a motorcycle of any size and is quite a surprise to ears used to the feeble beeping of most motorcycle horns. Also, the lights are very bright with the motor on, or off, contributing to overall safety along with the horn. Turn signals are widely spaced and very visible.

The Z-90 appears to be much larger than a 90 at a casual glance. The large wheels (17" front, 16" rear) with large diameter brakes and Pirelli Universal tires, 46.5" wheelbase and large dual

seat, do a lot in making the Z-90 a full size motorcycle at a 90 price tag. The bike is big enough to carry two average-sized adults fairly comfortably and the engine is capable of pulling a surprisingly heavy load for average street and back road riding.

Moto-cross style front forks by Marzocchi work well on dirt and pavement giving the Z-90 a very good-feeling front end. Steering is very precise and stable under the majority of conditions. The rear shocks and springs are another story. The springs are stiff enough for a "Harley 74" and completely erase any shock absorption qualities the dampening units may possess. The dampeners have plenty of travel and probably would work well enough if lighter springs were installed. The stiff action of the rear end nullifies the good ride offered by the front forks. When a bump is encountered on the dirt (just a bump; not even a big whoop-de-do) the forks absorb it easily giving the rider a sense of security that is shattered very suddenly when the rear wheel hits the same bump and tries to pass the

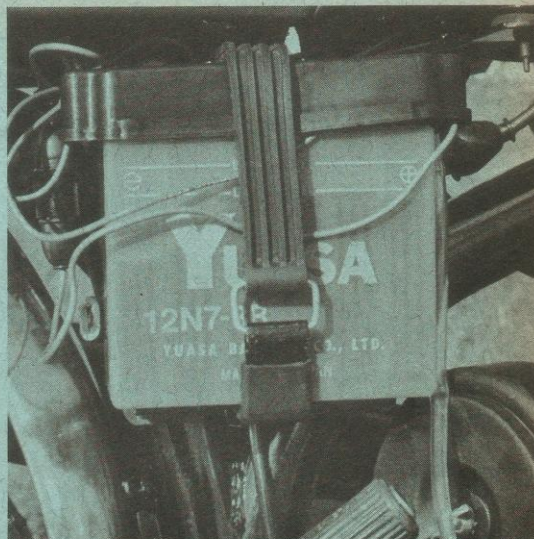
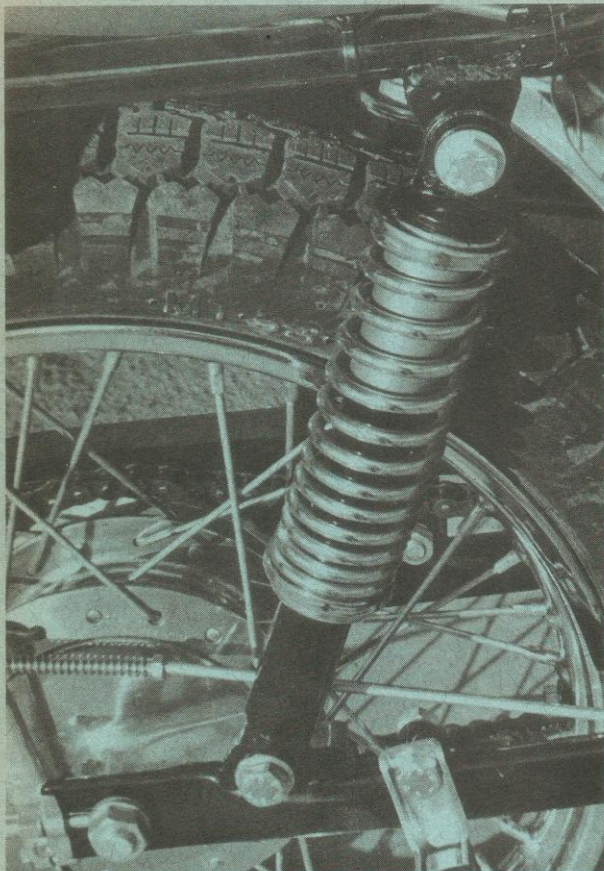


Fenders and tires look like strictly street gear, but Z-90 did it in the dirt, also.

Controls are ample in size and convenient. Speedometer is only gauge.

front wheel via the air mail route. This is multiplied as the bumps grow larger and/or the speed increases.

On the road, the stiff rear end makes its presence known only on the larger dips and bumps. In order to enjoy riding the Z-90 in the dirt the rear shock springs will have to be replaced by lighter ones. Comfort and handling safety simply aren't available with the stock set up. The only other thing we found to complain about is the seat. It is large enough for two people and is quite comfortable on the passenger portion, but it is too hard on the front section occupied by the pilot. When riding solo, the pilot can slide back onto the softer section without much discomfort, but when a passenger is taken along, the rider is forced onto the part of the seat that feels like vinyl-covered concrete. A ride of 15 or 20 miles produces saddlesores in the usual place. Even while riding with two adults aboard, the rear springs are still too stiff. Couple that with the hard seat and you've got a combination that is absolutely bone-jarring with a pair of



Big, conspicuous battery sticks out at side, breaks up good design features.

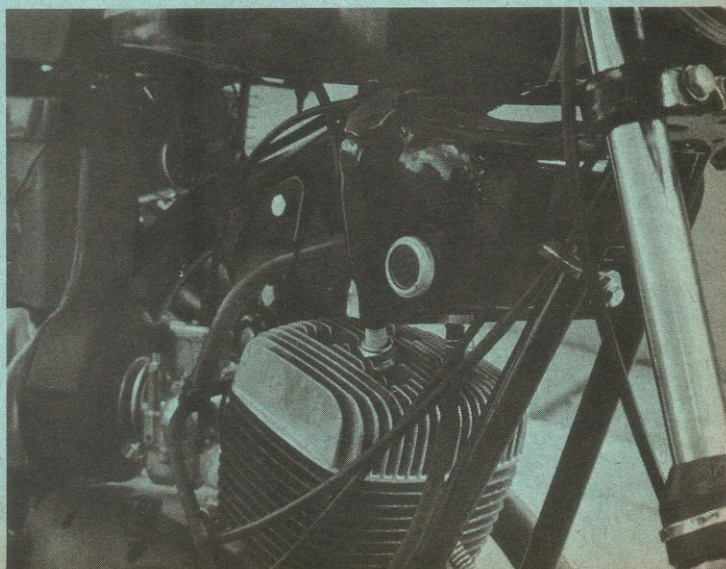
Rear suspension was stiff, didn't get settled in until two adults were aboard.

Oil reservoir sits right under gas tank, since space under seat is occupied by battery.

90-pound riders. Okay, okay, the test rider is getting soft and that seat won't really bother a young enthusiast nearly as much as an old duffer but those shock springs definitely have to go.

Back to the good stuff. The 90cc engine has a surprising amount of torque and a very wide power band. This is due, in large part, to the expansion chamber/muffler with a long induction pipe. The exhaust note is on the sporty side when accelerating and leaves no doubt that it is a "ring-a-ding" when idling or running at slow speeds. Power comes on right at the bottom and pulls strongly throughout the range.

The four-speed gear box is a real gem. Shifting is very smooth and positive, and the gear ratios are a near perfect match for the engine's running characteristics. First is low enough to get going out of tight places (even with a large rider) without a lot of clutch slipping. Second is close enough to first to keep the revs up when shifting, allowing good trail



riding without changing to a larger rear sprocket. The jump from second to third is just about right for street or dirt. Fourth gear is close enough to third to allow good use of third gear for passing and going uphill on the road. With two riders totaling over 300 pounds, the Z-90 will hit 55 mph on level ground. Cruising at 50 mph seems to be no sweat for the little Harley. With two aboard, you have to stir the gears around on the uphills quite a lot but with a single, lightweight rider aboard, shifting is minimal for a small displacement bike. Acceleration is as good as many 100cc machines and quite surprising for a 90cc street/dirt bike of this size. The Pirelli universals, front and rear, provide good cornering on pavement and dirt, and good enough traction for most trail riding if it isn't muddy or really deep and loose.

We liked the handlebars and grips and the general feel of the riding position. Controls work well and easily enough for riders of any age. A nice Harley touch is the large diameter cables, nearly twice the size of those found on many motorcycles much larger than the Z-90. They should last practically forever, considering the light duty they perform on such a small machine.

Control levers are heavy duty aluminum, with ball ends for safety, and are shaped to fit the fingers comfortably. The large, full-width hubs house a good set of brakes, capable of stopping the bike in a safe distance from cruising speeds even with two riders aboard. Control is positive and progressive, allowing precise rider control on tricky surfaces. The forward foot rests are mounted on serrated bosses and secured with a large diameter bolt to the frame. The serrated mounts allow the rider to adjust the footpeg height to his own satisfaction.

The seat height and large wheels take the Z-90 out of the mini-cycle category to the extent that riders of short stature will have a hard time putting both feet on the ground while straddling the bike. But since it is street legal and therefore aimed at the 16-years-and-up market the size really is just about right for the bike's intended users.

To sum up, the Z-90 is a spirited runner, good looking and well bred. Outside of the rear suspension it is hard to find fault. It is immensely fun to ride, even for two adults, and is powerful enough to be considered full-fledged transportation. In today's economy-conscious society, small-bore gas-savers like the Z-90 will probably come into much heavier use in the U.S.A., as they have been in Italy and Europe for many years. In the rush to find inexpensive fun transportation, don't overlook the stylish Z-90. It could well be the best small investment you ever made. □



Dual-purpose bike performed surprisingly well in dirt, even with street tires and accessories.

HARLEY-DAVIDSON Z-90

Manufacturer: Harley-Davidson Motor Co., Milwaukee, Wisc. 53201

ENGINE

Engine type	single, two-stroke	Carb	DelOrto
Bore	48mm	Ignition	Battery & coil
Stroke	50mm	Lubrication	oil injection
Displacement	90.43cc	Fuel capacity	2.4 U.S. Gal.
Horsepower @ rpm	N/A	Fuel requirement	regular gas
Compression ratio	9.2:1		

TRANSMISSION

Transmission type	4-speed, constant mesh	Gear ratios: (overall)	
Primary drive	Helical gears	1st	28.66:1
Clutch type	Wet multi disc	2nd	16.05:1
Final drive	roller chain	3rd	10.58:1
		4th	8.30:1

CHASSIS

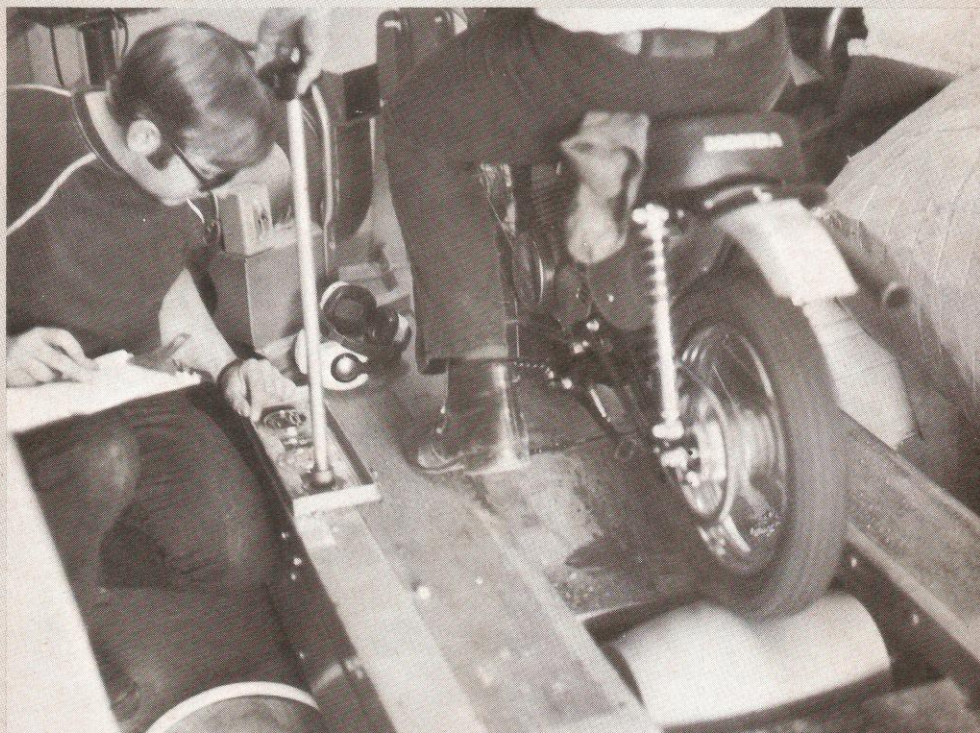
Frame type	Sgl. backbone, dbl. cradle	Tires: (Universal tread)	
Wheelbase	46.5"	Front	2.50x17
Overall length	72"	Rear	3.25x16
Suspension:		Brakes	Sgl. leading shoe, frt. & rear
Front	Telescopic forks	Ground clearance	7.3"
Rear	Swing, arm, spring shock	Seat height	28"
Wheels	Front 17", rear 16"	Dry weight	158 lbs.

PRICE AS TESTED \$425.00



MR 50 HOP-UP

Hot Honda From The Hacienda



Dyno testing is a valuable tool in any hop up job. Here Paul Kaitz wrings out the modified version for Tech. Editor Tom Mohr.

Honda's Elsinore series M/X bikes have been around long enough now to begin receiving "the treatment" from the many private tuners, accessory manufacturers and other assorted speed merchants. The newest Elsinore, the MR-50 mini-racer, is no exception. For a look at what's happening to the little varmint, we were invited out to Hacienda Honda's R&D Department to watch Paul Kaitz prepare an MR-50 for the Mini Grand Prix at Indian Dunes, California.

As in any hop-up job at Hacienda Honda, the first step was to set up a new machine and service it to standard specs. Next, it gets a few easy miles on it to

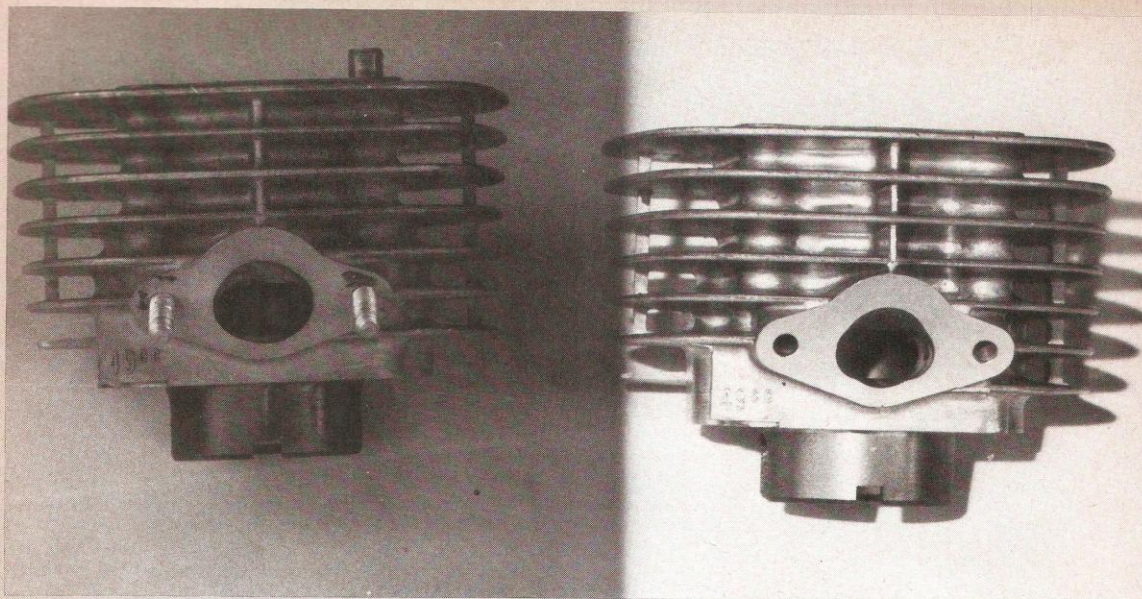
get things loosened up before initial dyno testing is begun. Once on the dyno, Paul puts it through "the numbers" to get an overall picture of the machine's performance characteristics. All the data is recorded on a graph to be studied for possible improvement and to establish a "yardstick" by which to measure the effect of the step-by-step modification of the machine.

Since Honda really prepared this machine for very young, beginning riders, everything about the engine is in a very mild state of tune, leaving lots of room for improvement by those riders who can use the additional power.

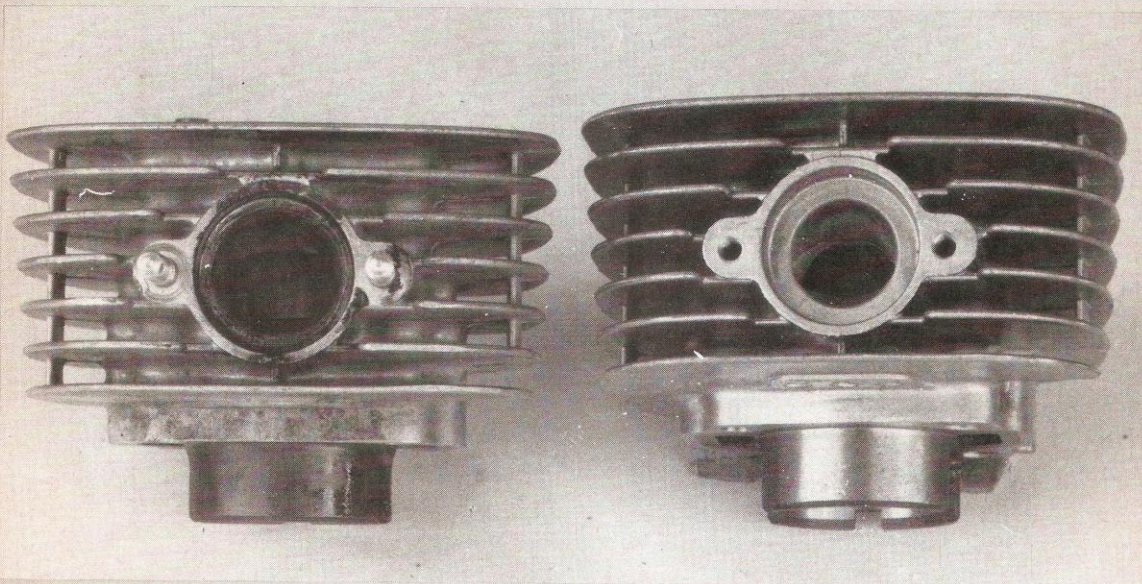
At this stage, the engine is torn down and the size and shape of the cylinder ports as well as the port timing, carb size, compression ratio and exhaust system are measured and studied for improvements.

First step in the hop-up was to modify the port timing to more race-worthy specs. Improved breathing was obtained by raising the exhaust port and extending the intake port duration by lowering the port opening and slight shortening of the piston skirt on the intake side. The exact dimensions are not for publication at this time, as the final configurations will have to be determined by more test-

APRIL 1974/27



Modified cyl. on left shows difference in port shape. Std port shape is cheap to machine but lacks flow efficiency.



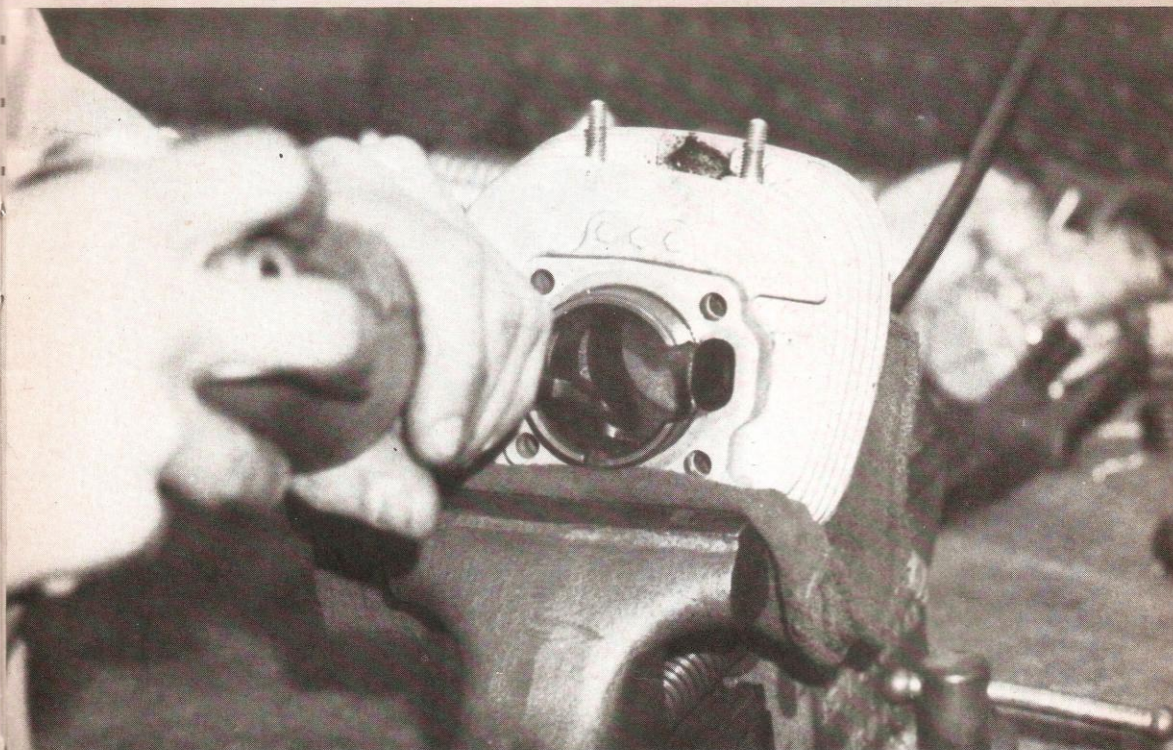
Increased exhaust port area on L/H cyl aids flow efficiency and changes power peak upward.



ing and actual race experimentation. Inspection of the transfer ports revealed that more transfer area could be utilized by grinding two transfer grooves into the cylinder wall located on either side of the intake port. While not actually being bonafied fifth ports, these grooves, matched to holes in the piston skirt, do aid in transferring more mixture to the combustion area in the amount of time allowed by the duration of the transfer port openings. This adds to the engine efficiency without any loss of power at either end of the rpm range. Paul found

that the extra work required to make the 5th port grooves resulted in appreciable gains in the torque and so this modification is included in the hop-up package on an exchange cylinder basis along with the other port modifications.

The widely spaced ratios of the standard 3-speed gearbox demand a rather wide power band in order to get any useful power to the ground. In keeping with the wide power spread required, Paul elected to use an expansion chamber with a long head pipe and slow taper cones, allowing the power to be spread

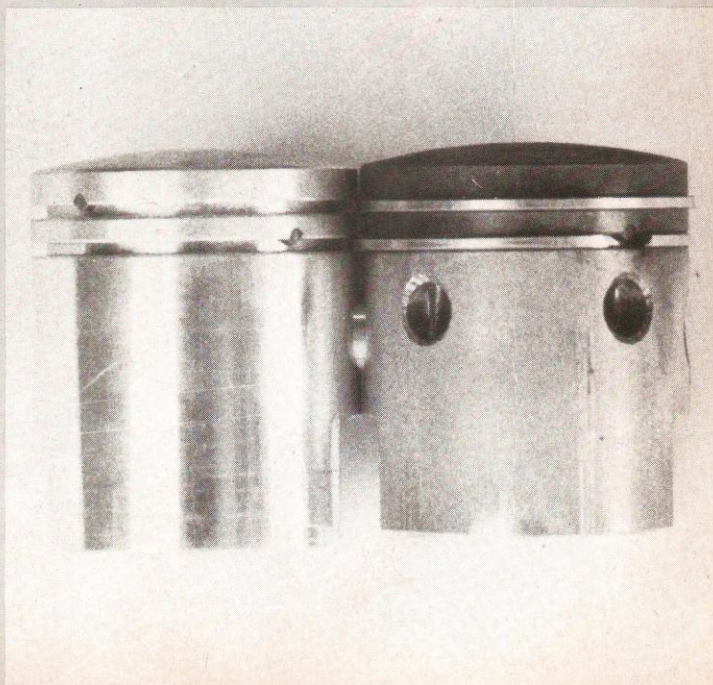


Here, Paul demonstrates grinding technique used to machine 5th port grooves in cylinder wall.

over a greater portion of the rpm range. The new pipe tucks nicely under the tank and seat on the right side of the bike, and has a good heat shield for burn protection. The silencer is a glass pack core, welded right onto the rear cone. The exhaust note is raspy but subdued enough to meet noise specs at most tracks and motorcycle parks. A spark arrestor would have to be added to be legal for national forests and most other trail riding areas.

The standard carb is replaced with an 18 mm Mikuni of the same type found on early Honda 100's. The stock Keihin item has only a 10 mm Venturi and is not sufficient for the modified engine due to the increase in volumetric efficiency obtained in the reworked cylinder and exhaust system. A special manifold was made up to accommodate the larger carb. At the same time, the stock air filter/airbox was exchanged for a simple sock type filter. The stock set up is a very leaky proposition offering poor filtering and restricting the intake flow too much to be used on the modified engine.

The cylinder head was left untouched as was the lower end assembly. All of the modifications will be available as a bolt on kit, with cylinder work being on an exchange basis. It is a simple, straightforward job to install the modified pieces



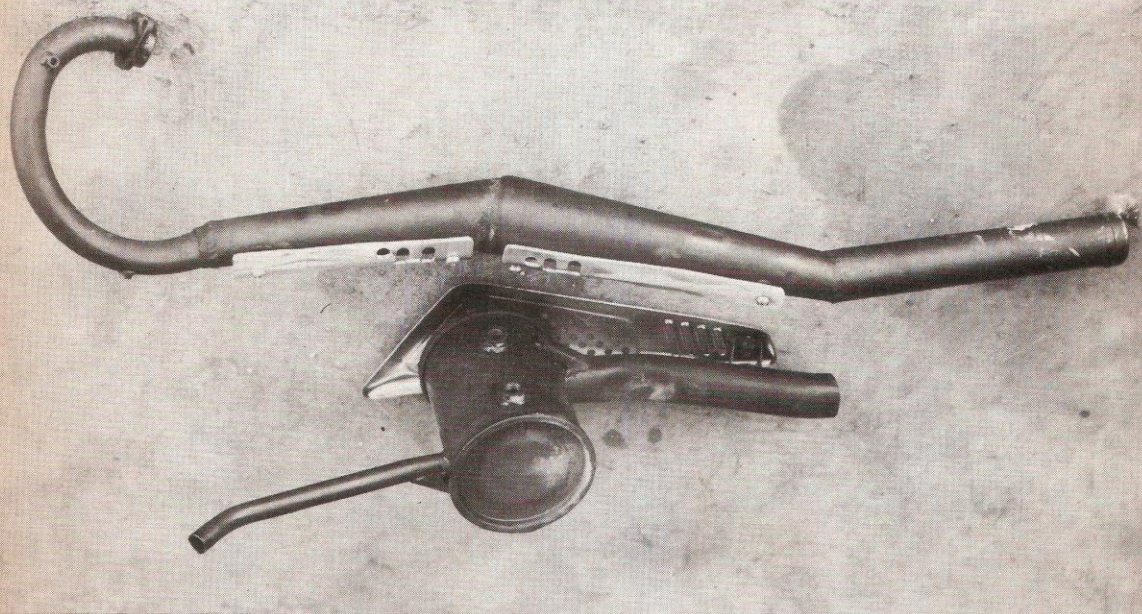
Std piston is drilled for transfer passage and intake skirt shortened for longer int. port duration.



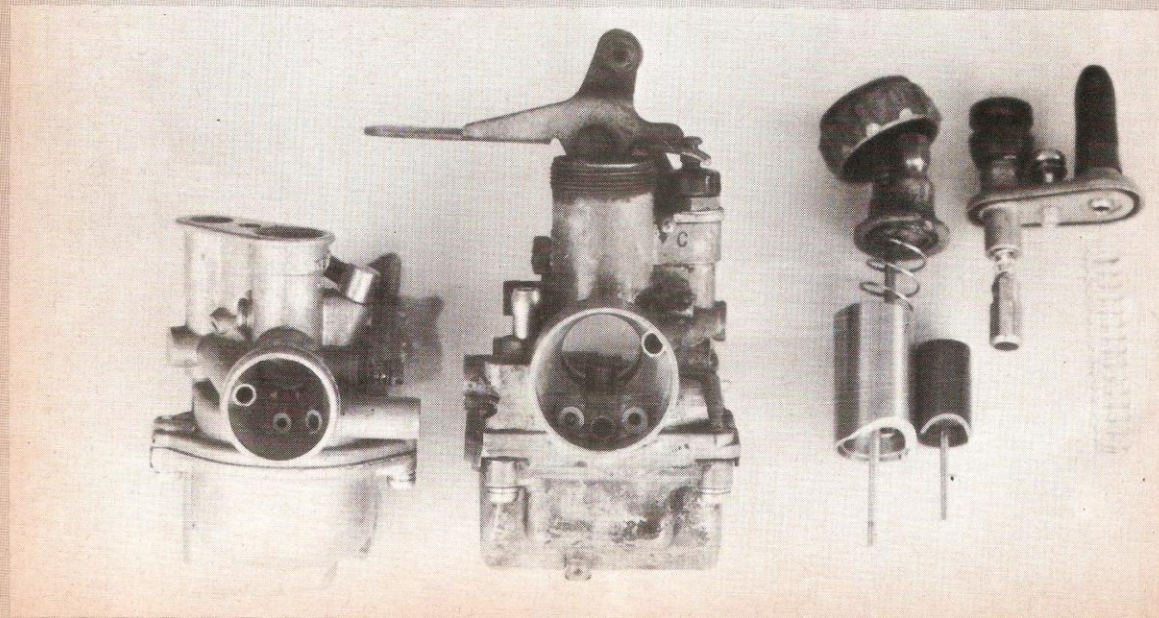
and the lack of super-special machine work or radical modifications should keep the price well within the reach of the average mini-cycle racer. Does it work? Well, the dyno says so. According to the tests we saw, the modified bike produces a whopping three times the output of the standard machine. It is not so radical that it is any more difficult to ride than the stocker, even with the

miserable gear box ratios and lack of a 4th gear.

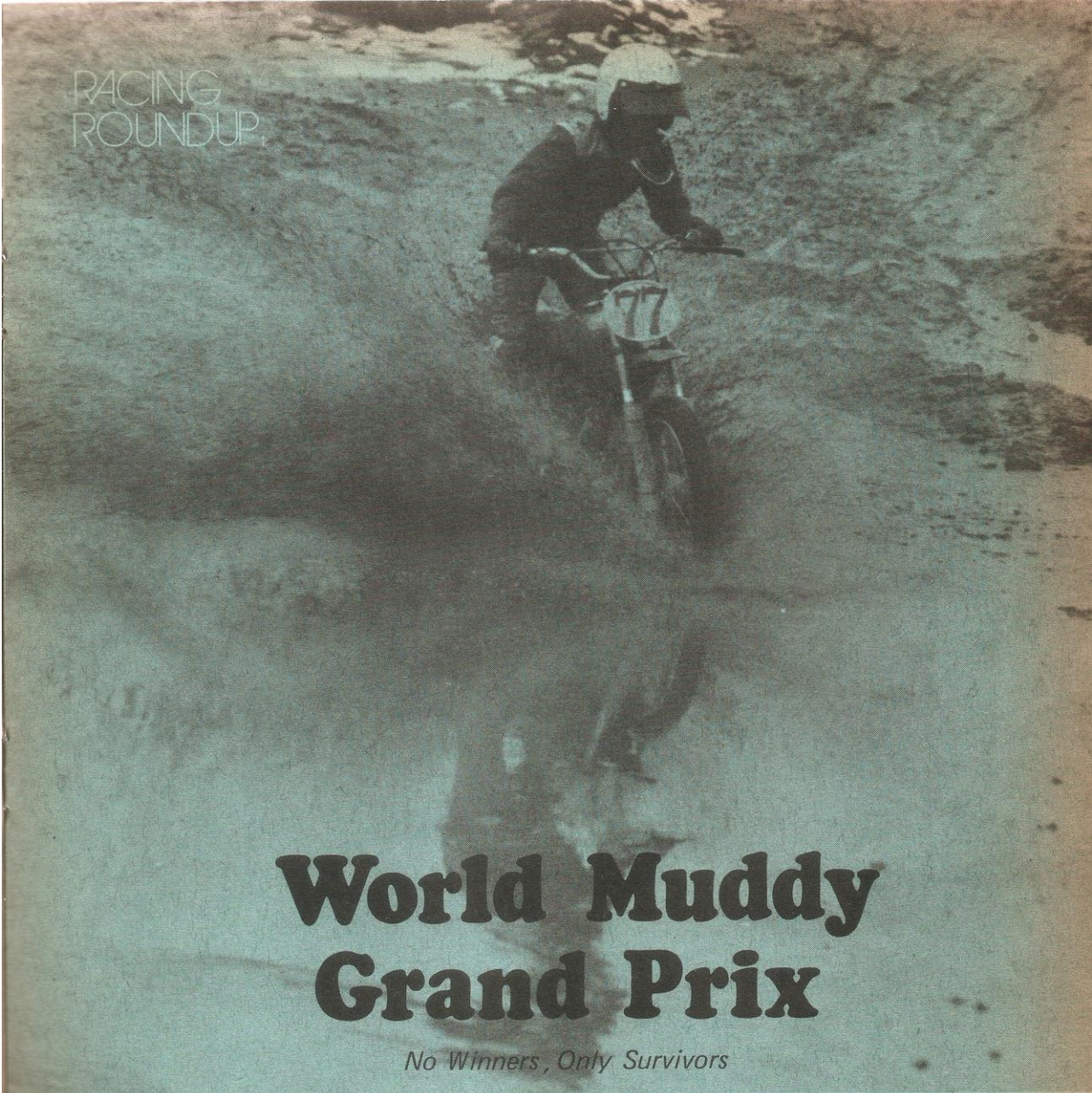
The MR-50 is such a unique little machine, the National MiniCycle Association had to set up a new racing class for it. We will have to wait to find out if the Hacienda Honda mods will outrun the other hot set-ups. Meanwhile, they make the little bike more fun to ride, and isn't that what it's all about? □



Std pipe is quiet, arrests sparks, and gives little to engine efficiency. Slow taper cones and long head pipe on exp. chamber give good performance over wide range. Integral silencer doesn't hurt performance but helps tame the bumble bees.



Vast difference in carb turnout size is evident.



RACING
ROUNDUP

World Muddy Grand Prix

No Winners, Only Survivors

Organizers were predicting that the fourth annual World Mini Grand Prix, scheduled to run at Indian Dunes on January 5 & 6, would be the biggest motocross event ever held, anywhere in the world. Ron Henriksen, of the National Minicycle Association, called us a week before the race and told us he already had about 800 entries. With entries at the gate, they expected to come close to 1000. That's a lot of minicycles. We were convinced they would have to run races almost 24 hours to get them all finished in two days.

Then, a couple days before the race,

Mother Nature got mad at somebody and started pouring a record-breaking rain storm on Southern California. Still, we weren't too worried. Rain never lasts very long around here. But the day before the race we received a shocking phone call. Indian Dunes was under eight inches of snow, and the highways leading to the park were closed.

The racers were immobilized. Some had traveled as much as 3000 miles to compete, only to be snowed-in about three miles from the track.

After checking weather reports and examining the track, the NMA decided

to postpone the races one day. The weather cleared enough to allow travel on the roads on Saturday, and they hoped to run the races on Sunday and Monday. Some of the racers, convinced the track would not be rideable, packed up and went home.

The *MiniCycle* crew arrived at Indian Dunes Sunday morning, while the practice sessions were in progress. It was a mess. Snow still surrounded the track, but the racing surface was all mud. A few places had drained enough to give a little bit of traction, but there were many spots where water had collected,

APRIL 1974/31

WORLD MUDDY GRAND PRIX

producing slushy puddles. Riders were slipping and sliding and splashing around the track. An annoying drizzle kept up all day.

After most of the practice was finished, track preparers went out to bulldoze a shorter, safer course for the mini-bikes, Pee Wees, and junior mini-cycles. They had to avoid the big mudholes, because the small bikes would just sink out of sight. After a few practice laps, the small bike classes were cancelled. Race officials didn't feel the little ones could overcome the track conditions.

The real racing (?) began a short time later with Event #5, 0-61cc, Stock, 9-11 years, Novices. Scott Burnworth, from Jamul, California, was the first survivor to cross the finish line. Scott finished eighth in a later race after he slipped and had to use most of his strength to get the bike up and running.

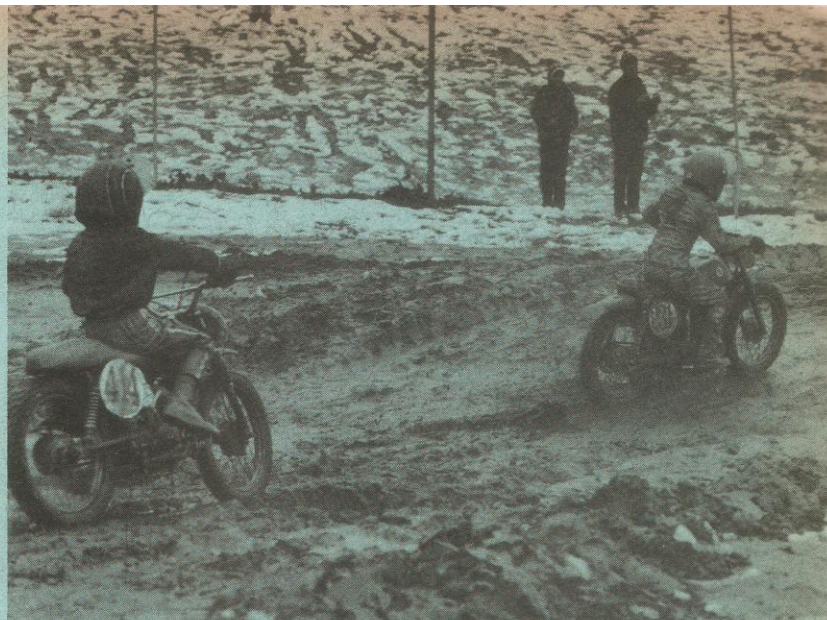
Motocross is one of the world's most physically-demanding sports. Throw in all that mud, and you have an exhausting experience. We were amazed that so many had the strength and stamina to keep going and finish their races. Others only gave up when their bikes quit working. Some riders who were entered in several classes decided to call it quits after a couple energy-sapping motos. And we respect their parents for letting them decide *not* to race.

They ran the first moto in every event (#5 through #35) except the small bike classes. That's a total of 31 events, in which 281 finishing positions were awarded. Considering the number of bikes we saw being pushed back to the pits, we would estimate about 500 starters.

By the way, the pits weren't a very nice place to be. Runoff from melting snow kept the flat parking area under a continuous sheet of running water. "Fire in the pits!" meant that someone was building a warming bonfire in one of the trash cans.

As usual, the majority of the racers were Californians. However, there were some notable out-of-staters on the track. Ron Ellenburg, from Las Vegas, Nevada, was the only rider in his class (0-61cc, Modified, 12 years & over, Novice) who was able to finish the race.

Some of the consistent winners from the Y-AMA Series were on hand to give the locals some competition. Novice Mark Murphy, from Fort Myers, Florida, finished three races, topping the 0-61cc, Modified, 9-11 years class in his best effort. David Hashman (Poulsbo, Washington) and Shaun Kelly (Houston, Texas), who both finished high in Y-AMA's overall points, managed to survive the slush. Brian Ward, from Orlando, Florida, picked up a first and a second on modified bikes. Kevin Davis (Las



Snow surrounded the track, and the track surface was sticky, gooey mud.



Flat starting area and the pits were under a couple inches of running water.

Vegas, Nevada) was one of the few riders who made it through four races, taking a first and a third, plus a sixth and an eighth place.

Gene McCay, Y-AMA's overall points winner from Lexington, Tennessee, was matched against the defending Grand Prix Champion, Brian Myerscough, in the 0-81cc, Modified, 12 years and over, Expert class. Both boys slid out in the mud, a surprise to them as well as the spectators. Still, the two champions had enough room to get up and take first and second. Myerscough won this one. McCay's parents swore that Gene rode about 75% of the race with his eyes closed. That's one way to keep out the mud.

Myerscough won another class, and was one of only a few riders who picked

up double wins. Others were Bryon Antonacci, Russ Eide and Greg Toyama. Greg also took second in one of the classes won by Eide.

The fact that we know who came in first, second, third, and so on, is a surprise itself. There was so much mud on the bikes and riders, it was almost impossible to read the number plates. Caryl Whiting and her crew of scorers did a fantastic job of identifying the mud-brown bodies flashing past.

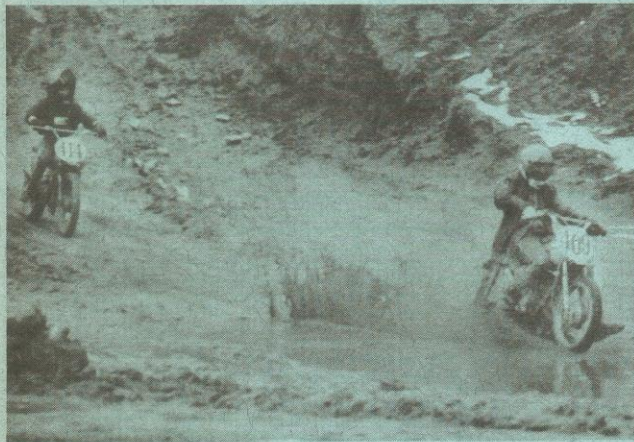
After a day of mud-slogging, everybody went back to their motels or nearby homes and spent a couple hours scraping off the muck. In the Ranch House Inn, a few miles from Indian Dunes, a whole bunch of concerned parents waited for a weather report. When it came, it was bad news. A new storm was on the way. Ron



Relatively dry second corner showed off bikes & riders before they were covered with mud.



Bryon Antonacci (355) picked up two firsts before the race was cancelled.



Ron Green (409) goes through first mud-hole on the way to third place, 0-61cc, Stock, 12 & over, Experts.



Fathers waded out in the ankle-deep muck to help stalled, stuck riders.



Most riders only gave up when bikes would not run. Note paper plate splash guard.

Looking like caped crusader, Kevin Woody wears oversized plastic poncho.

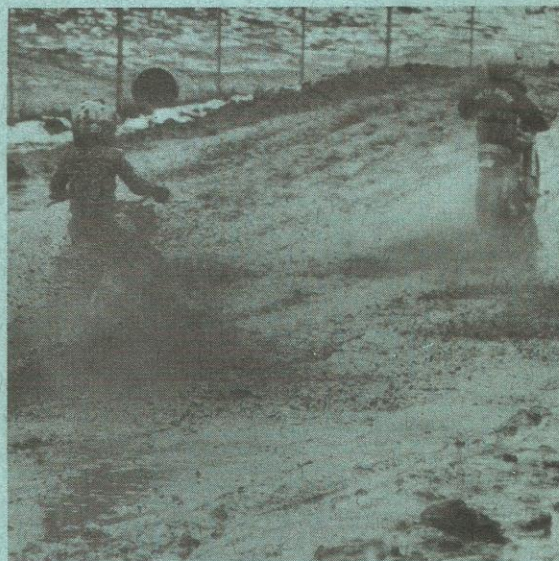


WORLD MUDDY GRAND PRIX

Myerscough (1x) led 0-81cc,
mod. class all the way,
even after a slippery crash.



Super-sticky corner trapped bikes in bunches.



Here's mud in your eye! The price of following too close.



Gene McCay (Y-AMA #1) makes a splash as he chases Myerscough (defending champ).

Henricksen of the NMA had the unpleasant, but necessary, task of cancelling the races.

Since only one moto out of three was run in each class, and under extremely adverse conditions, officials decided this could not be considered a complete event. They announced that the Grand Prix would be rescheduled, with all entry fees paid for this race applying to the rerun. After a couple of days of figuring, the NMA came up with April 6 & 7 for the new dates.

A newsletter announcing the new schedule will go out to everyone who was entered. All those entries are frozen, so a change in age before the rerun will not change the racer's class. Officials will be accepting new entries, from people who couldn't make the January race but would like to attend in April.

Although the scoring will start fresh

with the April race, the brave bunch that went out and slogged through the mud won't go away emptyhanded. A "Survivor's Certificate" will be mailed to every rider who started a race. The "winners" won't get any trophies, but you might say that they just survived a little quicker than the rest. Who knows what the results would have been under more normal conditions? (Take, for example, the stock bike which finished second in a modified class.)

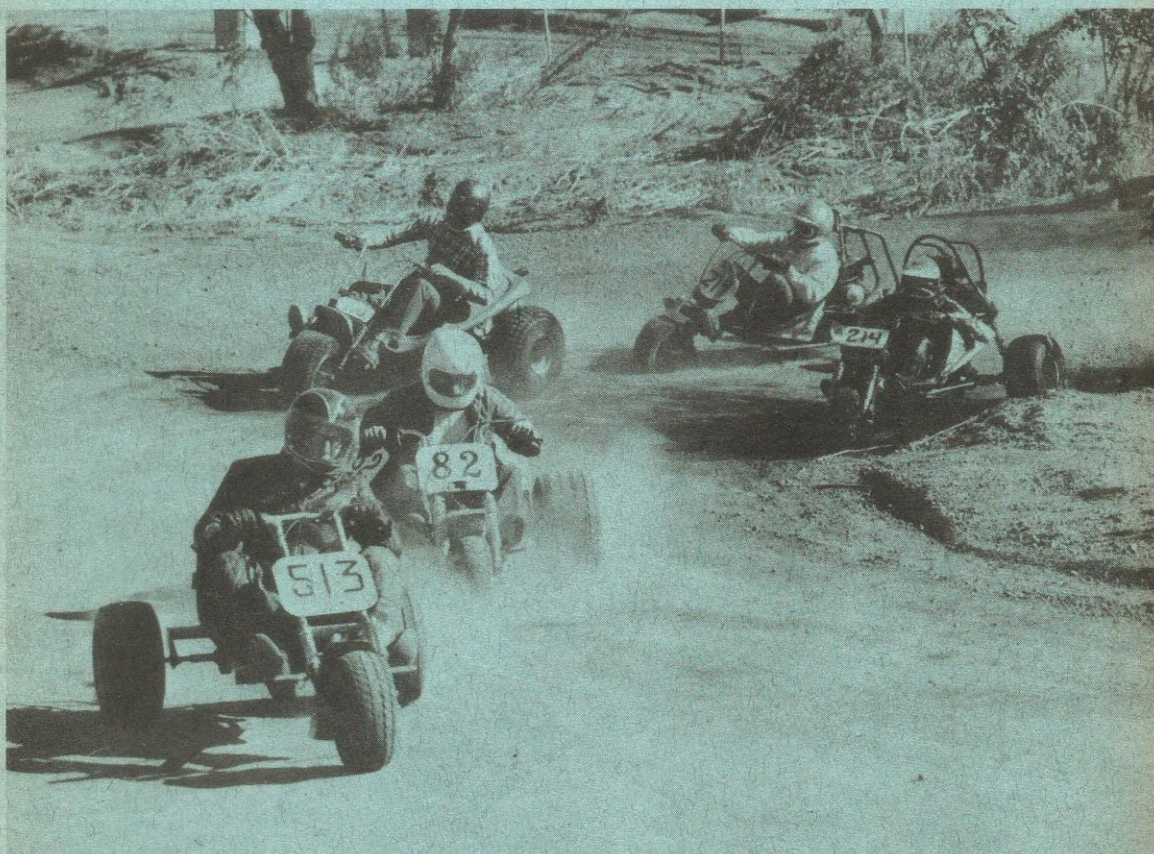
Anyway, everybody is glad the weekend is over. If the management of Indian Dunes discovers they are missing a couple tons of topsoil, it was probably carried off to every corner of the country, then scraped, scrubbed, and hosed off about 500 bikes and riders. The mud is washed away by now, but nobody will forget the World Muddy Grand Prix.

(Continued on page 58)

RACING
ROUNDUP:

A.T.V. TT

How Many Wheels Make A Race?



Robert Roman (82) eventually got by Joe King (513) to win 8 hp Stock class.

Indian Dunes has always been one of our favorite parks. We've watched uncountable mini-cycle races at the mini-TT track just inside the grounds.

The last race we watched there was a whole different story. ATV's took over on December 9, under the sponsorship of the Southern California Dunecycle Dealers Association. Apparently, they had raced there a full season, and this was their final race of the year, a special event earning double points toward the season point standings.

The ATV's came in many shapes and sizes, generally with three, four, or six wheels. The racing styles are really unique, nothing like the mini-cycles we are used to watching. The four wheelers bear some resemblance to the go-karts

which used to be so popular.

Although they have a child's class, most of these racers are adults. They race the three and four-wheelers with their knees bumping their elbows, but they seem to be having too much fun to turn over the speedy little machines to their youngsters.

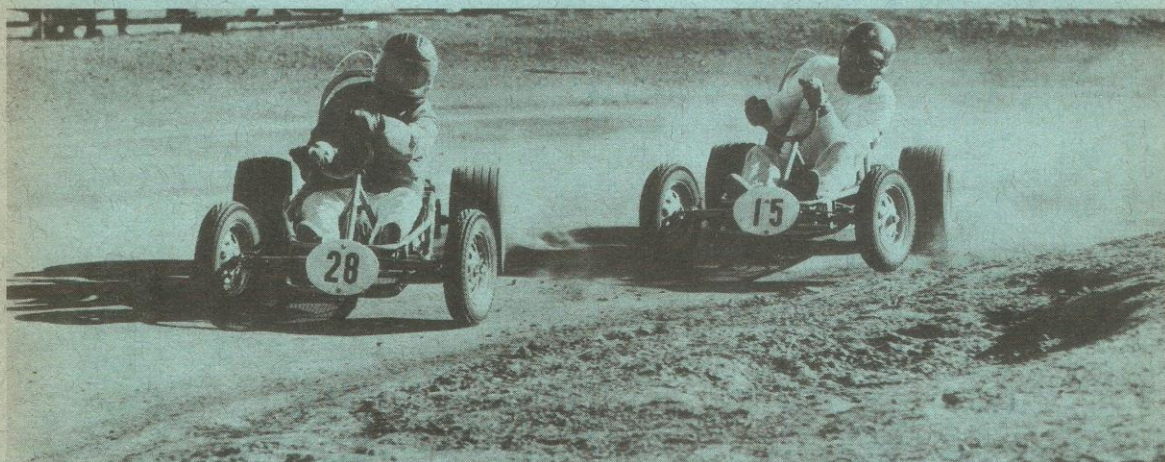
On the three-wheelers, sliding is standard procedure on the curves. The more powerful the machines, (and therefore, the more speed entering the turn) the more radical the slide. If a rider gets too far out of shape, he's likely to slide around until he's facing the wrong way. Since the trikes have no reverse, he has to take a short run against the traffic, spin the machine so it's facing the right way, and start chasing the pack. Usually,

the whole operation takes place in a couple seconds, with power on all the time.

The four-wheelers get a little sideways once in awhile, but either the drivers were more cautious, or the machines were more stable than the trikes, because we didn't see any four-wheelers slide out. The six-wheelers were something else. They seem to bounce around the track. You can hardly hear the engine over the WHOOM-WHOOM-WHOOM of those six big, fat, paddle-tread tires.

Since we had never seen these guys race before, we had trouble keeping track of the different classes, let alone the winners. We have included the results, to give credit for some good (unique) racing.

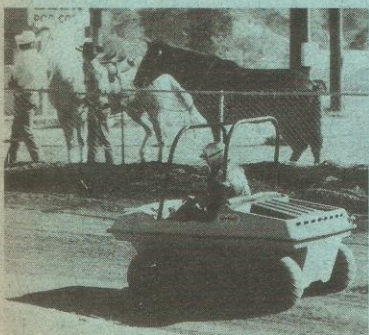
Frank Brown (72) and Steve Hughes (56) battle for the lead in the Open class.



Larry Whaley (28) and M. Van Eils (15) drift through a corner in close contention.



Tires humming, the modified six-wheelers bounce around the track.



ATV racer passes two spectators who've conquered the gas shortage.

RESULTS, A.T.V. TT

CLASS A (5 hp box stock) (1): 1) Ken Green, 2) Guy Duckett, 3) Brian Pearson, 4) Lee Taylor.

CLASS A (5 hp box stock) (2): 1) Rich Antles, 2) Dennis Lillehaug, 3) John Hoffman, 4) Wm. C. Eldred Sr.

CLASS B (5 hp stock appearing): 1) John Malfitano, 2) Ed Dalton, 3) Nick Asencio, 4) Jeff Bueoy, 4) Bob Jahrmarkt, 5) Mike Sudweeks.

CLASS D (5 hp powder puff): 1) Tania Roybal, 2) JoAnn Engelkes, 3) Jan Lillehaug, 3) Linda Antles, 4) Wendi Duckett, 4) Billy Eldred, 5) Gail Green.

CLASS E (8 hp stock appearing): 1) Robert Roman, 2) Joe King, 3) Jim Woods, 4) Ivan Burton, 5) Marc Trout, 5) Bobby McDonald, 6) John J. Smith, 7) Pat Walsh.

CLASS F (8 hp modified): 1) Doug Sherman, 2) Russ Watts, 3) John Stitt.

CLASS G (0-122cc — 2 cycle): 1) Sam Beck, 2) Susie James, 3) Bob Jahrmarkt, 4) Dave Antles, 5) Mitch Thierman.

CLASS H (123-230cc stock): 1) Gary Engelkes, 2) Mike Kappmeyer, 3) John Hardesty, 4) Frank Provance, 4) Billy James, 5) Bob McGee,

CLASS I (123-290cc modified): 1) Bill Vance, 2) Michael Sharp, 3) Casey Lehning, 4) David Harris.

CLASS J (open — 3 wheel): 1) Frank T. Brown, 2) Steve Hughes, 3) Jerry Black, 4) Lonny Conklin.

CLASS K & L (4 wheelers 5 hp): 1) Joe Estrada, 2) Roger Buck, 3) Bill McDonald, 4) Boyd L. Mason.

CLASS M (4 wheelers 7 hp): 1) Ron Jacobs, 2) Martin Farley, 3) Don B. Jones, 4) Bob Seifert, 5) Gilbert Neubauer, 6) Bessie Burton.

CLASS N (4 wheelers 20 hp): 1) M. Van Eils, 2) Larry Whaley, 3) Mike Tettlebaum, 4) Samuel Mason, 5) James Follinus.

CLASS O (6 wheelers stock): 1) Skip Howe, 2) Harvey Neville, 3) Rick Somes, 4) Michael Martin.

CLASS P (6 wheelers modified): 1) Ted Larson, 2) Ken Deane.

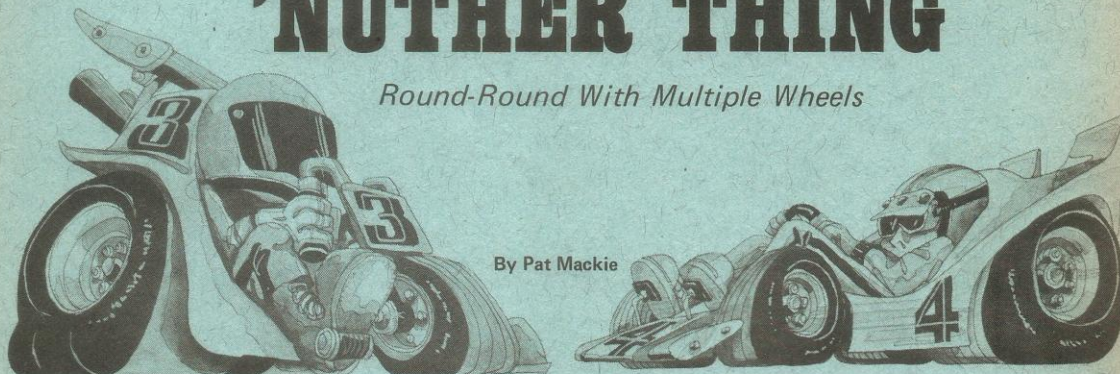
SCDDA 1973 POINTS CHAMPIONS

CLASS A, Lee Taylor; CLASS B, Jeff Bueoy; CLASS C (5 hp modified), Frank T. Brown; CLASS E, Robert Roman; CLASS F, Billy James; CLASS G, Sam Beck; CLASS H, Frank Provance; CLASS I, Mike Sharp. CLASS J, Steve Hughes; POWDER PUFF, Tania Roybal.

A WHOLE 'NUTHER THING

Round-Round With Multiple Wheels

By Pat Mackie



Racing off-road three- and four-wheelers is a ball, for both spectator and participant. It's a cross between fairground bumper cars, Grand Prix car racing, racing go-karts, and the freeway at rush hour...pre-55 mph speed limits.

The racers are mainly over-the-hill refugees from other sports, although there is a competitive junior faction. However, anybody who thinks it's a game for go-slow fuddy-duddies ought to try it. When you're behind a guy who has a store of nasty tricks gathered from years of dune-buggy/motorcycle/go-kart/racing car experience, and he harbors a bad Dan Gurney complex, and he's hot-shoeing a 28-horse buggy modified to the hilt...you'd better stay behind.

What the competitors lack in number (a big race might have 75 drivers) they make up in enthusiasm. It is easy to see why. There are classes for just about any



Gil Losi, Class C champ, gets hefty body English around the start turn.

type of three- or four-wheeler and it is a wide-open field for the imaginative guy who likes to build his own machines. The variations are endless, as the photographs show. And, for a minimum number of bucks (no racing is cheap) plus a modicum of skill, there's a maximum number of thrills and chills. As we've said, it

combines a lot of racing competition in one ball.

(To prove the point, this writer is hooked. After the "Scatters" National Championships at Osteen Park in December, Gil Losi (bossman at Muskin Inc.) let me take a couple of laps in his machine. Zap! I was bitten. I just know I could beat Losi. I know it! I know it! Driving Losi's hopped-up four-wheeler took me back to racing go-karts. The adrenalin was up. And I gotta have one for myself. Better retire now, Losi, while you're still king-pin.)

Which brings us back to the Scatters' Nationals. Three- and four-wheel racing takes many forms. Back East they are hot on oval racing on half-mile tracks. In the West it usually takes a modified type of TT form. At Osteen Park, Scatters run on a fairly level dirt course with sharp left-and-righters, one sweeper,

Bump and crunch in Class A main with winner Bill James (42) in the clear.



Bill Porento (90) and Johnny Wright in close quarters during Class AA main.



and a couple of smallish straights. Although some of the machines are putting out gobs of power (there was even a rotary-engined three-wheeler) top-end speeds are not excessive. The track is too tight for high speeds. What counts is dig-out.

The Nationals were the culmination of a year of points racing. They run an elimination system with the top three drivers from each heat and the semi-main going on to the main event. So, even if bad luck strikes in the heat races, a driver has a second chance to make the main. Also, this system allows the organizers to keep the number of machines on the track down to a safe number.

In the hotly contested Class C Four-Wheeler (0-5.9 hp stock) Ernie Weber, the point leader throughout the season, clinched his first Scatters' National title with a handy win in the main. This class is the single most popular in the Scatters program and has no less than 55 entrants listed. Of interest in this race was the last ride for Rod Brand who finished eighth in the main to wrap up a fourth in the season's points. Rod is going to hang up his four-wheeler to concentrate on two-wheeler 125cc motocross racing, as a professional.

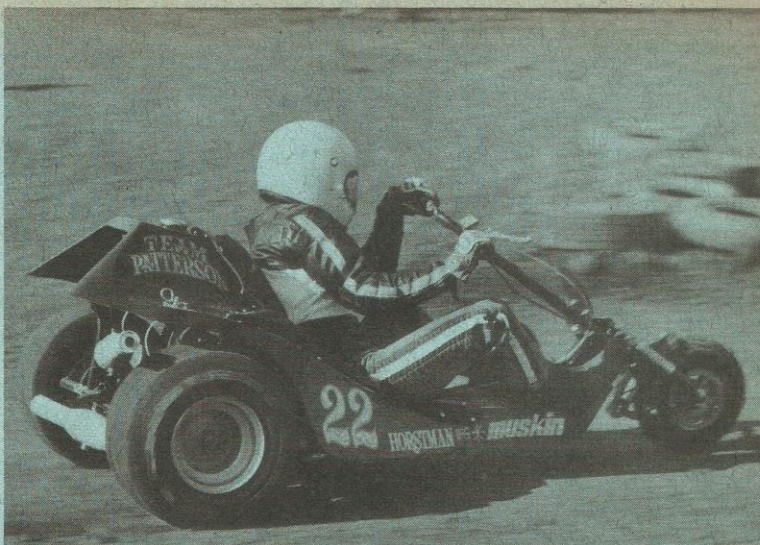
One of the most exciting races of the day was the semi-main of this class, which saw a wheel-to-wheel finish between Ray Losi, Jr. and Dale Weick, with Ray a hair-or-two in front. In the main, Ray moved from the back of the 12-machine line-up to finish fourth.

The other Losi (Gil) garnered a second in the only heat race, and a first in the main, to wrap up the points championship in the Class C four-wheelers (0-5.9 hp modified). All seven entrants qualified for the main.

The "Screaming Meanies", Class AA four-wheelers (open, 650cc), had only five entries and the main was a virtual repeat of the heat race. In both, Danny Thompson was the clear winner over Glen Taylor, yet it was the third man in both events, Bill Porento, who ended up the season's points champion. This was Thompson's first race and he looks like a shoo-in for next year's title. As it was, his two wins earned him fourth in the season's standings. This class was notable for the machines being raced and it appeared that they would be more at home on a bigger track (like Indianapolis) in front of paying spectators.

The largest class among the three-wheelers is the Class C (0-5.9 hp, stock) with 40 riders listed. Gary Cissell concluded an exceptional year with a win

(Continued on page 53)



Dick Patterson, third in Class AA main, winner of "best-looking three-wheeler" award.



Bob Roman on way to second in the Class B main.



Pushed by rotary engine, Pres Wildrick took second in Class AA main.

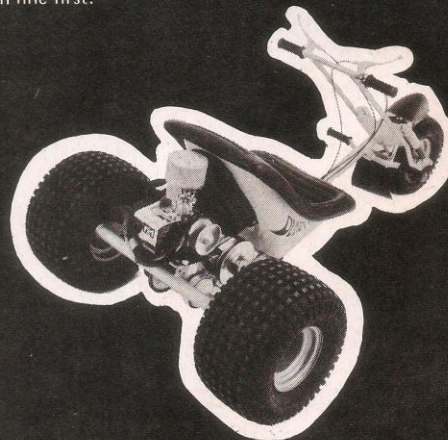
22 CHAMPS OUT OF 28



**BILL JAMES RACING A DUNECYCLE SPIDER TO THE FINISH LINE
FOR OVERALL '73 "SCATTERS" CHAMPIONSHIP, ONE OF 22.**

Another winning year for **DUNECYCLE**. Twenty-two of the 28 three-wheeler points champions for '73, in two racing organizations (SCATTERS and SCDDA), were riding **DUNECYCLES**. It takes a tough machine to rack up a record like that. The **DUNECYCLE Spider** is every inch a champion, with its hot McCulloch 101 two-stroke engine and special racing conversion. **DUNECYCLE** is the number one racing machine in its class (up to 230cc). But it doesn't stop there. Even when out-cubed against the bigger engines, the Spider often crosses the finish line first.

The **DUNECYCLE Spider** is all racing machine. But for those who want extra performance in an off-road machine for cross-country riding, the updated **DUNECYCLE Springer** is for you. As a competition winner, or for just the thrill and excitement of climbing those "impossible" hills, come try the surge of power from the classy **DUNECYCLE Springer**.



— DUNECYCLE SPIDER, THE WINNER —

off-road recreational products from

ALLIED MECHANICAL PRODUCTS DIVISION

A DIVISION OF TOWER INDUSTRIES INC.

13623 Pumice St.

Santa Fe Springs, Calif. 90670

DEALER INQUIRIES INVITED

APRIL 1974/39

HELMETS



Volunteers of assorted sizes show off three sizes and three styles of Shoei children's helmets used to demonstrate proper fit.

Every head in the world is different, full of bumps and depressions which aren't the same on any other skull. So, the only way to get a perfectly-fitted helmet is to make a mold by sticking your head in a bowl of resin. Fortunately, such drastic steps are not really necessary. A proper fit can be found just this side of an exact fit.

Anybody who has worn helmets for any length of time can tell what kind of fit suits them best, at least from a comfort point of view. But even some of the experienced helmet users could learn something about combining a safe fit with a comfortable fit. More importantly, the first time buyer should have some guidelines to consider while selecting protective headgear.

Of course, before you check the size

of a helmet, we would recommend that you select a brand and model which meet the standards of one or more of the organizations involved in helmet safety. The "Z90" standards of the American National Standards Institute have been adopted by many approval committees, including the Safety Helmet Council of American (SHCA). Also highly respected is the approval of the Snell Memorial Foundation. You can have quite a bit of confidence in the helmets which meet or exceed Z90 and/or Snell testing standards.

However, a safety approved helmet is not the main point of this story. We want to help you find a helmet that fits.

Now, let us stroll into a local motorcycle dealer. Mom finally broke down and let her budding motocrosser buy a

mini-cycle. Hooray! However, Moms are notoriously cautious, so she insists that a helmet be worn every time the machine is ridden. Hooray again!

So, here they stand: Mom, mini-motocrosser, and dealer, in front of a colorful display of helmets. First there is the decision between "full-coverage" (open face), and "full-face." Then there are half-a-million colors to choose from. Motocrosser is in a hurry to get out riding, so he picks one that "looks neat," then hops around while the dealer and Mom hassle.

"Is it a good one?"

"Sure, it meets Z90."

"What does that mean?"

"It means it's a good one."

"How does it fit, Jimmy?"

"Great, Mom, let's get going."

ET SIZING

Fitting Hard-Hats For Small Heads

So Mom forks over the usually-hefty fee, and they're on their way. But wait until Jimmy goes out riding. You have probably seen one like him. The guy who looks like he's wearing the box instead of the helmet. On the other end of the scale is the poor unfortunate who looks like he had to use a shoe horn to get into the thing, and his eyes seem to bug out more than normal. If their helmets are not downright dangerous, they certainly don't make riding more fun.

Proper fit is the answer. Shoei Safety Helmets offer three children's sizes, separate from their adult sizes, so we can be fairly certain that they are concerned about proper fit. We asked their American representative, Bob Wright, to help us with the answers to some pertinent questions. Like, how tight is too tight? How loose is too loose? Can a parent make an on-the-spot judgement? What can be done about an ill-fitting helmet? And so forth.

First of all, Bob stresses that you should never buy a helmet too large so the child can "grow into it." Even a slightly-loose helmet can result in what Bob calls "second impact." If there is airspace between your head and the helmet, the helmet will move that distance on impact, striking your head with the transmitted blow from the ground.

An obviously loose helmet will move easily on the wearer's head, side to side, front to back, or around the head. Less obvious offenders require more detailed checking.

There are four areas where fit should be checked: the front of the helmet, at the forehead; the back, at the base of the skull; and the two sides, near the temples and cheekbones. If you can easily stick your finger between the head and the helmet at any of these spots, without compressing the padding material, the helmet is too loose. If only one or two dimensions are too loose, it may be possible to make a proper fit with padding. We'll get back to that in a minute.

If you can't get your finger under the helmet at all, it's probably too tight. This judgement is usually reinforced by the groans of agony from the person inside the tight rig. As mentioned earlier, the eyes may bug out from the pressure. Or the wearer may sprain his ears every time he puts the helmet on or takes it off.

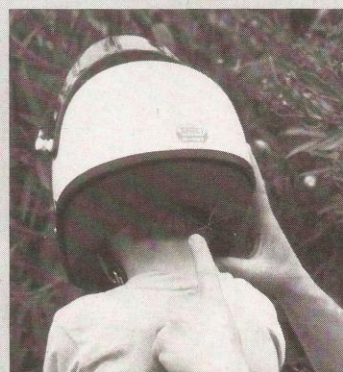
With a good fit, you should be able to put your finger part of the way in under the helmet, with the padding material



Bob Wright, Shoei rep., points out critical areas of fit: sides, near temples...



...front, at forehead...



...and back, at base of skull.



Too-loose helmet has too much room at back, allowing helmet to flop around.



Tight helmet causes wearer agony, won't allow finger between helmet and head.



Proper fit allows finger part way under helmet with padding slightly compressed.

FIRST IMPRESSIONS:



Brad Dutoit downshifts Husky 125 before climbing "the Wall," a short, steep uphill.

Husqvarna MX-125

When we made arrangements with Husqvarna to send our Editor and test rider Brad Dutoit to the Husqvarna International Training Center (Rolf Tibblin's MX School—see March issue), the people at Husky showed their generosity by offering to let Brad use a Husky during the school. We knew they had ulterior motives, since the pictures of Brad on the Husky would give them some extra publicity with the article. However, Brad welcomed the chance to try out a new bike, and we didn't mind.

Brad took his own bike along, but it broke on the third day, so he was glad

to have the Husky to ride. It was a brand new MX 125, just out of the crate, and freshly serviced.

Gloria, the lovely lady who passes out test bikes at Husky West in San Diego, asked us not to wipe out the bike too much, because she wanted to ride it when we returned it. Apparently, Gloria used to own a 125 Husky, and has always regretted selling it. We promised to be only a little bit reckless.

One reason Gloria likes the Husky 125 so much is the light front end. She admitted that she isn't as strong as most male riders, and some of the Japanese

bikes require too much effort to lift the front wheel over rough ground. The Husky, on the other hand, is just light enough. We agreed, later, when we had a chance to ride the bike. But we're not weak, just lazy.

Although his first objection was lack of opportunity to get used to the bike, Brad did have a couple specific comments about the Husky. He wasn't too happy with the brakes, a feeling which was echoed by other H.I.T.C. students on Huskies. The brakes had a tendency to fade rapidly. One day, Brad adjusted the front brake, went once around a



Pair of popular Huskies share the start line with trio of conspicuous yellow bikes.

barrel course designed for practice in braking and cornering, and had to re-adjust the front brake. The rear brake was a little better. The Carlsbad course was very muddy that week, which may have reduced the effectiveness of the brakes, but the consistent comments could not be ignored.

However, speaking of mud, the Husky engine did a great job in the gooey stuff. The last day of the school, the track was unbelievably sloppy from the previous night's rain. Brad had left to fly to a race in Florida, but the 125 was ridden by Michael Perry, an unlucky

student with a broken Penton. Perry praised the bike's performance in the muck.

A fairly broad power band must have done the trick. High-winding two-strokes with most of the power at high revs get a lot of wheel spin and reduced traction on a slippery track. The Husky had sufficient power at lower rpm to keep plugging while the mud tried to drag it down. On another occasion, on dry ground, the broad range was generous to a less experienced rider who couldn't always find the right gear at the right time.

Brad's other complaint, a wobbly rear end which led to loose chain miseries, was traced to a missing nut on the swing arm bolt. A fellow student found a replacement just the right size, and we didn't ask him where he found it.

These impressions are not nearly as thorough as a complete test report. Brad's main goal at the time was to learn motocross techniques, rather than to evaluate the bike. However, if our first impressions have got you interested, check with your Husqvarna dealer or a current Husky owner for more details.

FIRST IMPRESSIONS:



Dependable Yamaha 125 kept going while swifter machines were bogging or breaking down.

Yamaha MX-125

If our editor had gone to the Husqvarna International Training Center (see March issue, Rolf Tibblin's MX School) on one of the mini-cycles we had sitting around, he would have been laughed out of the state. As it is, he was kidded unmercifully about his shiny, new Bates leathers and Full Bore boots.

Since we didn't have a full size bike on hand, we had to borrow one. Yamaha came through with a good looking MX 125.

Our editor had an opportunity to break in the bike before the school. Mainly, he wanted to practice, so he wouldn't look too amateurish in front of all the young riders at the school. It might have worked if he'd had a couple more years to practice.

The Yamaha proved to be a little hesitant the first time out, possibly because of the high altitude of that riding area. As the bike began to warm up, it began to feel more comfortable.

The editor gained in confidence as the bike began to loosen up. His timid personality prevented any crossed-up jumps or full-lock power slides, but the rider and the machine were both slowly improving.

Once at the school, the editor discovered that he and the bike were not the hot set-up. Rider skill was mostly to blame, but there were a lot more bikes passing than being passed. No matter, he thought, it's just fast enough for me.

APRIL 1974/45

FIRST IMPRESSIONS:



Dependable Yamaha 125 kept going while swifter machines were bogging or breaking down.

Yamaha MX-125

If our editor had gone to the Husqvarna International Training Center (see March issue, Rolf Tibblin's MX School) on one of the mini-cycles we had sitting around, he would have been laughed out of the state. As it is, he was kidded unmercifully about his shiny, new Bates leathers and Full Bore boots.

Since we didn't have a full size bike on hand, we had to borrow one. Yamaha came through with a good looking MX 125.

Our editor had an opportunity to break in the bike before the school. Mainly, he wanted to practice, so he wouldn't look too amateurish in front of all the young riders at the school. It might have worked if he'd had a couple more years to practice.

The Yamaha proved to be a little hesitant the first time out, possibly because of the high altitude of that riding area. As the bike began to warm up, it began to feel more comfortable.

The editor gained in confidence as the bike began to loosen up. His timid personality prevented any crossed-up jumps or full-lock power slides, but the rider and the machine were both slowly improving.

Once at the school, the editor discovered that he and the bike were not the hot set-up. Rider skill was mostly to blame, but there were a lot more bikes passing than being passed. No matter, he thought, it's just fast enough for me.

APRIL 1974/45

Then, as days went by, something else became very clear. The Yamaha was definitely dependable. Bikes were breaking down right and left, but the Yamaha didn't even complain.

Mud was an unavoidable nuisance at the school, due to some rain before and during the week. It bothered the editor more than it did the bike. The air box worked all the time, keeping out the muck. The cooling fins did their job, as long as they were scraped clear once in awhile. The engine took the high revs on the down-hill and the bogging through the mudholes.

Farley Brown, whose bike broke

down about four times during the week, borrowed the Yamaha 125 for that last, muddiest day. It still didn't give up.

"That thing's kinda neat," he said. "It's a turkey, but at least it's still running."

As you can tell, Farley wasn't impressed by the machine's speed. However, in that gooey mess none of the bikes was moving very fast.

A couple weeks after the school, the Yamaha went on a weekend trip with four people and three other bikes. The rider on the Yamaha also thought it was "just fast enough." He felt even better when the weekend was over and all the

bikes *except* the Yamaha had died for various reasons.

Perhaps it's all coincidence or luck. But it looks like that Yamaha is going to last a long time.

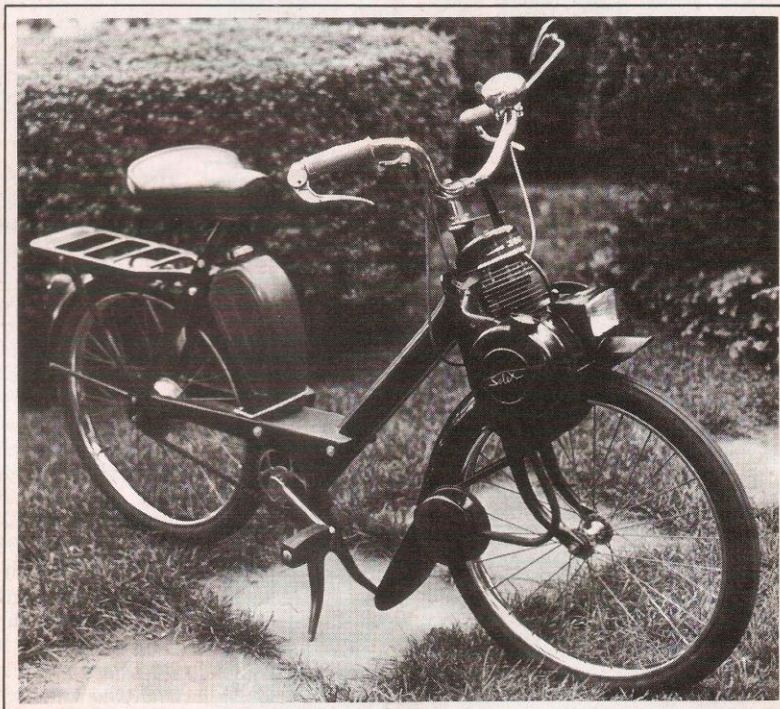
This first impression won't seem substantial enough for many of you. We've neglected a lot of the "important" details of a bike designed mainly for competition. We haven't talked about horsepower, or top speed, or handling in the tight corners of a motocross track. But we found a bike that's built to last, and we thought you would like to know. Our editor hated to give this bike back to Yamaha. □

Farley Brown zips through pedestrian gate on Yamaha 125. Mud-ruined Carlsbad track was rerouted.



moped

A Bicycle With A Motor



The VeloSolex is an example of the European moped, a two wheeler that has been widely used for many years on the continent of Europe for personal transportation. The top speed is 20 mph, so that it really is not much faster than a bicycle. This limited top speed might seem to make it impractical as a motor vehicle but actually this is what makes it practical.

Not being any faster than a bicycle, it can be used on paths restricted to bicycles (in Europe at least). The limited top speed puts it into a category where no license plates are required in a number of continental European countries (and now certain States). The lower the speed, the less serious the accidents, and so in France the VeloSolex has special low insurance rates.

The power for the VeloSolex comes from a small 0.8 horsepower, 49cc, two stroke motor with a fuel consumption of

about 200 miles per gallon. This leads not only to low fuel cost, but to a low amount of exhaust gas polluting the atmosphere. The recent shortage of gasoline serves to remind us that there are serious difficulties ahead in providing enough gas for the Detroit monsters. The VeloSolex is one of the fuel-saving alternatives.

The VeloSolex has an excellent (but inexpensive) muffler, so the motor makes about as much noise as an electric motor. If you are coming home late at night with a VeloSolex, you can turn off the engine and pedal the last block without noise.

There are many who have come to realize that the bicycle provides very good exercise, helping to keep a person in good physical health. So, why should a motor be added, as with the moped? Well, there are times when too much exercise can be a bad thing.

The motor is obviously a great advantage on hot days when a person has a long distance to travel. An office worker might need the exercise. A factory or construction worker might feel he is getting enough exercise on the job and would like to rest as he rides home.

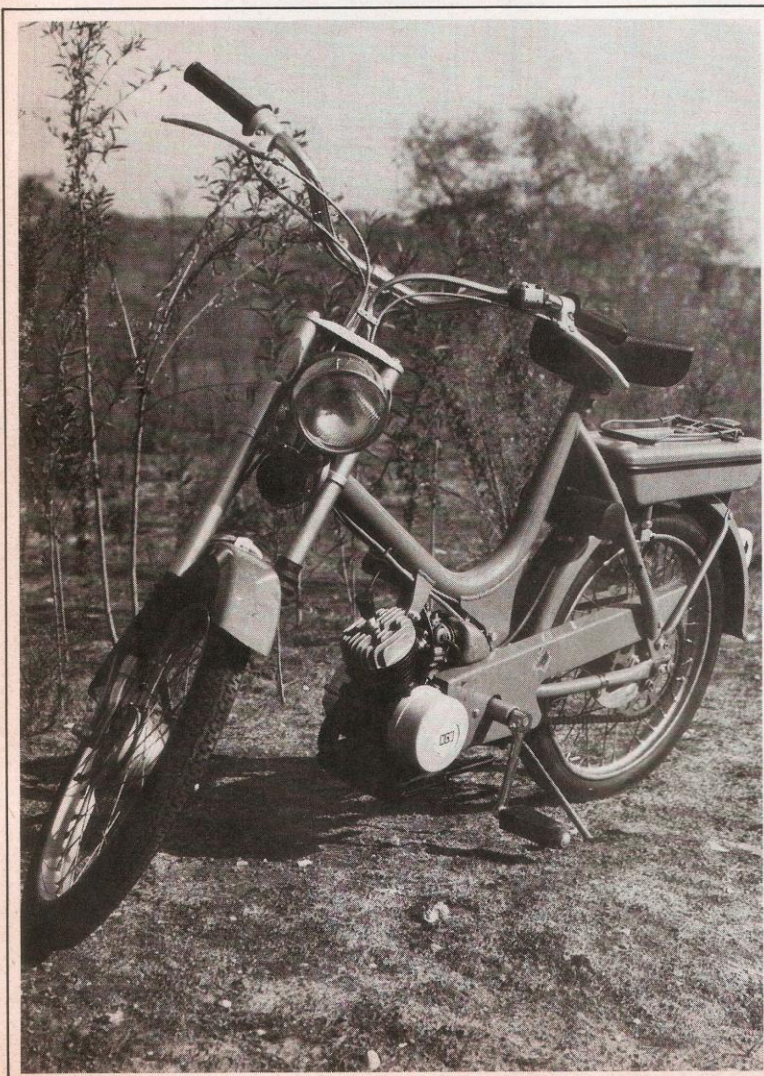
The motor makes it easier to travel long distances without getting too tired. For distances above five miles, the moped may be more practical than the bicycle.

The gas tank holds only a quart, but it's a 50-mile quart. A reserve supply can be carried under the seat. The moped uses pre-mixed gas and oil for its two-stroke engine.

Weighing only 65 pounds, the moped can be strapped onto a bicycle carrier on a car. On the other hand, it can carry a payload of 265 pounds (a second-passenger seat is available). Truly, the moped is a remarkable cross-breed: a bicycle with a motor. □

APRIL 1974/47

Monark Moped



Moped looks like a bicycle, except for the conspicuous little engine in front of the pedals.

48/MINICYCLE

The preceding article about the use of mopeds as alternative transportation sparked our curiosity, so we decided to borrow one and see what it's like. Just on cue, the Man from Monark called and said he had one available for testing. Of course, we had seen mopeds in use, but we wanted to check out the experience firsthand.

The Monark Moped comes with a 49cc engine, mounted in front of the pedals and under the main frame member, which looks like the "down-tube" of a girl's bicycle. The engine produces a little over one horsepower, so you know it won't get going very fast.

The frame itself looks almost like a basic bicycle frame, but it is substantially thicker, presumably to support the extra weight and vibrations of the engine. There is no rear suspension, but the front end has a set of little, inefficient spring forks.

The rear wheel has a sprocket on each side, with a drive chain on each sprocket. One chain is driven by the pedals, and the other by the engine. Under pedal power, the engine is disengaged from its drive chain, but both chains still turn, which puts a little drag on pedalling speed.

Once you get going under pedal power, it is easy to get the engine started. Simply pull in the lever on the left handlebar, which engages the engine (opposite of a clutch, which disengages the engine). When the engine catches, the lever is released and the twist-grip throttle on the right handlebar is used as normal.

Before the engine is started, the gas is turned on. The tank is mounted over the rear fender, with a spring clip carrier on top. For cold starting, there is a choke lever on the right side of the engine. The lever clicks into place when



pushed down, and releases automatically when the engine is running. A kill switch is mounted on the handlebars. It has to be held down long enough, or the engine will sputter back to life.

The moped is like no other bike we've ridden. It's pretty sluggish under pedal power, until you build up speed. But, in places where the sluggishness would be a problem (like climbing hills), you can let the engine take over. We didn't try any very steep hills. We understand it is sometimes necessary to use the pedals with the motor to make the grade.

A young fellow on a ten-speed bicycle challenged the moped. Under power, the moped could outrun the ten-speed going uphill, downhill, or on level ground. Also, the rider was putting less effort into the contest.

The pedals could still be turned but under the circumstances where we were riding, they didn't contribute to the forward motion. Be sure, though, that you don't lean into the corners enough to drag the pedals. The ultimate in moveable footpegs.

These things are supposed to get about 200 miles to a gallon (especially if you shut off the engine frequently) so they are a natural during the energy crisis. A lot of the half-breeds were on display at a recent motorcycle trade show.

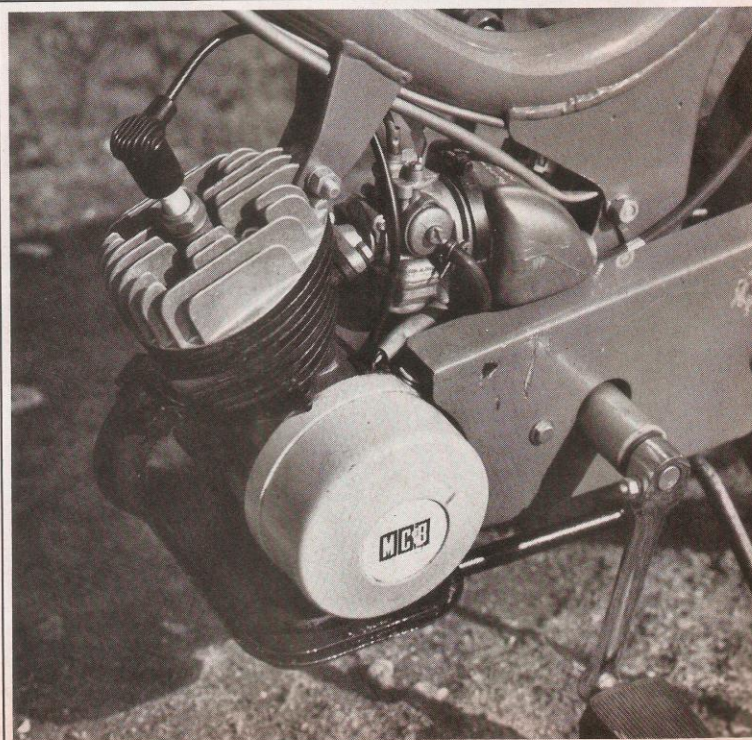
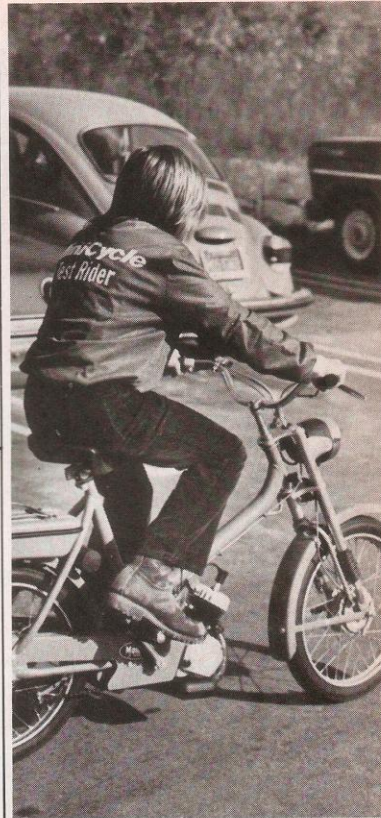
Be sure to check all your local regulations, to make certain that you aren't riding one illegally. Some states consider them bicycles, and some states consider them motorcycles, which can only be ridden by licensed drivers.

At \$295, the Monark Moped is more expensive than those high-priced ten-speeds, but it's got a little extra power. For more information, write to Inter-Trends, 3001 Red Hill Ave., Costa Mesa, Calif. 92626. □

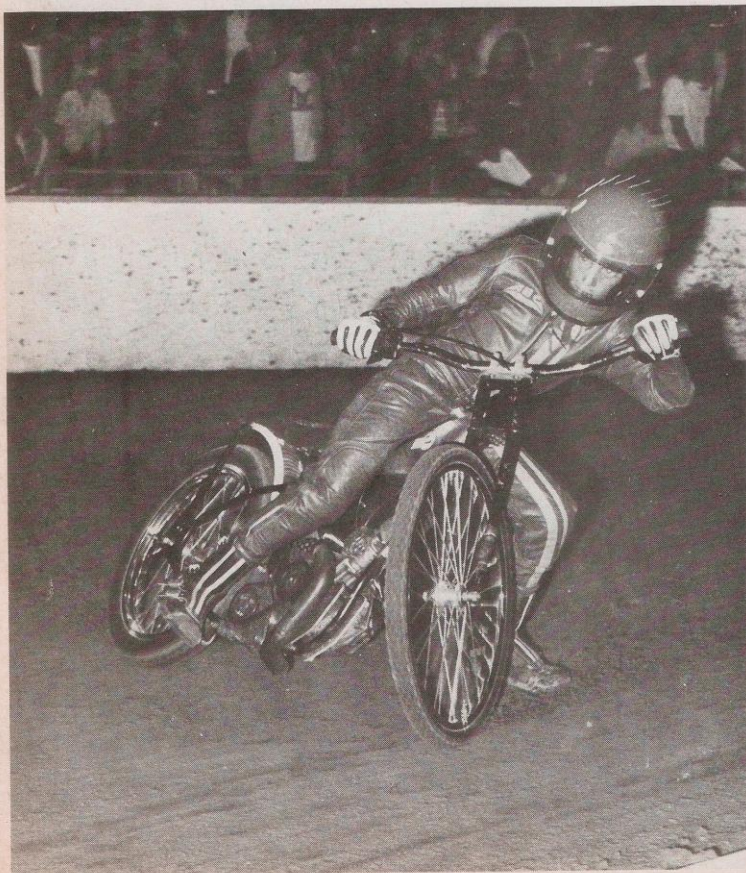
When bike is moving under pedal power, this level engages engine, serving opposite function of a clutch.

Pedal power converts quickly to piston power with the Monark Moped.

Tiny 49cc engine produces a little over one horsepower, so speed is limited.



MINI-SPEEDWAY



Jay Giannetti, 12, shows surprisingly good form on his 3/4 scale Speedway bike.

50/MINICYCLE

Finally, A Chance To Grow

Speedway racing stirs the passions of its audience more than any other type of motorcycle competition we've seen. It is easy to see why.

The fans are usually packed into a stadium which encloses an area too small for a football field. The one-fifth mile track and short, four-lap races produce some tight and tense competition. And the roaring, big 500cc Speedway engines drown out all but the loudest screams and cheers.

Since the audience can see every part of every race, they have no chance to get bored or lose track of the action. They noisily encourage their favorites, boo and hiss at rival riders, whipped into hysterics by the local announcer, personified at Southern California's Costa Mesa track by a deceptively calm-looking radio personality, Larry Huffman.

Racing numbers are hardly necessary. Regular fans recognize the riders by their helmet and leathers. Nicknames have stuck to some of the top riders: Danny "Berserko" Becker, "Lightning" Larry Shaw, "Wild" Bill Cody. Personal loyalties are very strong, and for some young boys and girls, the highlight of the evening is the rush to the pits after the races to collect autographs.

For Mini-Speedway to catch on, it apparently will have to stir up the same cheering, screaming response. To our knowledge, scaled down Speedway machines have been around since early 1971



All eyes are on the Mini-Speedway machines during half-time at Costa Mesa.

(see Mini-Bike Guide, March '71). They have the same low-slung, skeletal styling as the big machines, the same lop-sided handlebars, and the small gas tank and seat. However, to this point, the little imitators have been used, usually one or two at a time, as a half-time attraction at regular Speedway meets.

Now it looks like regular competition is about to become a reality. And from what we have seen, the crowds will love it.

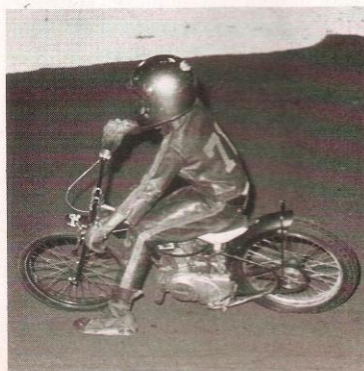
Russ Miller, who has been making tanks and fenders for two-thirds scale bikes since they first appeared, told us about a planned race involving his son and three other young riders. The mini event was to be held during intermission at the Friday night Speedway races in Costa Mesa.

When we arrived that Friday, toward the end of last season, we found four bikes in one corner of the pit area, standing out by their smallness among the full size machines. Two of the four were two-thirds scale, the others were three-quarters scale. The three-quarters scale bikes carried McCulloch 101A two-stroke engines. One of the smaller bikes had a 100cc Hodaka engine, and the other had a 100cc Honda engine.

The two-thirds scale bikes follow the design originated by Dick Rucker, who built the bike featured in our March '71 issue (MBG). The larger, three-quarters scale machines were planned and built by



Battery starter kicks over McCulloch engines of these 3/4 scale racers.



Mike Miller drops into a corner on his Honda-powered 2/3 scale bike.

Ed Schafer and Ed Williams of Speedway Research & Specialties, Santa Ana, California.

Jay Giannetti and Mike Bloom had the McCulloch-powered bikes. The Honda was piloted by Russ Miller's son, Mike. The Hodaka machine was ridden by Shawn Moran. All of the riders wore full-face helmets, full-length leathers, sturdy boots and a steel sliding plate attached to the left foot, just like the big guys.

At intermission, the four boys pushed their bikes out onto the track. The spectators who hadn't gone for a hot dog or popcorn sat talking about the races they had seen. The referee suggested that the boys take one practice lap around the oval. The crowd was still paying only partial attention.

Mike Miller went first, coasting around the turn by the pit gate, getting the feel of the track. Shawn Moran started out, goosing the two-stroke once around the curve, sending the rear wheel out in a short slide. The audience was watching now.

Jay Giannetti headed for the corner, leaned into the turn, and grabbed a handful of throttle. The bike went sideways around the curve, buzzing madly, in near-perfect form. The crowd went crazy. Cheers followed the 12-year-old around the track.

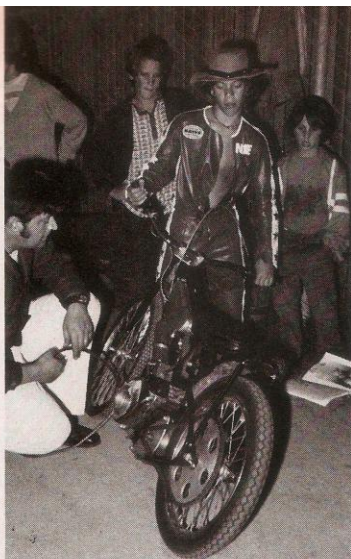
In the race that followed, and in later weeks when the minis were allowed to

APRIL 1974/51

Mike Bloom's machine was built by
Speedway Research & Specialties,
Santa Ana, Cal.



Shawn Moran warms up his Hodaka in the pits before his race.



Shawn Moran watches over his 2/3 scale bike, dwarfed by a full size machine.



Smiling Jay Giannetti accepts one of the pleasures of victory: a chance to kiss the trophy girl.



run, Jay proved that his form was no accident, by winning most of the races. He and the other boys showed their inexperience sometimes, with unprofessional form and stalls. Still, they weren't any worse than the beginning big guys of Division III.

We know a couple of examples which seem to indicate that early experience on the scaled-down bikes has led to quicker adaptation to the bigger bikes. Dennis Silagos, who rode his three-quarters scale bike in one of the half-time races, also races a full size machine at another track. He can't race Division III at Costa Mesa, because he is only 13 years old.

Bruce Penhall, who sold his three-quarter scale bike to Mike Bloom less than a year ago, worked his way rapidly through the lower divisions and started racing Division I near the end of last season. The young-looking blond already has strong support from the fans.

Since the spectators seem to enjoy

the little guys, Harry Oxley, Costa Mesa promoter, has been talking about making Mini-Speedway a regular part of the program. The new racing season begins in April, so we will look forward to the form that this program will take. We expect there will have to be separate classes for the two-thirds and three-quarters scale bikes. They might also develop a system of handicaps, like the full size riders. In a handicap event, past performance determines each rider's handicap of 10, 20, 30, 40 or 50 yards. In a "scratch" race, the riders start dead even.

There will be a bunch more riders showing up in the coming season with the small bikes. Kelly Moran, Shawn's brother, should have a three-quarter scale bike by then, as will Mike Miller, who has outgrown his two-thirds scale machine. "Lightning" Larry Shaw, one of the top Speedway riders of any year, sponsors a mini racing team, and has reportedly imported at least one mini-

speedway bike for the coming season. Also, some of the manufacturers and distributors who post contingency awards for the big racers have talked about supporting the mini program.

All in all, it looks like a good year for Mini-Speedway. It will stop being a novelty and become a competitive event. And Speedway, like the other forms of motorcycle sport, will have a training ground for the youngest beginners.

The American Motorcycle Association has announced that the United States will be able to send a rider to compete for the Individual Speedway World Championship in 1974. This will be the first time since World War II that the U.S. has sent a rider to the Championship qualifying rounds. That means that this country will be actively participating in the World Speedway program by the time Jay Giannetti has moved up to the big bikes. With this head start, he might have a chance...



A WHOLE 'NUTHER THING

(Continued from page 38)

in his heat and a third in the hard-fought main, to wrap up the overall points honors. Scatters' "Woman of the Year", Theo McDonald, proved that the distaff side can race with the best by taking second in the points standings with a fourth in her heat and a second in the main. The main winner, Don Allen, was third in the points standings.

Points king for the year was George Bueoy (744 points) and he blew everybody off the track with two easy wins in Class C three-wheelers (0-5.9 modified).

Jim Woods and Mike Figueroa gave an exciting show in the Class B three-wheelers (6-8.9 hp stock) but in the points battle Bob Roman was the winner. All three were contenders for the title with a 41 point spread.

The "McCulloch class" (Class BB three-wheeler, 100cc stock), was won by George Bueoy in both the heat and main at the Nationals. This was the first outing for Bueoy in this class and his fine ride netted him second in the points standings to the champ, Bill James.

One of the more popular three-wheeler classes is Class A, powered mainly by snowmobile engines up to 230cc. The points championship in this class went to David Ward although he finished second in both his heat race and the main. Bill James finished the season with a flourish taking a second in his heat and a first in the main. Having entered only four races during the year, James finished with a strong fifth in the standings.

Among the three-wheelers, the "big Daddies" are those in Class AA (650cc open). This class produced a stand-up-and-yell battle between Bill McDonald and Steve Hughes. With four machines competing, Steve pulled off a close first in the heat race and it looked as though he had the title all sewed up in the main when he blew a belt from his torque converter in the last lap. McDonald, charging hard behind, took the opportunity to add an extra 100 points to his total, making him the year's champ. That's racing.

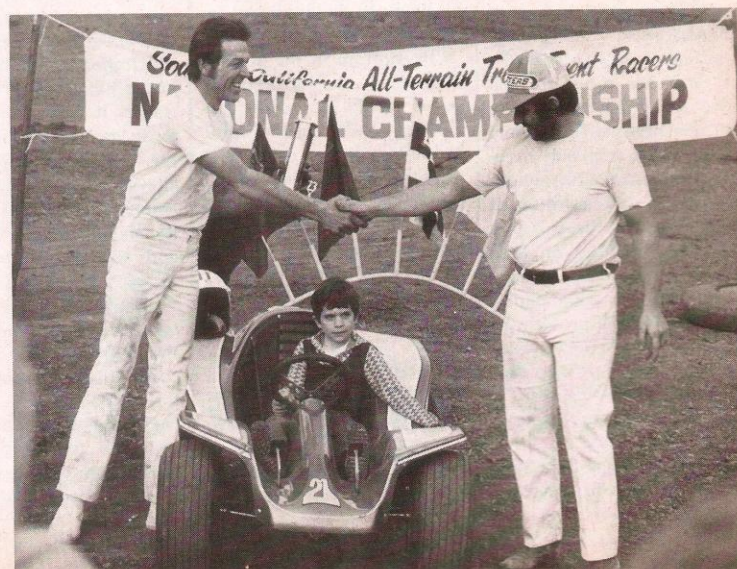
It seems as though the Powder Puffers and Juniors did not qualify for points standings and we protest this rank discrimination. Maybe next year will see these riders accommodated. Still, the fine rides by Steve Edwards, winner of heat one, and Mike Yurkunski, winner of heat two, deserve mention. Trudy Harris and Carol Losi were the Powder Puff winners. □



The two Mac's of Bill McDonald, Class AA main winner.



Class B main winner Mike Figueroa takes checkered flag for parade lap.



And, of course, trophies for the winners. This one to Ernie Weber.

MISCELLANY

OFF-ROAD EXTRAS

Malcolm Smith Distributing is adding to their line of racing apparel a new riding jacket, jacket pack, canteen-holder combination, and a Baja back-pack.

Worn by A.C. Bakken and Mitch Mayes to victory in the 1973 Baja 1000, the Gold Medal Riding Jackets proved to be tough enough to withstand the punishment that only Baja can offer. Made from 100% water-proof nylon,



they feature ISDT type pockets, Velcro fasteners on the sleeves, collar and pockets, large zippers, and a wide fully adjustable belt. Available in small, medium, large and extra large, they can be machine washed to keep them looking new. The colors are navy blue, red or royal blue with gold pockets.

Malcolm's Gold Medal Jacket Pack has room for the riding jacket plus oil bottles and even a lunch. These come in navy blue, red and royal blue. Made from 100% nylon, the pack is as heavy-duty as the riding jacket. Water is very important to have on long rides. Malcolm offers his new canteen-holder combination to help solve the problem of having to carry a bulky water container. Made of light durable plastic the canteen is held by a strong nylon holder that fits most belts.

A bright orange Baja Back Pack is a must for the long trail rides or for off-road competition. Thick padded shoulder straps and waist belt give maximum comfort to the

rider. For further information about these products contact Malcolm Smith Distributing, Dept. MC, P.O. Box 1086, Riverside, California 92502.

RACING POSTER SET

Four posters designed to aid organizers of kart, cycle, snowmobile and three-wheeler racing events are being offered by McCulloch Corporation, manufacturer of high performance engines for racing and recreation. A note of professionalism will be added to even the most casual competitions by the posters which announce INSPECTION AREA, TECH AREA, PRE-GRID AREA and PIT AREA.

The posters are intended to enhance the smooth operation of racing events, especially where the arrangement of facilities may be strange to competitors and fans, according to McCulloch Product Manager Chuck Hammond. The attractive red, white and blue posters measure 19 by 25 inches and are printed on rugged paper which may be mounted on plywood or fiberboard for permanent use.

In addition to the posters, McCulloch makes available many racing accessories, including jackets, caps, T-shirts, banners, posters, decals and jacket patches. McCulloch's Pit Poster Set, priced at 50 cents, may be ordered from Marketing Services Dept. MC, McCulloch Corporation, 6101 W. Century Blvd., Los Angeles, Calif. 90045. The company's Racing Catalog is available at no charge.



UNCHAIN MY HEART!

A Jackson, Michigan, manufacturer has come up with a new product for motorcycle riders who transport their bikes by trailer.

Stable-Safe is a tie-down designed to hold a bike securely on a trailer despite highway speeds or back-road stress. It



fits any bike and trailer combination, installs easily and is simply and quickly attached to, or removed from, the bike.

The tie-down, used in pairs, is attached to the handlebars of the bike and bolted to the trailer. It has a minimum of nylon webbing that fits around the handlebars and thereby allows only an insignificant amount of stretch. The rest of the tie-down is made of steel with an aluminum turnbuckle to adjust tension.

Stable-Safe is maintenance free, strong, solid and inexpensive. A pair of the tie-downs costs only \$9.95 plus \$1.50 for shipping and handling. Once attached to the trailer, any bike can be tied down firmly. Stable-Safe can also be used on multiple bike trailers—one pair per bike.

Write: Stable-Safe Corporation, P.O. Box 408, Dept. MC Jackson, Michigan 49204.

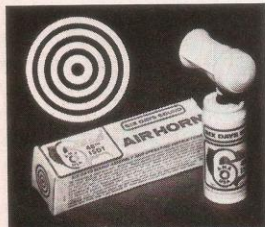
NEW CABLE LUBER

Ashland Chemical has recently come out with a brand new device called the PETROCHEM Cable Luber, and the accompanying cable lubricant called Cable Life. This unique cable luber will allow you to power inject a cable lubricant into the cable without spilling, over-run, or mess. Simply attach the Cable Luber to either end of a clutch, throttle, or brake cable. Insert the snorkel and press the button. Instantaneously fresh lubricant is power injected down the cable, cleaning it and lubricating it without removing the cable from the machine. When the lubricant runs clean out of the opposite end of the cable, you know you have properly cleaned and lubricated the most difficult to lubricate cables.

Cable Life is a unique lubricant and corrosion preventive that displaces moisture, lubricates, and stays fluid to 70 degrees below zero. Especially adapted for snowmobiles to eliminate the throttle from sticking and freezing in the open position. Ask for the PETROCHEM Cable Luber and Cable Life combination pack. Sells for \$6.00 at your snowmobile and motorcycle dealers. Ashland Chemical Co., Dept. MC, 10505 So. Painter Ave., Santa Fe Springs, CA 90670.



SIX DAYS SUPER SOUND
IN THE 48th RUNNING OF THE ISDT, a major concern of the sponsoring American Motorcycle Association was for the safety of the 300 entrants and the thousands of local residents and spectators from all over the world. The AMA was anxious that no tragedy mar this first hosting

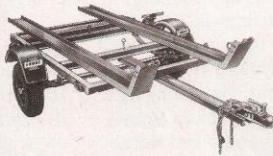


of the 'Olympics' in the U.S., such as happened too often in Europe where traffic is even less a problem.

To help avoid mishap, each competing motorcycle was given a new type of air horn, weighing but 3 oz., yet capable of up to 125 blasts of 118 decibels! The device clamps quickly to the handlebar for instant use and is effective at over 60mph and can be heard up to a mile away. The advantage of its light weight meant instant acceptance by the Six Day riders, who carefully pare every ounce from their bikes, which are virtually road-legal motocross machines.

In the spirit of the occasion, the horns were dubbed Six Days Sound, and carried the red, white and blue ISDT emblem. The Six Days Sound is still available, both as a souvenir of the Trial, and for the same practical purpose originally intended, a great safety device for every street and off-road bike; and part of the price of each one will still go to the ISDT Fund. They are available through many dealers at \$3.50, including chromed handlebar mounting clamp, or you may order

direct for mail delivery from Target Products, Box One, Eagle Rock Station, Los Angeles, CA. 90041, asking for SDS 285-6, sending \$3.80 to include packing and postage. Refills are available, priced at \$3.40 per pair, also from Target.



TRAILER TO TRIALS AND TRAILS

With a capacity of up to three motorcycles or 1000 lbs., the Ideal Model W-116 Cycle Trailer has a rugged welded steel chassis that rides smoothly, protects valuable cycles.

All equipment is included "ready for the road", including Federal Standard No. 108 lights. Steel channel ramps simplify loading and tuck away neatly when not in use. Hold-down brackets are adjustable for correct positioning.

For details and current literature, write: Ideal Mfg. Co., Dept. MC, Oskaloosa, Iowa 52577.



GEAR SHIFT LEVER

IMPAC Industries has announced the availability of a totally new addition to their line of "unbreakables"—the IMPAC Gear Shift Lever with many outstanding benefits to the motorcyclist. Made of Nylon similar to the IMPAC clutch-brake lever assembly,

and patented under U.S. Patent No. 3,733,922, the new lever combines outstanding reliability with light weight and the protection of transmission parts.

According to IMPAC Industries, the lever incorporates "controlled flexibility" which cushions jolts to the transmission and helps to prevent damage to the shift shaft and shift forks. The unique curve near the foot pad essentially eliminates breakage by turning crashes and collisions into glancing blows. The lever will not permanently bend, but returns immediately to its original shape.

As with the IMPAC clutch-brake lever assembly, if any should break for any reason, IMPAC will replace it for a small handling and mailing charge. Virtually indestructible, the lever is impervious to gasoline, oils, cleaning solvents and weather. It is much lighter than most metal levers and its flat black appearance is compatible with all motorcycles.

The initial model fits most Hondas, Kawasakis, Yamahas, CZs, Maicos and many others with 11.5 mm. - 30 spline shift shafts. IMPAC says models for other shift shaft sizes will be available soon. Suggested list price at your favorite motorcycle dealer is \$8.95. For additional information contact: IMPAC Industries, Dept MC, 5704 Bellaire Blvd., Houston, Texas 77036 (713) 668-9017

KENDICK PRESSURE TESTER

The new products section is intended as a service to our advertisers and readers for announcing items of interest. The copy and claims contained here-in were obtained from each manufacturer and in no way represent an endorsement by MiniCycle Magazine. Time and space permitting, we will test any new products submitted to our Product Evaluation department. Manufacturers are invited to send samples to this section each month.

Suzuki Fun Center is announcing the availability, by same day mail order service, of an important new tool for the 2-stroke motorcyclist and motorcycle repair shop. Air leaks resulting from such maladies as broken or faulty gaskets, faulty crankshaft and carburetor flange seals, faulty engine castings, etc., can cause a multitude of problems. Problems ranging from a loss of power to something as serious as a seizure or blown engine.

The Kendick Pressure Tester, engineered by motorcyclists and extensively field tested to assure reliability, locates pressure leaks in minutes.

Priced at only \$19.90 complete (includes the Pressure Tester and Cover

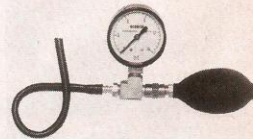


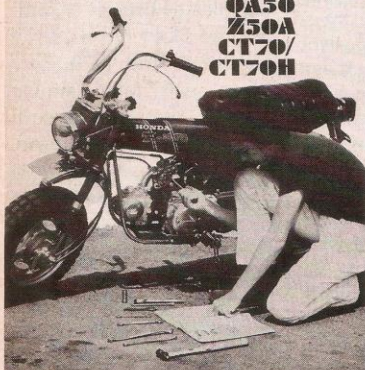
Plate Adaptor Kit for specific make applications). For the repair shop, priced at only \$28.90 complete (includes the Pressure Tester and Universal Cover Plate Adaptor Kit designed for use with a broad range of popular applications). From: Suzuki Fun Center, Dept. MC, 515 N. Victory Blvd., Burbank, CA. 91502.

BOOK REVIEW

Young Mechanics Handbook

STEP BY STEP
MAINTENANCE
FOR Honda

QA50
Z50A
CT70/
CT70H



YOUNG MECHANIC'S HANDBOOK
Published by American Honda Motor
Co.: 176 pgs.; \$5.95

There are many books and manuals about motorcycle repair currently available to the do-it-yourselfer. Quite often they are too technically advanced for the new owner or the novice mechanic to readily understand and gain from reading them.

Young Mechanic's Handbook is put out by American Honda as a training aid for youth groups and their leaders. It is meant for beginners, those who are new to motorcycling. It contains step by step instructions and illustrations dealing with general maintenance, and basic knowledge of the required tools and vocabulary. Routine upkeep is sometimes neglected because the owner is ignorant of the necessity.

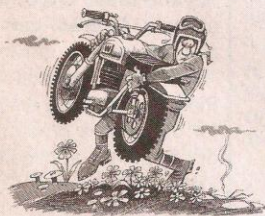
The book is somewhat narrow in scope, as it deals only with three of Honda's small four stroke trail bikes. But, the basic maintenance skills required for these bikes relate quite well to many other machines.

The manual begins with a page telling you how to use it and how to get the most from it. From there, it goes into a

section on trouble shooting, which is painfully brief but of some value to the beginner. After this comes the step by step maintenance of the machines, broken down for each model (QA-50, Z50A and CT70/CT70H). The illustrations are very simple and, for the most part, do a decent job of illustrating the point being made.

There are bits and pieces about engines in general and how they work. This material is poorly organized and is at the wrong end of the book. However it really wasn't meant to be a primer on engines, but rather a step by step guide for the owners of specific machines. On that score it does just fine. As a training aid, assuming the instructor is knowledgeable, it should be quite helpful in the teaching of junior high and younger groups. If you own one of the models covered in this book and are a beginner at the mechanics of it, buy the book and use it. It is available at Honda dealers everywhere and is moderately priced. We think it is well worth the money.

A TRAIL RIDER'S GUIDE TO THE ENVIRONMENT



by
SHAUN BENNETT, PH.D.
consultant to
American Motorcycle Association

A TRAIL RIDER'S GUIDE TO THE ENVIRONMENT: by Shaun Bennett,

Ph.D., Published by the American Motorcycle Association; 60 pgs.

Shaun Bennett sets out, in a witty and imaginative style, "to explain the potential environmental impact of off-road motorcycles to their users and to suggest ways in which it can be reduced or avoided." Because the author has some fun with the subject, his book succeeds in being entertaining and educational.

Of course, the subject of ecological damage by motorcycles isn't really funny, but the story has to be told, in the most interesting way possible. Motorcyclists have confronted conservationists so frequently lately that they tend to tune out the other side of the story.

Dr. Bennett doesn't preach about the bad things all you terrible motorcycle nuts are doing to Mother Earth. He isn't a spokesman for the Sierra Club. He's a concerned individual, who has tried, with the encouragement of the AMA, to point out that there are ways to have your fun

without leaving scars on the countryside.

The conservationist arguments are presented here, with the author's evaluations. He makes the point that some impact is inevitable, but we should try to keep it minimized.

There is also a section with some common sense ideas for keeping yourself in one piece, as well as the environment. This includes what to wear, what to ride, and how to plan your route.

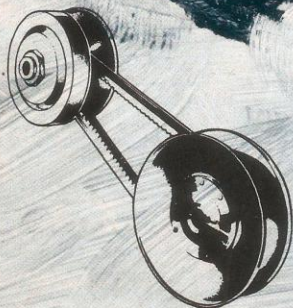
A large part of the success of this witty approach to a serious subject can be credited to the great illustrations by Jerry Barnett. He has captured the author's remarks in cartoon form, adding immensely to enjoyment of the book.

If you want to know what your bike can do to the environment, and how to be kind to Mother Nature, write for information about "A Trail Rider's Guide to the Environment," by Shaun Bennett, Ph.D., to: American Motorcycle Association, P.O. Box 141, Westerville, Ohio, 43081. Price: \$1.00.

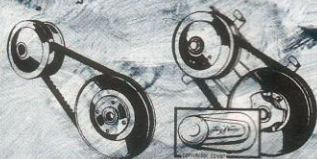
It's here!

COMETS' BRAND NEW MODEL 40 TORQUE CONVERTER SYSTEM

This is the mid-range torque convertor that puts power where it belongs—puts you out in front where you belong. Six Model 40 series clutch drivers adapt to most machines to find extra power you didn't know you had. The Model 40D driven units increase dependability, to deliver smooth power transmission in the reliable Comet tradition. Comet Industries thrives on challenge: building new products to meet exacting specifications and special needs. When you're challenged to better performance, you need Comet. Contact your Comet dealer for complete information, or write Comet Industries, 25 Washington Ave., Dept. 2-22, Richmond, Indiana 47374.



MODEL 40



MODEL TC 88

The standard of the industry for mini-bike maxi-power.

TORQ-A-VERTER 99

17% overdrive efficiency with bolt-on installation convenience.

2 CYCLE OR 4 CYCLE
ENGINES UP TO 25 HP
(2 cycle to 25 hp.;
4 cycle to 18 hp.)



25 Washington Avenue
Richmond, Indiana 47374
Phone 317-962-8506

World Muddy Grand Prix

(Continued from page 34)



Riding style of good racers like Bill Franks and Mike Brown was masked by mud and warm clothing.

RESULTS, WORLD MINI GRAND PRIX

0-61cc, Stock, 9-11 yrs, Novice: 1) Scott Burnworth, Jamul, Calif.; 2) Robin Harris, Las Vegas, Nev.; 3) Rick Stephenson, Buena Park, Calif.; 4) Ronald Taylor, Los Angeles, Calif.; 5) Joe Spangler, Fontana, Calif.

0-61cc, Mod., 12 & over, Novice: 1) Ron Ellenburg, Las Vegas, Nev.

0-61cc, Stock, 12 & over, Expert: 1) Mike Harnacker, North Hollywood, Calif.; 2) Jeff Ward, Mission Viejo, Calif.; 3) Ron Green, Northridge, Calif.; 4) Mike Marshall, Northridge, Calif.

0-61cc, Mod., 9-11 yrs, Experts: 1) Matt Whitting, Saugus, Calif.; 2) Rick DeLong, Sunnyvale, Calif.

0-61cc, Mod., 12 & over, Experts: 1) Brad Dutoit, Fallbrook, Calif.; 2) Mike Brown, Saugus, Calif.; 3) Joe Tucci, West Covina, Calif.; 4) Dave Stransky, Niceville, Florida; 5) Tommy Hopkins, Hawthorne, Calif.

0-61cc, Mod., 9-11 yrs, Novice: 1) Mark Murphy, Fort Myers, Florida; 2) Jimmy Simmons, Whittier, Calif.; 3) Neal Nelson, Alameda, Calif.; 4) Shawn Moran, Downey, Calif.; 5) Danny Kirkeby, Petaluma, Calif.

0-81cc, Mod., 9-11 yrs, Novice: 1) Bryon Antonacci, Lakeside, Calif.; 2) David Dieterle, Riverside, Calif.; 3) Don Bramlett, Fortuna, Calif.; 4) George Holland, Kerman, Calif.; 5) Rex Smith, Jr., South Gate, Calif.

0-81cc, Mod., 9-11 yrs, Expert: 1) Scott Talkington, Downey, Calif.; 2) A. J. Whiting, Saugus, Calif.; 3) Phillip Larson, Bremerton, Wash.; 4) Joey Hamilton, Pico Rivera, Calif.; 5) David Hashman, Poulsbo, Wash.

0-81cc, Mod., 9-11 yrs, Novice: 1) Ernie Townsend, Fontana, Calif.; 2) Todd Kutcher, Las Vegas, Nev.; 3) Jimmy Simmons, Whittier, Calif.; 4) Scott Wilder, Sylmar, Calif.; 5) Bill Ronland, Auburn, Wash.

0-81cc, Mod., 12 & over, Experts: 1) Lenny Giger, Las Vegas, Nev.; 2) Bobby Jones, Fillmore, Calif.; 3) Doug Nicol, Culver City, Calif.; 4) Mike Harnacker, North Hollywood, Calif.; 5) Todd Peterson, Orange, Calif.

0-81cc, Mod., 12 & over, Novice: 1) Russ Eide, Artesia, Calif.; 2) Andy Northrup, Chino, Calif.; 3) Bill McCandless, Villa Park, Calif.; 4) David Campbell, Seaside, Calif.; 5) Jeff Lammers, Valinda, Calif.

0-81cc, Mod., 12 & over, Novice: 1) Joe Rivello, Norwalk, Calif.; 2) Dwayne Franks, Artesia, Calif.; 3) Richard LaRue, Crescent City, Calif.; 4) Lance Burgess, Miranda, Calif.; 5) Billy Reese, Paso Robles, Calif.

0-81cc, Mod., 12 & over, Expert: 1) Brian Myerscough, Calimesa, Calif.; 2) Gene McCay, Lexington, Tenn.; 3) Duane Marker, Wenatchee, Wash.; 4) Andy Palafox, El Paso, Texas; 5) Greg Summey, Reseda, Calif.

0-81cc, Mod., 12 & over, Novice: 1) Bobby Quintin, Cypress, Calif.; 2) Dan Hryniewicz, El Monte, Calif.; 3) Bret Lockhart, Pomona, Calif.; 4) Jim Cartwright, Upper Lake, Calif.; 5) Nick Minicucci, Riverside, Calif.

0-81cc, Mod., 12 & over, Novice: 1) Gregg Toyama, Carson, Calif.; 2) Randy Monroe, Upland, Calif.; 3) Mike Sanford, Indio, Calif.; 4) Pat Pace, Yuma, Ariz.; 5) Steve Shelton, El Toro, Calif.

0-81cc, Mod., 12 & over, Expert: 1) Brian Ward, Orlando, Florida; 2) Joe Tucci, West Covina, Calif.; 3) Mike Brown, Saugus, Calif.; 4) Timmy Mahlen, Auburn, Wash.; 5) Jim Ball, Norco, Calif.

POWDER-PUFF—0-81cc, Mod., Max., Age Open: 1) Renee Payen, Downey, Calif.; 2) Laurie Sharkey, Baton Rouge, La.; 3) Merri Peters, Dodge City, Kansas; 4) Lisa Christensen, Saugus, Calif.; 5) Joy Marimon, Costa Mesa, Calif.

0-81cc, Stock, 9-11 yrs, Novice: 1) Bryon Antonacci, Lakeside, Calif.; 2) Bruce Bennett, Seattle, Wash.; 3) Sam Raphael, Bremerton, Wash.; 4) Kenny Allen, Fullerton, Calif.; 5) Reid Barnt, San Gabriel, Calif.

0-81cc, Stock, 9-11 yrs, Expert: 1) Mark Rooks, Seattle, Wash.; 2) Phillip Larson, Bremerton, Wash.; 3) John Wheelchel, Newhall, Calif.; 4) Rick DeLong, Sunnyvale, Calif.; 5) J. C. Lopez, Santa Barbara, Calif.

0-81cc, Stock, 6-8 yrs, Novice: 1) Scooter Stafford, Baton Rouge, La.; 2) Tommy Hodgins, Canoga Park, Calif.; 3) Peter Lepp, Hacienda Heights, Calif.; 4) George Holland, Kerman, Calif.

0-81cc, Stock, 9-11 yrs, Novice: 1) Rick Johnson, El Cajon, Calif.; 2) Brett Cross, San Luis Obispo, Calif.; 3) Rodney Morrison, Van Nuys, Calif.; 4) Jeffery Morgan, Glendale, Ariz.; 5) Don Bramlett, Fortuna, Calif.

0-81cc, Stock, 12 & over, Novice: 1) Russ Eide, Artesia, Calif.; 2) Gregg Toyama, Carson, Calif.; 3) Scott Boek, Granada Hills, Calif.; 4) David Campbell, Seaside, Calif.; 5) Robert Gray, El Monte, Calif.

0-81cc, Stock, 12 & over, Expert: 1) Kevin Davis, Las Vegas, Nev.; 2) Vic Darilek, Phoenix, Ariz.; 3) Jerry Shore, Northridge, Calif.; 4) Greg Summey, Reseda, Calif.; 5) Gene McCay, Lexington, Tenn.

0-81cc, Stock, 12 & over, Novice: 1) Jim Cartwright, Upper Lake, Calif.; 2) Bobby Quintin, Cypress, Calif.; 3) Peter Hillebrecht, Orange, Calif.; 4) Mark Hickey, Northridge, Calif.; 5) Bill Recchia, Northridge, Calif.

(Continued on page 61)



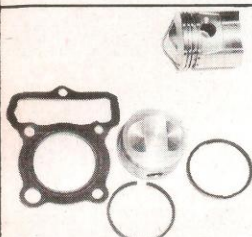
JEFF WARD WINS 2nd ANNUAL WINTERNAIONALS FOR SECOND YEAR IN SUCCESSION!

NEW FROM J&B RACING EQUIPMENT

Lightened Flywheel for XR-75.....\$14.95 exchange.
 Special Light Tappet Adjusting Nuts for XR-75.....\$1.98 pair.
 Special Light Aluminum Exhaust Flange for XR-75.....\$9.95
 Button Mag. Kit (Includes all mounting hardware and Instructions for Installation).....\$149.95.
 Air Box, Inc. Filter for Motocross (For XR-75).....\$14.95.
 CR125 Elsinore Sunburst High Performance Head.....\$49.95.
 CR125 Elsinore Race Proven Expansion Chamber.....\$49.95.



J&B DYNO TUNED RACING EXHAUST
 One-Piece Construction, Built-in silencer. Fantastic horsepower increase for both stock and modified bikes.
 SL-70.....\$25.95
 XR-75.....\$34.95



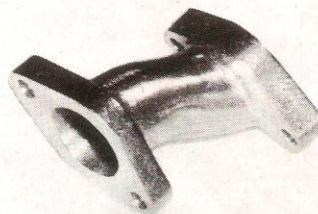
J&B PISTON KITS

75cc High comp. kits for:
 SL70.....\$24.90
 XR75.....24.90
 81cc High Comp. Kits for:
 XR75.....29.95
 High Comp. kits for:
 SL100 & SL125.....29.95

HIGH PERFORMANCE CAMS

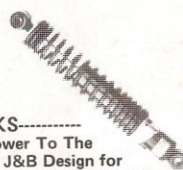
Built to J&B specifications. "The Winning Equipment".

SL70.....	\$26.95 exchange
XR75.....	26.95 exchange
SL100, Stage I.....	28.50 exchange
SL100, Stage II.....	36.00 exchange
SL125, Stage I.....	28.50 exchange
SL125, Stage II.....	36.00 exchange



XR75 CARB ADAPTOR

One piece aluminum for 22mm carb.
 \$11.95
 Manifold ported & flowed to match cylinder head-- add \$7.00.



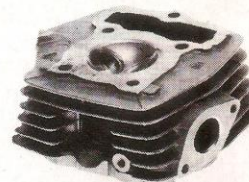
BOGE SHOCKS-----

Get the Horsepower To The Ground. Special J&B Design for kids. For XR-75, SL70, Yamaha 80 & Indian MX. State bike and weight of rider. 90-day unconditional guarantee.
 \$37.95 per pair.



LIGHTENED & BALANCED CRANKS

To J&B Specifications. For XR75..... \$39.95 exchange
 NEW STROKER CRANK for XR75. Use with 81cc piston kit. Make your XR75 a 100..... \$74.95 exchange
 ADD \$30.00 CORE CHARGE IF NO EXCHANGE.



XR75 PORTED & POLISHED HEAD

Bench flowed to J&B specifications.
 The proven winner. \$36.95 exchange
 SL70 ported & polished head (Not illustrated) \$36.95 exchange

GO WITH THE WINNING EQUIPMENT-Like Jeff, Brad Dutoit & Davy Carlson



P.O. Box 2431 - Laguna Hills, CA 92653



Jeff Ward



Brad Dutoit

Name (please print) _____

Street Address _____

City _____ State _____ Zip _____

Check or Money Order for \$_____ enclosed.

Mail to: J & B RACING EQUIPMENT Dept. MC8
 P.O. Box 2431, Laguna Hills, Calif. 92653

J&B have recently expanded their facility and are now staffed and equipped to handle all brands of mini-cycles and motorcycles. Complete machine shop and dyno tuning available. **PRICES UPON REQUEST.**

Send \$1.00 for 1974 J&B Racing Equipment Catalog.

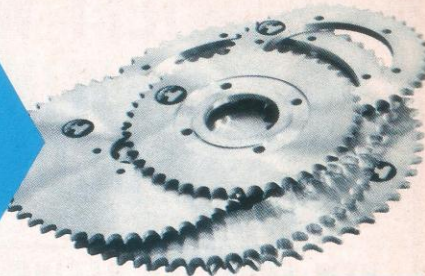
Dealer inquiries invited. Your ideas and comments welcomed.

... WE'LL FOLLOW YOU ANYWHERE!

MOTORCYCLE SPROCKETS:



Bolt-on's, overlays, motorclutch, transmission, dual row and standard replacement in steel and lightweight, tough 7075-T651 aluminum.



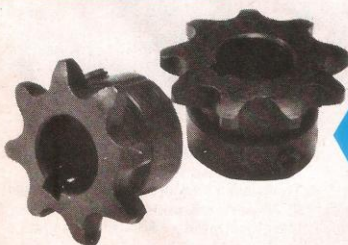
KART SPROCKETS:



The famous Tru-a-line #35 Kart Sprockets, precision hobbed and blue anodized . . . then split in half for quick changing. In tooth counts from 37 to 84. Other styles in both steel and aluminum also available.

ATV SPROCKETS:

Precision machined #40/41 sprockets to fit all popular differentials and Hubs on both 3 and 4 wheeled ATV's. One piece or split styles, in super-tough aircraft alloy to withstand rugged off road use. Sizes range from 43 thru 82 teeth.



LAWNMOWER SPROCKETS:

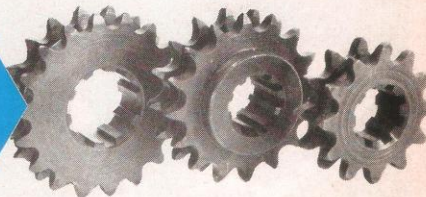
A wide range of tooth sizes; in "B" type sprockets to fit #35 and #40 chain . . . and "C" type sprockets to fit #40/41 chain. All precision hobbed, keywayed and black oxidized.



SNOWMOBILE SPROCKETS:



Precision hobbed, splined and hardened steel sprockets to fit all makes of snowmobiles. Made for single, dual and triple row chain . . . in all popular sizes. A variety of bore styles, either splined or keyed, available.



No matter which direction your products take; Azusa has the sprocket for you. All our sprockets are made in our Tabloc Division, where our rows of Hobbers and Broachers fabricate sprockets in many hundreds of sizes and shapes . . . to cover every conceivable application. O.E.M.'s, send us your requirements. We'll prepare a prompt quote — no obligation. For more information write: Dept. MC-43, Azusa Engineering, Inc., 1542 Industrial Park Street, Covina, Ca. 91722.

Azusa
Engineering
Incorporated



WORLD MUDDY GRAND PRIX

(Continued from page 58)

0-81cc, Stock, 12 & over, Expert: 1) Brian Myerscough, Calimesa, Calif.; 2) Troy Rhoten, Dodge City, Kansas; 3) Bobby Gonzales, Montebello, Calif.; 4) Mike Brown, Saugus, Calif.; 5) Mark Lawrence, South San Gabriel, Calif.

0-81cc, Stock, 12 & over: 1) Lance Burgess, Miranda, Calif.; 2) Vince Van Hook, Covina, Calif.; 3) Dwayne Franks, Artesia, Calif.; 4) Kevin Burns, Reseda, Calif.; 5) Ron Ellenburg, Las Vegas, Nev.

0-110cc, Mod., 9-11 yrs: 1) Kevin Steel, Las Vegas, Nev.; 2) Rick DeLong, Sunnyvale, Calif.; 3) Mark Murphy, Fort Myers, Florida; 4) Neal Nelson, Alameda, Calif.

0-110cc, Mod., 12 & over: 1) Ricky Simmons, Whittier, Calif.; 2) Bobby Gonzales, Montebello, Calif.; 3) Steve Crawford, Sacto, Calif.; 4) Jerry Shore, Northridge, Calif.; 5) Tony Schuler, Artesia, Calif.

0-110cc, Mod., 12 & over: 1) Greg Toyama, Carson, Calif.; 2) Bob Kline, Northridge, Calif.; 3) Mike Prunty, Arleta, Calif.; 4) Jim Bramlett, Fortuna, Calif.; 5) Jerry Bagby, Yuma, Ariz.

0-110cc, Mod., 12 & over: 1) Bobby Jones, Fillmore, Calif.; 2) Brian Ward, Orlando, Florida; 3) Kevin Davis, Las Vegas, Nev.; 4) Joe Tucci, West Covina, Calif.; 5) Mike Brown, Saugus, Calif.

100 Motorcycle Class, Division A: 1) Richee Collins, Anaheim, Calif.; 2) Geoff Singer, Anaheim, Calif.; 3) Don Faulkner, Santa Monica, Calif.; 4) Brett Moore, North Hollywood, Calif.; 5) Sue Fish, Rosemead, Calif.

100 Motorcycle Class, Division B: 1) Jeff Drumm, Tarzana, Calif.; 2) Jeff Timmerman, Sacramento, Calif.; 3) Troy Ingolia, Fullerton, Calif.; 4) Bobby Lakey, Yuma, Ariz.; 5) Jerry Shore, Northridge, Calif.

125 Motorcycle Class, Division A: 1) Jed Drummond, Gardena, Calif.; 2) Robbi Hunter, Yuma, Ariz.; 3) Chris Gray, Pasadena, Calif.; 4) Robert Westbrook, Redondo Beach, Calif.; 5) Don Faulkner, Santa Monica, Calif.

125 Motorcycle Class, Division B: 1) Evan Marcus, Granada Hills, Calif.; 2) Jerry Allison, Whittier, Calif.; 3) Gregory Brown, Los Angeles, Calif.; 4) Wayne Talkington, Downey, Calif.; 5) Jodie White, El Paso, Texas. ☐

PUBLISHERS PAGE

(Continued from page 8)

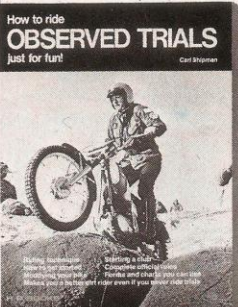
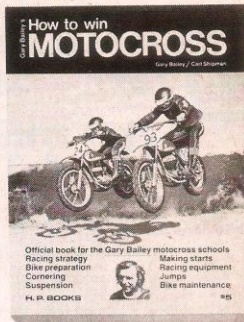
sulates", is shot through with (dare we say it?) b.s. With this column, our Tech Editor hopes to cut through some of the fog.

Space in *MiniCycle* is at a premium. We cannot afford to waste any of it. Editor McClintock has his column and, let's face it, there is some duplication in this column. So I will retire. Ungracefully, because I enjoy writing it. But, I guess, it's really just an ego trip. ☐

HOW TO WIN MOTOCROSS

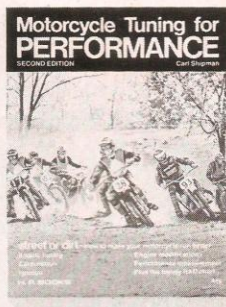
New...Gary Bailey's book shows how to get a good start and go fast all the way around an MX track. The first thing Gary says is, "Slow Down." After several years of conducting his popular motocross schools, Bailey teaches racing technique in a practical and straightforward way. If you are doing it wrong, it won't help to do it wrong faster. Bailey's advice... slow down while learning correctly and then let your improved abilities start winning races for you.

How To Win Motocross covers everything taught at the Gary Bailey racing schools within its 192 pages, illustrated with about 300 how-to-do-it photos taken at the schools. Making starts, first corner razzles, jumps and turns, with a lot of strategy and thoughtful advice thrown in. Covers the seemingly insignificant but vital information about setting up your bike for racing: location of controls, tire pressures, suspension and maintenance.



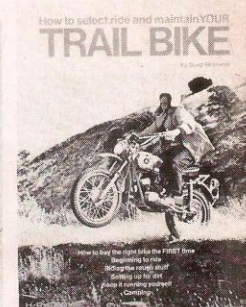
How to ride OBSERVED TRIALS just for fun

160 pages/250 photos-drawings. Have fun at the booming sport of Observed Trials. This new book by Carl Shipman tells you how to get started on nearly any bike and develop your riding skills both for the fun of trials competition and nearly any other kind of off-road riding that you like to do. Tells you how to get started, rules and procedures, how to organize a club, and how to modify your present bike to make it better. Riding technique for the difficult stuff is carefully explained and shown in pictures so you can understand it and start improving right away. An entertaining new book on a sport which offers challenge and lots of fun. Includes the Official Rules of the American Trials Association. \$5 + 30 cents postage (or get it from your dealer). Satisfaction guaranteed!



Tuning for PERFORMANCE

114 pages/231 photos-drawings. Even if you've never done it before, this book tells and shows you how to get utmost performance—whether you ride street or dirt. Details cycle carbs, ignition timing, compression and gearing. Charts, graphs and formulas take the mystery out of altitude, temperature, air density, jet sizes, fuel/air ratios and much more. Shows you professional methods for performance measurement and tuning with a RAD chart and useful record forms to use as you tune. Don't be misled by the title. Performance and good tune are as important to average riders as to racers. Some reviewers have said this book has *too much* in it. We don't see anything wrong with a book that tells it all. When you're doing something it helps a heck of a lot to understand it. Solves your tuning problems or your money back. \$5.00 + 30 cents postage (or get it from your dealer). Satisfaction guaranteed!



How to select, ride & maintain YOUR TRAIL BIKE

160 pages/220 photos-drawings tell it like it really is—details your dealer would give if he had a week to spend with you personally. Tells and shows you experts' tricks so you will spend more time riding—less time fixin'—and a lot less time falling off! Full details what you MUST know to buy a new or used trail bike. How to learn to ride correctly and easily... complete how-to-ride series for hills, sand, mud, water, rough ground, rocks, banks, logs, pine needles, grass and ruts. Personal safety. What to wear to save your hide. How to keep your bike running—yourself. Flat fixing, wheel balancing, which tires are best for what, chain care and much more. Setting up your bike for dirt riding. How to go camping with your trail bike. You just can't imagine how complete it is until you get a copy in your hands. Every page offers more hard facts than a whole magazine article. \$5 + 30 cents postage (or get it from your dealer). Satisfaction guaranteed!

Please send ☐ **HOW TO WIN MOTOCROSS**

☐ How to select, ride and maintain YOUR **TRAIL BIKE** Allow 3 weeks for delivery

☐ Tuning for **PERFORMANCE**

☐ How to ride **OBSERVED TRIALS**

☐ All about **MINIBIKES**

☐ Check ☐ Money order

Enclosed is \$ _____ (\$5.30 per book including postage & handling)

Name _____

Street _____

City _____

State _____

Zip _____

MiniCycle Magazine Library, P.O. Box 2869, Laguna Hills, Calif. 92653

APRIL 1974/61

Indian OWNERS—DEALERS MINI MINI 10" WHEELS & TIRES

FRONT WHEEL CONE TYPE	\$20.00
FRONT WHEEL WITH BRAKE	\$25.00
REAR WHEEL WITH BRAKE	\$25.00
10" KNOBBYTIRE & TUBE	\$18.00
10" UNIV. TIRE & TUBE	\$15.00

SEND CHECK OR MONEY ORD. TO
JERRY SHORE
17402 CHASE AVE.
NORTHRIDGE, CALIF. 91324
ALL ORDERS SENT FRT. COL.
(DEALER ING. INVITED)



LITTLE RACERS

WE BUILD 'EM

The famous TARBO HOT KAT world championship Mini. Now the new HOT KAT for the 0 to 60 class. *Minicycle.*
(14 & 15" wheel size)

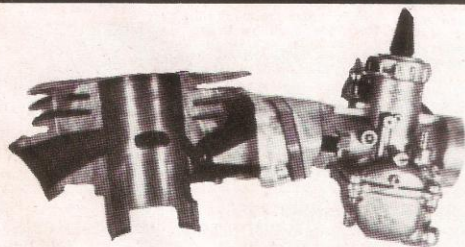
Our record with the Tarbo Hot Kat minibikes has proved our point, we use the best 50cc engines on the market. **OUR RECORD 97%** of the events we have run in, **OUR TARBO BIKES HAVE WON.** And they run two and three times a week at various places. For Specs and prices write

CHAMBERS ENTERPRISES

US Dist. TARBO HOT KAT

P. O. Box 20033 Long Beach, Calif. 90801

DH Reed for GT-1 Yamaha



The 4-petal DH reed assembly shown here offers a 250% increase in reed area over the stock 2-petal unit. The DH reed accepts a 24 or 26mm Mikuni in place of the stock 16mm carb. The big reed and carb will transform the detuned GT-1, and make it a performer.

The DH reed lists for \$24.00. We also stock 24 and 26mm Mikunis.

**DH Enterprises, 1605 Lynngrove Drive
Manhattan Beach, Cal., 90266, (213) 372-6427**

The "GO" Show

JIM RIGGLE became a part-time television star recently. He was the featured rider in NBC-TV's "GO" show segment about mini-cycle racing. The segment of the half-hour, weekly, children's program was filmed at the Y-AMA's "National Mini-Moto-cross Championships" at Mansfield, Ohio.

NBC really put together an accurate and informative view of mini racing. We only wish such a positive approach could be shown to a larger audience, perhaps in prime time. ("Adam-12" recently showed a boy outrunning a police car through suburban streets on a hopped-up Mini-Enduro.)

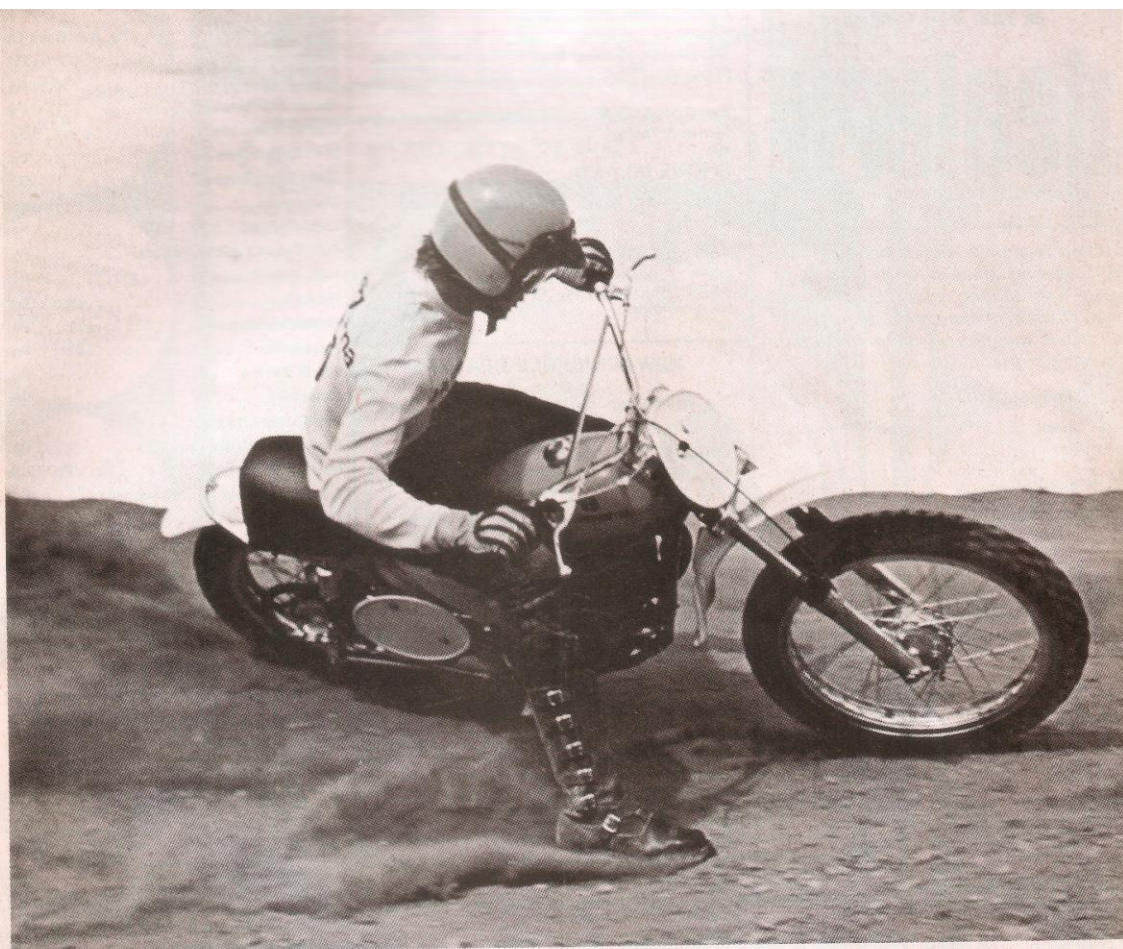
Tim Ryan, of NBC Sports, narrated the show, which followed the racing and related activities from start to finish. Riders from various parts of the country were introduced, and some of them, including Jim Riggle, were shown as they walked the track with their fathers, making sure they knew every turn and jump.

Check-in procedures were outlined, including tech inspection of bikes, health questionnaires and a check of individual protective clothing. Each racer carried a medical release at all times.

Racing action concentrated on the 81-100cc Junior class, with Jim Riggle among the leaders. Brief helmet-mounted shots were too rough to be effective, but the slow motion shots, set to music, were fun to watch. (Reminded us a little of "On Any Sunday".)

Some of the shots were actually of the Expert class race the following day, with Kenny Blissett unnamed but impressive. For the sake of continuity, the show gave the impression that we were still watching the Junior class, leading up to Jim Riggle's second place finish and resulting trophy.

We liked the show so much, we're going to watch it again, maybe twice. You'll get your chance to see it on February 9 and June 15. Check your local listings for the exact time of NBC's "GO" show. ☐



Fill in the coupon below and take it to your local Husky Dealer and get a full color poster of this photo at no charge!

Your turn on a 125

... heading for the winner's circle! This one-two-five comes stock with the trick goodies like a 32 mm Bing, Carb, Motoplat CDI ignition. Betor Forks, Girling shocks and nylon control cables. Competition proven in the 1st 125 Grand Prix MX, the Husky 125 has a 6 speed gear box (your choice of MX or off-road ratios) and the same Swedish craftsmanship and technical design know how that has gone into producing the winners of the Baja 1000, ISDT Silver Vase Team Trophy, National Enduro Championship, Barstow to Vegas and hundreds of local MX and enduro races coast to coast. Avoid the high cost of modifying a stocker and go with an out of the box winner; a Husqvarna 125.

Take this coupon to your local Husky Dealer and get a full color poster at no charge. Persons under 18 must be accompanied by an adult. This offer is limited to stocks on hand.

Name _____

Address _____

City _____

State _____ Zip _____

Husqvarna

Husqvarna Motorcorp East/1906 Broadway, Lorain, Ohio 44052 
Husqvarna Motorcorp West/4935 Mercury, San Diego, California 92111

APRIL 1974/63

local dealers

With our readers in mind, MiniCycle lists the following dealers and brands to enable you to find your "Local (mini-cycle) Dealer." If the dealer nearest you isn't listed, mention our program to him and have him contact us.

ARIZONA

Cycle Shack, 5138 W. Hubbell, Phoenix; Accessories

CALIFORNIA

Allied Cycle, 24601 Arch St., Newhall; Indian, Monark, DKW, Penton, CZ, Suzuki

Auto Cycle City, 851 N. Anaheim Blvd., Anaheim; Indian, Tri-Sport, Montesa, Trailers

Don's Tires & Cycle, 1108 W. Hoit, Ontario; Indian, Montesa, RTS

Gemini/Monark of La Habra, 535 W. Whittier Blvd., La Habra; Gemini, Monark, Off Road Accessories

ILLINOIS

Midwest Indian, U.S. 51 South, Rochelle; Indian (Phone: 815-562-8984)

INDIANA

Buck's Barn, RD 200 North, Michigan City; Indian, Hodaka, Rockford, Bridgestone

YU CAN! M/C SHOP, 109 W. 41st Ave., Gary; Indian

KANSAS

Santa Fe Trail Cycle Sales, 134 East Main, Gardner; Indian, Rupp & Cooper Racing Bikes

MASSACHUSETTS

Beech Cycles, Inc., 299 Lynnway, Lynn; B.S.A. & Indian

MICHIGAN

Schafer's Motorsports, Inc., 14081 U.S. 27 North, De Witt; Indian, Holder, Speedway

Williamston Sports Center, 108 W. Grand River, Williamston; Indian, Speedway

NEW JERSEY

Mini Trail Bikes, 231 White Horse Pike, Clementon; Chaparral, Chibi & Charger

NEW YORK

Aries Motorcycle Sales, 155 Montauk Hwy, Blue Point; Indian, JAWA & CZ

Humiston's Garage, R.D. #6, Saratoga; Indian (Phone: 518-695-3000)

64/MINICYCLE

OHIO

Bob's Sport Cycle, 200 Branstetter, Wooster; Indian, JAWA & CZ

Motorcycle Specialties, 4300 Warner Rd., Cleveland; Barnt, Hodaka, OSSA, Steen

Stormie's M/C Shop, 7113 North Ridge East, Madison; Indian

RHODE ISLAND

Kent County Assoc., 672 Main St., Coventry; Indian

TEXAS

Motor Sports Cycles, 1619 Red Bluff, Pasadena; Indian

NEW MINICYCLE DEALERS

The following mini-cycle dealers have joined the MiniCycle Bulk Dealer Program, and sell MiniCycle magazine on their counters. Ask your local dealer to stock MiniCycle.

CONNECTICUT

Richard W. Hall's Ranch
7 Sugar Hollow Rd., Danbury

FLORIDA

Mini Motors & Mowers
230 S. W. 10th St., Ocala

ILLINOIS

Put's Cycle Center
1016 E. Marietta St., Peoria Hts.

KANSAS

International Motors
322 E. Evans, Wichita

MICHIGAN

Nicholson Enterprises
2280 W. Liberty, Ann Arbor

BOY'S CAMP

Trail Bike Riding - Bike
Overnight - Small Engines -
Woodshop - N.R.A.
Riflery - Compass Skills -
Swimming

FREE BROCHURE
MEMBER A.C.A. & C.C.I.

CAMP TRAILBREAKER
Dept. MC, R.D. 2, Box 219 B
Blairsville, PA. 15717 412/ 459-8549

COLOR T-Shirts

Super
Shirts

FREE Sample & Brochure

Send
to **SUPER SHIRTS**
DEPT. N, P.O. BOX 66147
Los Angeles, CA. 90066

ADVERTISERS INDEX

American Honda	Pg. 9 & Back Cover
Azusa Engineering	Pg. 60
Calif. Speed & Sport	Pg. 64
Camp Trailbreaker	Pg. 64
Comet Industries	Pg. 57
D-H Enterprises	Pg. 62
Dirty Distributing	Pg. 11
Dunecycle	Pg. 39
Explorer Inc.	Pg. 5
Full Bore (Yankee Motors)	Pg. 7
Hacienda Honda	Pg. 15
Heald Inc.	Pg. 64
Hodaka (Pabatto)	Pg. 3
Husqvarna	Pg. 63
J & B Racing Prods.	Pg. 59
Kawasaki	Pg. 17
MiniCycle Library	Pg. 61
Moto Villa (Villa Imports)	Pg. 8
Muskin Corp.	Pg. 12 & 11
ND Spark Plugs (Nippondenso)	Pg. 4
Plans	Pg. 64
POW Engineering	Pg. 16
Shoei Helmets	Cover two
Super Shirts	Pg. 64
Suzuki	Cover three
Web Cams	Pg. 14
Webco	Pg. 6

MINI-3 WHEELER PLANS!

FREE!
DISCOUNT COUPON ON
PARTS WITH PLANS!

Exciting NEW 3-wheel
plans reveal step-
by-step details!
ALSO MINI-BIKE AND KART PLANS!
RUSH \$2 for plans!
(INDICATE TYPE)
TO:
PLANS, P.O. Box 793, Dep
Fremont, Nebr. 68025

GO KART & MINI-BIKE CATALOG

A COMPLETE GUIDE OF STOCK AND
H-PERFORMANCE PARTS
SEND \$1.00 FOR CATALOG AND FREE DECAL

CALIFORNIA SPEED & SPORT SHOP Dept. A
298 Jersey Ave. New Brunswick, N. J. 08902

NEW SUPER TRYKE

KIT PRICE \$369.95



YEAR ROUND FUN

HEALD'S NEW "SUPER TRYKE" Has full suspension front and rear, large 21" dia. x 12" wide ATV tires and 8 H.P. 306 cc. Tecumseh Engine. Torque Converter drives differential rear axle through #40 chain. Options include electric start, front ski, lights, roll bar, spark arrester muffler. Tryke comes in easy-to-build semi-kit form. Base kit price \$369.95. Ideal for farm or recreational use on snow, sand or trails.

FOR MORE INFORMATION WRITE
HEALD INC., Dept. P.O. Box 1148,
Benton Harbor, Michigan 49022

FREE CATALOG

Exclusive for MINICYCLE READERS... ROCK TRADING CARDS

FREE!

NAME THE
HITMAKER WHO
BEGAN AS A
BOXER!

WHICH ARTIST
HAS A
COLLECTION OF
OVER 70,000
RECORDS?

WHICH
DRUMMER HAS
WON 85 GOLD
RECORDS?

WHICH ARTIST
STARTED BY
SINGING IN A
BASEBALL
PARK?

by Hitmakers
of Hollywood

WHICH ARTIST
GAVE UP \$1,000,
000.00 TO DO
HIS OWN
THING?

WHAT DOES THE
TERM "THREE
DOG NIGHT"
MEAN?

NAME 1st
GROUP TO
PERFORM AT A
ROCK FESTIVAL
ANYWHERE!

Richard Car
Karen Carpi

14 F S
exciteme
point to
Richard
singles th
BEGUN,
DAYS,
three con
TERS," a
three "G
Arts and
Carpente
the afore
Song-of-t
Other Str
the moti
Oscar no
The Carp
recent Fa
the Carpi
to record
chief hot

CARP.

CARPENTERS

ROCK & POP



CARPENTERS

Get in on the LATEST FAD...

STAR-SWAPPING

BIG, BOLD, BRIGHT and CRAMMED with info on your favorite music artists. Each 3½ x 4½" card has your star's full color photo and on the flip side, lists hit records, birthdate, zodiac sign and biography. **MANY NEVER-BEFORE PUBLISHED FACTS.** Over 600 artists! 3 Dog Night; Bread; Carpenters; Leon Russell; Dawn; 5th Dimension; Canned Heat, just to name a few... Collect them all! Not available in stores. For a limited time only, packets of 18 action cards **FREE** with new or extended subscriptions to **MINICYCLE**. Offer expires May 1, 1974. **LAST CHANCE!**

One pack FREE with 1 year sub.
Two packs FREE with 2 year sub.
Three packs plus clear plastic carrying case FREE with 3 year sub.

Get the answers with a **MINICYCLE** subscription!

STAR-SWAPPING

Please send me a new or extended 1-year subscription

(one FREE Rock Trading Card Pack) \$6 ☐

2-year subscription (two FREE Packs) \$11 ☐

3-year subscription (three FREE Packs plus plastic carrying case) \$15 ☐

ENCLOSED \$ _____ CHECK OR MONEY ORDER

New ☐ Extended ☐

Mail this coupon today to:

MINICYCLE MAGAZINE/P.O. Box 2869, Laguna Hills, Calif. 92653.

NAME _____

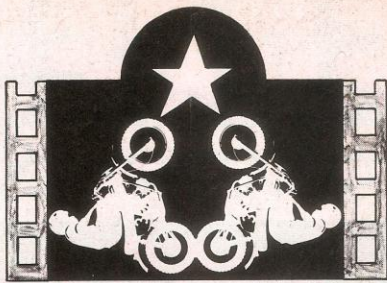
ADDRESS _____

CITY _____

STATE _____ ZIP _____

Allow three weeks for delivery of Trading Cards. Foreign subscribers add \$2.00

APRIL 1974/65



PHOTOHUNNIES



"OK, OK, I'll give you the shirt, but please don't break my hand!"



"Excuse me, Mr. Roberts, how do I get this thing out of second gear?"
(Test rider, Davey Oller, dices with Kenny Roberts, AMA Grand National Champion)

Roger De Coster, 500cc World Motocross Champion, 1971, 1972 and 1973

If Roger De Coster were your age, he'd ride a Suzuki Mini Cross.

Even when Roger was a boy, he hated to lose. Just like you.

That's why Suzuki made this new TM-75 Mini Cross racer. It looks and feels just like the big TM-400 Roger rides. But it's just for boys.

Mini Cross has a 72cc rotary valve engine with five horsepower at 6500 rpm. Five horses, not ponies.

You also get a 4-speed constant-mesh gear box. And a primary kick starter so you can start in any gear.

The front brake is a leading shoe type. Handlebars are the big motocross kind.

Of course you get Suzuki's famous CCI automatic engine lubrication (you don't have to pre-mix the gas and oil).

The fenders won't dent. They're plastic. And the oil-dampened telescopic front fork and rear swing arm shocks soak up all the rough stuff.

Tell your dad about Mini Cross. And ask him this: If he were your age, isn't this the bike he'd want to ride?

U.S. Suzuki Motor Corporation,
13767 Freeway Drive,
Dept. 3013,
Santa Fe Springs,
Calif. 90670.

In Canada,  Suzuki Canada, Ltd., 
Ontario.



Suzuki. A man's machine.

HONDALINE APPAREL.

**When you're
not kidding around.**



Boot up. Leather up. Gear up for your favorite action. With the new line of Hondaline jackets, jerseys, helmets, boots and leathers in smaller sizes. From the most experienced name in motorcycling. From Honda.

All Hondaline apparel is durable and protective. And you can choose from a wide variety of super-tailored-looking styles, colors and sizes. You'll just possibly be the best-looking rider around. And you'll have safety on your side as well.

Better yet, you can try before you buy. At many of your nearby Honda dealers. And since Hondaline apparel is from Honda, you can depend upon its high quality.

Hondaline riding apparel comes in sizes to fit nearly everyone — men and women, as well as younger people like yourself.

It's gear to make any rider a better-looking rider. And that's no kidding.

HONDALINETM
APPAREL • ACCESSORIES • SPECIALTIES

For a free color brochure describing Hondaline apparel, write: American Honda Motor Co., Inc., Dept. MB, Box 50, Gardena, Calif. 90247. ©1974 AHM.



Thank You for your support. We really appreciate it!

Dan & Sarah



FREE Newsletter at our website

<http://Www.AllAboutMiniBikes.Com>