

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

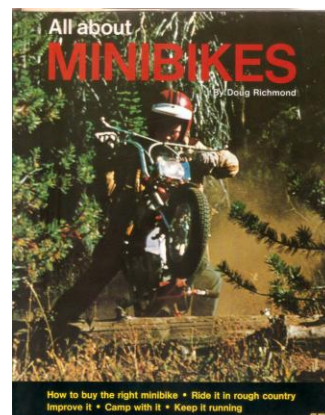


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The first book I ever read on mini bikes back in 1973. I got it at the Library. I bought the kids a mini bike for Christmas several years ago, [Sarah loved riding](#) and I got back into mini bikes. Hence, the name of our FaceBook page and Website... "All About Mini Bikes" thought you might get the connection. Thanks for your patronage in our hobby and feel free to write us anytime at Przyojski@Yahoo.Com

Your Mini Bike Friends,

Dan & Sarah



**MINI
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COMBINED WITH

NEW ENGINE GETS TRYOUT IN DESERT RACE

FEBRUARY 1972/75¢
K 47745

MiniCycle

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Retek's Cheetah &
Ital Jet MK.I

Win a Honda CT70 in
Mini-Model Contest

World Trials Champ
Schools
U.S. Riders



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The *STEEN* F-100 was a howling success. You told us what you liked and we built the bike that fit your idea of a top-notch mini-cycle. Tests by several magazines rated it just that: Top-Notch. It must have been; we sold every one built!

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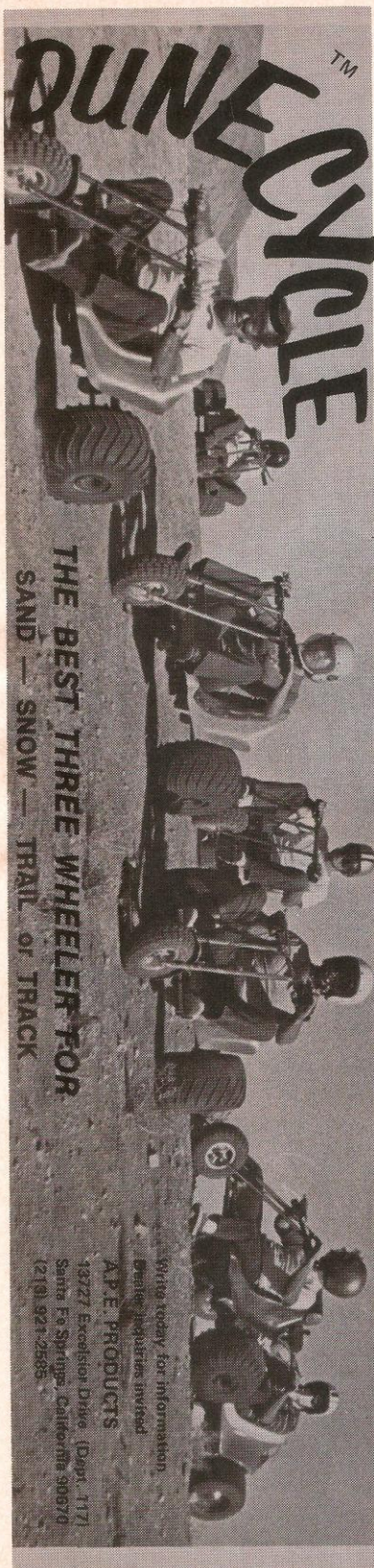
You wanted *motocrossers* with flexible fenders that sprang back after tweaking on a fall or run-in with the bushes. And lights. Not for road-running, but to get you back to camp after sundown. You put in a word about colors — and you were set on what you wanted, and didn't. When you talked about suspension and handling, we sat up and took notice. (*You were right, y'know!*) Thankfully, you were loud in telling the things you liked just the way they were. Stuff like the 16-inch wheels and optional leading link or Ceriani telescopic forks, fat saddle and motorcycle handlebars.

So here you are, troops — the *STEEN* 'Cross-Hundred for 1972. Not *too* new, but more than ever, the bike *you* asked for! It comes in one model, the *Mini-Motocross*, with three color choices: Red, White or Blue "crayola colors." No pearls or 'flakes for your racing bikes, you said. Lights and all parts for mounting are available in a kit, just \$29.95. For the big guys there's a fork spring kit with stiff springs (good for competition, too!) and accordion boots.



STEEN'S
INCORPORATED

OFFICES: 1635 WEST VALLEY BOULEVARD • MAIL: BOX 2276
ALHAMBRA, CALIFORNIA 91803 • TEL.: (213) 289-4351



editorial

MACKIE'S MARAUDERS GET WEAPON FROM 1899

Some while back I sounded off in this column about polluters of our countryside. I suggested formation of Mackie's Marauders to pester people who drop their pop bottles all over the landscape. We don't know if Mackie's Marauders will ever get on an organized basis but we did spark a good deal of interest. One of the concepts of our campaign was that if we didn't clean up the landscapes ourselves, how could we complain about industrial polluters.

Well, it's been a few months since that editorial appeared so it is safe to assume that everybody has been picking up after themselves—right? Now we can get started on the industrial polluters.

Faced with the sight of a large company polluting the earth, we get angry and frustrated but more frustrated than angry. All of us feel helpless. How are we going to stop them? Go knock on the manager's door and ask him, pretty please, to turn off his valves? Or paddle your row boat up to the tanker and point out that his bilge pumping is hurting your swimming beaches? It might be good for a few yuks but it isn't going to clean up the mess.

Don't despair, dear readers, we've got a 73-year-old weapon in our hands that can make industrial polluters, at least those who louse up our water, sit up and take notice. And, at the same time, you might be able to make a fair bit of change—more than you might imagine.

The frustration exists because ordinary people feel helpless to challenge the legal big guns of a large corporation. And it is probably true that we'd get nowhere if we tried. Besides, who's got the money to hire attorneys to prosecute the case. The Federal government, that's who.

The law that allows ordinary citizens to act against corporate polluters is the 1899 Refuse Act. This prohibits the discharge of any refuse, of any kind, into any navigable water, or any tributary. Navigable water means water that is large enough to be used by vessels other than those propelled by oars or paddles. Since rivers only get that large from being fed by smaller tributary streams, the Refuse Act just about covers all streams, rivers and coastline.

And here's the important point that, we bet, most large companies would like to keep quiet. It's the government that does the prosecuting under the Refuse Act. All we have to do, as concerned citizens, is give the U.S. Attorney the ammunition, in the form of legal evidence, with which to attack.

What's more, if the evidence you are able to gather results in a conviction, you don't lose money, you make it! Half of the fine is yours when it is collected. And that can add to quite a bit of loot. The maximum fine is \$2,500 for each instance of violation and the minimum is \$500. Some U.S. Attorneys claim, and some judges agree with them, that each day constitutes a violation. If the company pollutes for a month, and it is proved in court, that can mean anywhere between \$75,000 and \$15,000 in fines. Half of that can mean a lot of cash jingling in your pocket. And even if they are not convicted they can be embarrassed. Polluters don't like the harsh light of publicity.

There are some details to take care of, before you get paid off. The Justice Department has circulated guidelines for investigations (some local U.S. Attorneys actively solicit the help of citizens in prosecuting polluters, contrary to their usual policy).

There are eight steps in the investigation and, depending on how gung-ho the U.S. Attorney is, you may have to do them all yourself. The eight steps are: 1) Determining whether or not the company has an Army Corps of Engineers permit (yes, believe it or not, there is such a thing as legal pollution); 2) Getting a detailed photographic record of the pollution; 3) Getting documented samples of the polluted water in comparison with the unpolluted water; 4) Obtaining an analysis of the samples; 5) Keeping track of the samples if they change hands; 6) Getting proof of the source of pollution; 7) Identifying the polluter; 8) Getting statements from witnesses.

The Justice Department's guidelines go into more depth than this and your local U.S. Attorney (look under U.S. Government, Justice Department, in your telephone book) should be able to help. Ask for the attorney in charge of complaints under the

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Cheetah . . . a NEW dimension in fun

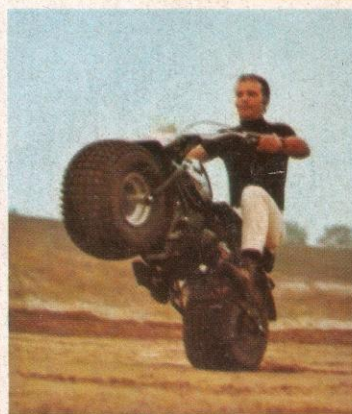
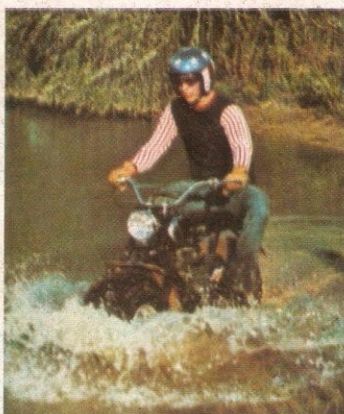
Cheetah . . . a new breed of cat . . . born to roam the wilderness . . . to take you places no trail bike or ordinary ATV can go. Feel the confidence of soft riding, sure-footed traction — anywhere. Experience the sparkling performance of its powerful 4-cycle engine. Enjoy the simplicity and easy handling of automatic torque converter operation. Get the extra safety of a powerful, self-energizing caliper type disc brake.

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So new that a limited number of dealer and distributor opportunities are still available — write for details.



Specifications: Cheetah 250 — Tecumseh 250 cc, 7-hp, 4-cycle engine; Cheetah 200 — 200 cc, 5 hp, 4-cycle engine. All Cheetahs feature Comet automatic torque converter transmission, Kelsey-Hayes self-energizing caliper brake on 8 inch disc, 21 x 11 inch knobby low pressure tires on 8 inch rims, welded tubular steel frame — weight 150 lbs.

MiniCycle

VOLUME 4, No. 2/FEBRUARY 1972/AMERICA'S FIRST MINI-CYCLE MAGAZINE



Trials school in progress at Saddleback Park, California



Steens/F.480 combo



Desert enduro riders catch the "signal"

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JACK PELZER
Publisher
Advertising Director
PATRICK MACKIE
Editor

EINAR VINJE
Art Director

JIM GILBERT
Contributing Editor

MIKE MISHICH
Technical Illustration

CAROL FIGLIO
Circulation Manager

GARY BERTRAM
Production

RANDY DELUCA
Staff Photographer

DAVE GOOLEY
Contributing
Photographer

TERRY BALDWIN
Reader Services

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letters

FLEAS FROM 1,000 CAMELS

Just got done with your latest issue and you've done it again. Another great effort. What I'm writing about is the test you did on the Steens F100. I have one of the first ones that showed up at my dealer and I am fairly happy with the bike, all-in-all. Just a few minor problems which I see they have worked out.

The worst thing is Steen's itself. They are their own worst enemy. I lost a rear axle nut and I waited five months before I finally had my axle machined.

The Steen's rep. came into my dealer's shop with a smile from ear to ear and said, "Here are the axle nuts you ordered." Six months later. I could have pushed those nuts down his throat. One last word, may the fleas from a 1,000 camels invade Steen's armpits. And, if you don't print this, may you get your share of the itches.

Chris Mounts

Corona Del Mar, California

We checked Steen's out on this one. It seems they have been so busy fumigating the parts department because of a strange epidemic of fleas that they haven't had time to get out any orders. We might take a wry philosophical attitude towards these problems but they are nonetheless real. Most manufacturers are anxious to correct them and we have never had one ask us to butt out when we've investigated complaints. Steen's is not the only company with service problems. In fact, Steen's used to have a very good track record and is working hard to regain that good reputation after a number of internal changes.

It is not our intention to apologize for the mistakes of manufacturers. In too many cases, not enough has been done to satisfy legitimate complaints. However, not all the blame can be laid, in every case, at the manufacturer's door. Say, for instance, Chris, your dealer did not give your axle nut order to the distributor for about a month (from one visit to the next). Then the distributor held on to the order until he had a few to send in. Another month goes by. Then they are back-ordered in the manufacturer's parts department. More waiting. So it is possible, with all the best intentions, and a good deal of inefficiency, that six months could go by without anybody being "shady". That's

no excuse, we know, but what do we say to a guy who's doing his best, even if it's not very good.

What we say is, "Have we got a new service for you." It's called MiniCycle's "Grin and Gripe Bag." It works like this, readers send in a letter, complaint or compliment, to the G&GB. Then, every month, we send a G&GB Report to the manufacturer or whomever (basically photocopies of the letters). We request that they let us know what action is taken within 30 days. The reader is notified and also asked to keep us informed. In this way we hope that a lot of these problems will get straightened out but if they are not, we will have to think of some way of helping resolve the situation. Don't expect miracles or overnight solutions but, at least, the "little guy" will know something is being done for him.

JUST ANOTHER DAY

Who cares about one lonely mini-biker stranded five miles out in the woods! I do! Because I was him one day during vacation last summer!

Well, it all started one average morning. I had planned to spend all morning hopping and bumping around on my trails. I got up about 5:00 a.m., put on my riding gear, filled the gas tank on my mini-bike, checked the oil and wheeled my trusty companion into the morning light.

Five pulls and she kicked over (it took ten, actually, because I forgot to connect the sparkplug). Off we shot towards the woods. My bike's powerhouse of four horses purred contentedly as I moved further into the woods. Here and there I stopped to look at one thing or another, and each time my bike started up immediately.

About five miles away from all civilization I stopped near a large elm tree. I had noticed a rather bumpy ride from my bike that had persisted for about a minute. When I looked at the back tire I saw a nail sticking up between my treads. To make matters worse, I had forgotten to pack a small tool kit before I left. In the time that elapsed between discovery and when I started that long walk back, I sat on the ground and fumed.

Well, my fellow mini-bikers, the moral of this story is, TAKE A TOOL KIT!

Jonathan Knight,
Northbridge, Mass. 01534

Tough luck, Jonathan, but it bears out what we are always saying—expect the unexpected.

SPEED LUST

I suffer from a strange, but not uncommon malady, "speed lust". After my first bike died (did it ever live?), I decided to look for a machine with quality. My first choice was a Rupp machine. They have good frames and there was a dealer in my neighborhood. A Rupp Sprint, with its 3½-hp engine, front and rear suspension, good brakes and good looks was my downfall.

For the first week I rode it slowly and carefully. Then I cleaned off my work bench and started to dissect the Sprint. Every part was either modified, replaced or eliminated. Like you say in your mag, "It comes down to simply matching the mini-bike to the mini-biker." I did every thing I could to the engine and took things off the frame that added weight.

Now I was ready for the great challenge. I took my bike to the local club races and for the next three months I was on top. Then, after a period of convalescence from a wheelie crash, I was ready for the big one. The local speed record!

While going for the record the engine checked out on the scary side of 50 mph. Then, as I was set for the winner's circle, I really lunched it. Bits of Teke shrapnel and oil all over the place.

Since then I've had a 1971 Rupp Enduro, but it just isn't the same. I traded it in for a kart. To heck with fast minis! Don't get me wrong, I love bikes and always will, but the way minis are designed right now, hard use kills them.

Eric Deturq,
Wilton, Connecticut

IN A BOX

I am planning on building or buying a mini-bike that will fit in a box measuring 35 inches wide by 38 inches high by 40 inches long. I would like one that would go 40 mph. And not costing too much.

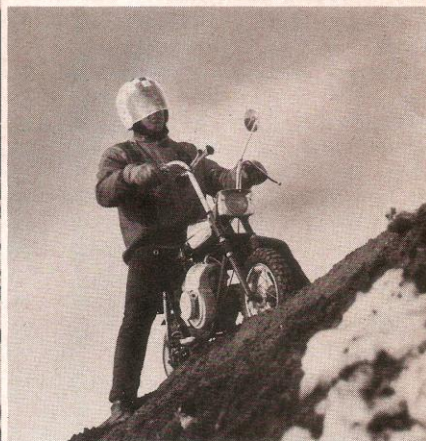
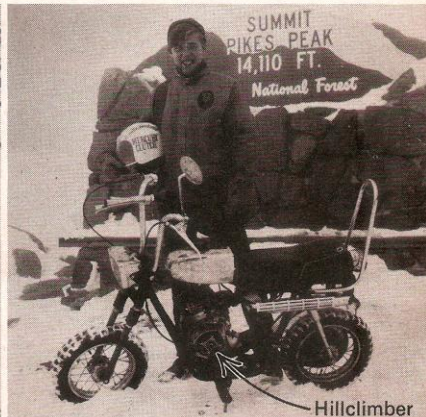
Phillip L. Vogel
Peoria, Illinois

Isn't that a little too fast for such a confined riding area?

BULLETIN:

We're telling the world from 14,110' up—

Mercury's Hillclimber Clutch has
climbed Pike's Peak* (Sept. 22, 1971)



On September 22, a Mercury Hillclimber centrifugal clutch took a 165 lb. rider and his 125 lb. mini-bike to the top of Pike's Peak 14,110'—up-up-and UP through 20 miles of mud, fog, snow, curves, switch-backs and long, engine-killing grades. This impossible test proves once and for all that no other mini-bike clutch can touch Hillclimber for torque, guts and long life. That's why we're not afraid to give you a 6-months warranty.

So, don't settle for anything but the Conqueror of Pike's Peak, The Hillclimber. It gives you your money's worth!

WIN BIG PRIZES in the Mercury Sweepstakes! You're automatically entered if we get your Mercury Clutch Warranty Card—packed in each clutch—between Jan. 1, 1972 and Oct. 31, 1972. Details to come.

*Special authority was given for this test. Mini-bikes are not permitted on Pikes Peak.



MERCURY CLUTCH

Div. of **aspro** Inc., 1201 Camden Ave., S.W., Canton, Ohio 44706

TECH TIPS

KAWASAKI SET-UP

Q: I'm having trouble adjusting the idle speed on my Kawasaki Dyna Mite. There are two screws on the carb—could you please tell me the correct settings?

I am interested in buying the new Gemini Boss 80 but I can't find out the name of my nearest dealer. Could you please help?

Johnny Sacchi

Briarcliff Manor, New York

A: Initial settings for the MT.1 carb are thus: pilot airscrew (forward adjustment) should be turned all the way in and then backed off 1½ turns. The idle speed screw (rear location) should be turned in and then backed off one turn initially. Final adjustment of the idle screw should be made to get the desired idle speed. Turning the pilot air screw in will richen the mixture and turning it out will produce a lean condition. We do not know the name of your nearest San Tong dealer but the distributor for New York State is Camrod, 604 West 52nd Street, New York 10019. Write or call them for the dealer's name. The Boss 80 is just now coming into the U.S. in large numbers.

STUCK WITH A TANK

Q: I recently purchased a Cat mini-bike frame and have two engines that go in it, a Briggs 3 hp and a Briggs 2½ hp. The 2½ is fastest but every time I ride it for a while, the carb comes loose. I think this is due to the weight of the gas tank which is attached to the carb. How could I install a fuel line to the stock carb so that I could install a remote mount gas tank. Any help would be appreciated.

Stew Cook

Van Nuys, California

A: The Briggs and Stratton Vac-U-Jet carb is an integral part of the gas tank and cannot be used without the gas tank. There are only two ways to mount a remote gas tank. First, the original tank is retained and a fuel line is run from the remote tank to the stock tank,

with a cutoff valve between. As the fuel from the stock tank is used up, the valve to the remote tank is opened and the stock tank re-filled. Azusa Engineering, 1542 Industrial Park St., Covina, Calif. 91722, has the necessary fittings and instructions. This is our recommended procedure since it increases your machine's fuel capacity and is the simplest method. The only drawback is the proximity of the stock fuel tank to the muffler. To overcome this, it is necessary to change the carb. B&S have float bowl carbs that may fit and your local dealer will be your best advisor. With a float bowl carb you simply install your remote tank and a fuel line in the usual manner.

CLINTON TRANSPLANT

Q: Could I put a Clinton 3 hp carburetor on my Briggs and Stratton 2½? My Briggs has a Vac-U-Jet carb on it and the Clinton is a float bowl type. If I made this change, the float bowl would be horizontal. Would it operate in this position?

Would I be changing the handling much if I put Honda Mini-Trail 50 tires on my mini-bike instead of my 12½ diameter tires? My machine has no fenders to limit the diameter of the tires.

I think your magazine is great. It's the only magazine in which I read every single article I can find.

Rick Gouliau

Bronxville, New York

A: We can give you some general hints, Rick, but can't be too specific since we do not know the type of Clinton engine you have. All float bowl carburetors have to operate in the horizontal position, that is to say, the rim of the bowl must be, roughly, horizontal. Your B&S carb is basically a float bowl type. To check if the Clinton carb will fit, take off the stock carb and tank at the engine manifold and see if the hole pattern of the Clinton unit will fit. You may find that drilling new holes in the carb

manifold flange will produce the desired results. If you can make it fit, and if the bowl is, indeed, horizontal, everything should work out fine. The capacity of your B&S engine is such that the Clinton carb shouldn't be too big. If you can get the Honda wheels into your frame, do it. You'll find that handling will be much improved. As a general rule, the larger the diameter of the tire, the easier will be the ride.

WHAT'S A LEADING LINK

Q: Do you know where I could get a block for a five horse Briggs and Stratton engine and how much it would cost? Also do you know where I could get a two cycle engine such as Hodaka or Sachs and how much they cost? Thirdly, what is a leading link suspension.

Joe Lilek

Walworth, Wis.

A: Look in the Yellow Pages of your telephone directory under "Engines—Gasoline". Try to find the B&S service distributor. Lawnmower repair shops often don't carry a large spares inventory and there are so many engine blocks that they couldn't carry them all.



Sachs do not have an importer of their engines in the United States. Sachs engines usually come mounted in a frame

Continued on page 16



The **Speedway** Scarab is packed with reasons why it should cost more than \$270

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| 1. HD wishbone frame. | 11. Up to 40 MPH. | 25. Chromed drive cover. |
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Everything you've just read is included in the \$270 price of the Scarab. Mini-cycle extraordinary.

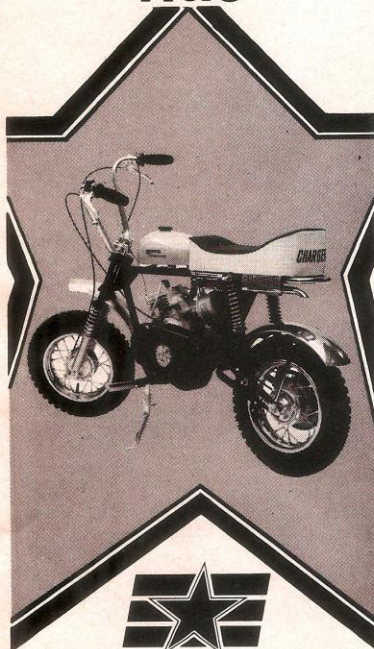
For more information see your Speedway dealer. Or for a full color brochure on all Speedway products, send 25¢ to Richard Walters, Speedway Products, Inc., 160 E. Longview, Mansfield, Ohio 44905.

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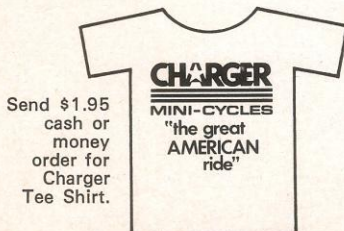
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Club Scene

AUSTRALIAN BOOM

Mini-bikes have only recently become the in-thing "down under". Correspondent Cory Hipkins writes from Victoria saying that two years ago there were virtually no mini-bikes in Australia. Now, he says, "kids are dragging their parents to the local dealer to get the latest models".

A couple of months ago the first real mini-bike rally was held in Victoria, at a big local motorcycle scrambles track. Cory reports that the event was more like a hill-climb than a rally and most of the machines turned in good performances, chugging up the hills, although they were not, in general, balls of fire. To illustrate the growing popularity of mini-biking, the promoters expected about 500 spectators and some 3,000 turned up.

Now this type of event is held about once a month. Cory thinks that their mini-bike events probably don't equal the scale of American events but judging from the attendance figure of the first one, the Aussies seem more successful than we do.

As of Cory's report, there is no Australian mini-bike industry and all of their machines (except the sometimes exotic homemade jobs) come from Japan or Taiwan. The most popular machines are the Hondas—the 50cc Mini-Trail, the automatic CT70 and the three-speed ST70 and the new SL70. The Australian prices for these machines are \$249, \$248, \$299 and \$325 respectively. Other popular machines are the Yamaha Mini-Enduro (\$349); the Kawasaki Dyna-Mite (\$299); Suzuki Trailhopper (\$299); the Tas (\$159); and the Grand Prix (\$130).

Although the other Honda's are popular, it is the SL70 that is doing best at races, along with the Kawasaki Dyna-Mite. The Aussies find that the pick-up on the Mini-Enduro is not so great (or, as Cory says, maybe its the riders that are not so great). The Mini-Trails, Amigos (corresponding to the QA50 in the United States), Tas and Grand Prix are used by the younger riders.

Still largely untried but making a brave entry into the Australian market are the SST Gemini's imported by Harrison Industries.

Just like in the U.S., Australian riders are starting to be harassed by the law as

a result of noise. Parents, also, have their doubts as to the relative safety of riding mini-bikes. Despite this, mini-biking continues to grow rapidly in the land of the duck-billed platypus. Still, if any American mini-bikers have experience in overcoming opposition from their local authorities, Cory would be happy to hear from them. Write: Cory Hipkins, 23 Kintore St., Camberwell, 3124 Melbourne, Victoria, Australia.

NORTHERN CALIFORNIA

After losing an oval track at one county fairground (Santa Clara) the Mini-Bike World Wide Racing Association recently opened for business at another county fairground (Alameda). Bob Scheid, president of MBWWRA, told MBG that the new track, a scrambles course as opposed to the old oval, will be open most weekends. The new track is in Pleasanton, California.

The first event at the new track saw 47 entries and some 400 spectators. Despite some last minute hassles in getting the track ready, most people attending appreciated the bleachers under tall shade trees and the good facilities, including tasty snacks and cold drinks.

Among the first day's entries was Mike Wright, aged 10, a National Champion from the Los Angeles area. Mike did battle with the Bay Area Champion in his class, Larry Andres, aged 7, to provide the spectators with real thrills. The outcome went to Mike, on his new Honda SL70, just beating out Larry's Yamaha Mini-Enduro.

There were ten main events with a trophy awarded to the winner in each class and special ribbons to second and third place winners. Bob Scheid welcomes inquiries about the track or MBWWRA at P.O. Box AE, Campbell, California 95130 or by calling him at Area Code 408, 224-0467.

BOY'S CAMP

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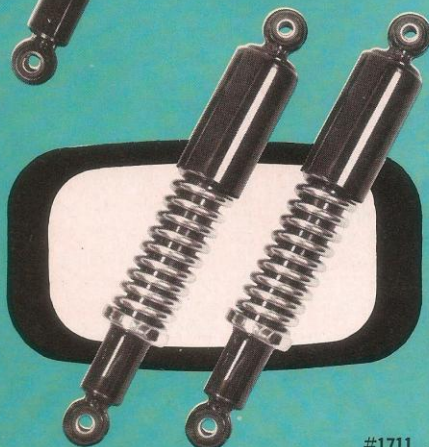


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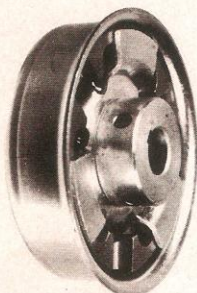


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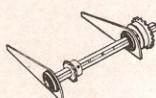


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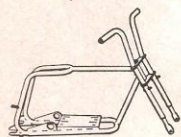
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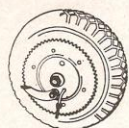
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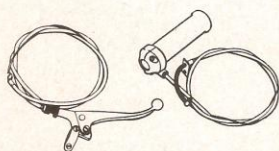
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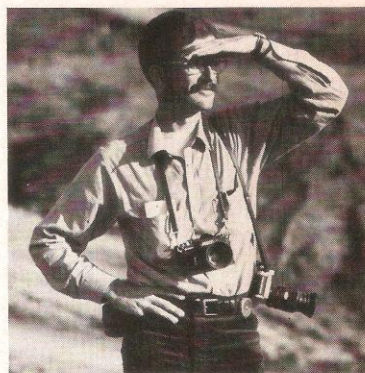
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HOW I SPENT MY SUMMER VACATION

By Dennis McClintock



Dennis McClintock

My favorite editor, Pat Mackie, was overjoyed when I told him about my travel plans: a three-week journey by Jeep to take a look at mini-bike activities in different parts of the country.

"Can you stop in Omaha...?"

"There's a man in Grand Forks..."

"And how about Mansfield, Ohio...?" And so on.

Of course, there just wasn't enough time to hit all the possible stops. Three weeks goes too quickly when the important cities are 1500-2000 miles apart. The field narrowed to four major stopovers: Eagle Park in Detroit for the World Championships; Hampton Speedway's mini-bike and kart races in Hampton, Virginia; a visit with Bob Marshall, national president of Mini-Bike Club-Canada; and a stop in Grand Forks, North Dakota, home of Doc Tait ("Race Prepping the Bonanza MX" and "The Night the Spark Plug Quit").

Though my main intention was to cover specific events, I learned a lot about mini-biking just by talking to the people I met, people involved in the sport. I've been photographing mini-bikes for about a year but people have been my life-long hobby. The individuals I met on this trip were invariably friendly and helpful.

Chuck Gohr and Jim Wright of Detroit; Bill Lowery and Harold Page of Virginia; Bob Marshall of Ontario; and Doc Tait of Grand Forks; all showed me their particular brand of hospitality. Their families, friends, co-workers, and co-racers made me feel at home wherever I went. That includes a certain Holiday Inn near Detroit which, after several days of occupation by groups of mini-bikers from California and Ohio, will never be the same.

One thing I noticed at all my stops was

Continued on page 14

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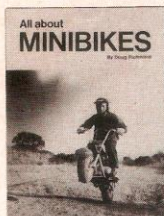
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SUMMER VACATION. . . Continued

a great deal of curiosity and interest in mini-bike activities in other parts of the continent. Everyone wants to know what kind of bikes other kids ride, what kind of tracks they race on, how they find places to ride, etc. Much of the curiosity centered around the wide variations in racing rule books, especially the separation of bikes into competitive classes.

Here's my chance, I thought . . . "crusading journalist takes pen in hand to promote national unity and a single rulebook for the whole country". Seeking support for my campaign, I talked to my local association contact, Ron Henrickson, president of the American Mini-bike Racers' Association. This Association holds races at Indian Dunes Park in Valencia, Calif. Ron patiently pointed out some basic flaws in my noble ideas.

First of all, there is a good reason for the differences in racing classes. The local clubs set up classes to accommodate the kind of bikes which are available or popular in that area. Most Canadian mini-bikers ride Hondas, so their main separation is between 50cc and 70cc bikes. Mid-westerners have many factories nearby (Rupp, Speedway, Ruttman, Wildcat, etc.) producing the true mini-bikes with industrial engines. Therefore, the Detroit classes follow the 3½-4-5 hp sequence of the basic engines. Stock classes take in bikes which race unmodified, giving the manufacturers a chance to demonstrate what their bikes can do before Dad starts tinkering with the power plant.

On the other hand, California minis tend to imitate their big brothers on the big bikes. Motorcycle-type engines are everywhere, and there are always a lot of entries in the mini-cycle classes (Mini-Enduros, SL-70's, Steens, Indians, and the list is growing). The large number of racers makes competition fierce, and most of the bikes are modified in some way for improved racing. A truly "stock" class is hard to find.

Obviously, a single rulebook would be severely stretched trying to allow for all the conditions mentioned. The situations which led to the different systems would not change overnight, even if uniform rules were adopted. Ron Henrickson's AMRA set up a 6-8 years, 1-3 hp, stock class and the first race it was used, there were no entries. However, the AMRA will have several stock classes for their championship event in January to allow for possible out-of-state entrants.

Each club or track usually puts on one

major "championship" event every year. These are the races which may draw entries from other areas, bikes and riders who may not fit easily into the local club's racing classes. Ron's idea of offering a wider than normal selection of classes will possibly draw more out-of-town riders than if the AMRA stuck to their usual set-up.

Of course, before you can offer something for the outsiders, you have to know what kind of races the other clubs like to run. So, readers, after this lengthy introduction we come to the lesson for today: communicate!

Keep track of what the other clubs are doing and let them know what's happening in your area. Get on other clubs' mailing lists. Try not to schedule your one-a-year big race at the same time as someone else's. Nobody draws a full house that way.

Keeping race dates straight won't be the only benefit from this exchange. Almost everybody has had some experience which could apply to others. Want to set up a track? Ask a club that already has one. Insurance problems? Somebody already went through that hassle. Sure, it may take a few letters to find the solution for your particular problem, but the solution could be well



MOXEY - Mini riders everywhere, such as these in the Midwest, show lots of safety moxie.

worth the effort. If the high cost of postage bothers you, think of the good old days when the Pony Express charged \$5 per half ounce.

MC might be able to help you find your answers, but only if we know what's going on at the local clubs. So, while you're communicating with each other, keep MiniCycle informed as early as possible. Mini-Bike Club-Canada sets up their calendar for the whole year at

their general meeting in January. Everyone should be so well prepared. Besides, the sooner I know everybody's schedule of events for next year, the easier it will be to plan my next summer's journey through mini-bike land.

Watching mini-bike races, I sometimes worry about the riders getting hurt, but not for long. After watching a couple heats, it's easy to see that the boys and girls with the moxie to dive into the

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"LAST SUMMER" *Continued*

thickest competition are quite able to handle themselves in such situations. The inexperienced riders usually hang back, out of trouble. Spills do happen, but after the handlebars are straightened and chains re-hung, nine out of ten riders will continue the race.

Of course I'm talking about well-organized events, with plenty of adult supervision and strict safety rules. Back-alley races and unauthorized drag meets on the supermarket parking lot are about as sensible as playing chicken with a locomotive.

Mini-Bike Club Canada was check point three on my whirlwind tour of coast-to-coast mini-bike activities. Imagine my disappointment when I was told that the Club had cut down race events in response to bad publicity.

A lot of the public outrage was the direct result of the death of a 12-year-old boy on a mini-bike. The boy, without a helmet, rode his bike out of a playground, between parked cars, and into the street.

We would gladly support any honest effort to prevent another such tragedy, but in this case, one of the targets of the

crusaders was the MBCC. The irony of this attack is the fact that MBCC tries to get the kids off the street into supervised riding areas and organized events.

Reporters who wouldn't normally go to a mini-bike race even if they were given an engraved invitation, started showing up in groups looking for something to write about. At one event, photographers snapped pictures of two boys in casts until they found out that one boy slipped on a waxed gym floor and the other lost control of, believe it or not, his skis!

Once they found a place to aim their fury, the press found other causes for complaint. One writer worried that youngsters like Scott Sinclair (aged 4 at that time) were being pushed into organized activities at an age when they should be riding tricycles. The writer failed to note that Scott's father races motorcycles and two-wheeled sport is a natural part of his life.

Mini-bike Club Canada had gained use of plots of undeveloped land in metropolitan Toronto for local clubs to ride, but when the vicious editorials started to appear, legislators took notice and the riding areas began to disappear. Part of the problem was that after the relatively quiet mini-bikes came noisier mo-

Continued on page 58



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TECH TIPS *Continued from page 8*

but some of the motorcycle importers sometimes have replacement engines. Try Penton Imports, 1354 Colorado Ave., Lorain, Ohio 44052. There is a new Hodaka-type 80cc engine that is specially produced for the mini-cycle field (see story in this issue) and it is available from Pabatco, P.O. Box 327, Athena, Oregon 97813. We cannot quote prices for these engines. Leading link, or Earls type, front suspension is an arrangement whereby the axle of the front wheel is carried in an arm that pivots about a point some distance back from the axle. The upward and downward travel (pivoting) of the front wheel is usually controlled by a pair of shock absorbers for trail bikes. More compact methods of travel control have been used on street machines with less stringent needs. Examples of this type of suspension can be seen on the new front ends of the Steen's 100 series bikes and other dirt machines. Illustrated is the leading link front end from Hi-Performance Metal Fabricators, 412 Agostino Rd., San Gabriel, California 91776. It costs about \$25 and includes everything, even handlebars, and it really is a great front end. See page 75 of the July 1971 issue of MBG.

EDITORIAL

Continued from page 4

1899 Refuse Act. He should also be able to indicate how far his own investigative team will assist in collecting the evidence. In any case, younger readers will probably need the help and support of their parents.

If the need to preserve the ecology doesn't really grab you then the chance to make some money might. Either way, we'll all come out on top.

BICYCLE WAYS AND MINI-BIKE PARKS

Across the country there is a growing interest in bicycling and we think that's great. However, we wonder at the rush by politicians everywhere to jump on this bandwagon. Just recently, for instance, Governor Reagan of California signed into law a bill allocating millions of dollars to furthering the pedal habit.

We can't help contrasting this attitude to the outright hostility that many levels of government show to another healthy activity—mini riding.

Of course, the two sports are not really comparable since mini-bike and minicycle riding is usually done where traffic hazards don't exist. Despite the obvious danger of pedalling around in the middle of today's harum-scarum car drivers, bicyclists persist in their habits. So, we suppose, they have to be protected.

We really don't begrudge the millions being spent to provide "bike ways". We don't begrudge fun for anybody, even if it involves more millions being spent for golf courses so that the folks can get their walking exercise without going on the dangerous streets.

We mini riders don't need millions of dollars in tax money to be spent in our favor (although it would be nice, for a change). All we need is a little sympathetic treatment. And if we can't get sympathy, just leave us alone. We'll work out our own salvation without bureaucratic help.

THE AMERICAN MOTORCYCLE ASSOCIATION AND MINI RIDERS

AMA has a mixed reception among motorcyclists. The majority view is as a benevolent old uncle, a nice old guy trying hard to understand what the young'uns are up to. In the past, because of this out-of-touchness, the AMA has made some mistakes that have made many two-wheelers impatient with the Association. In recent years, however, its sensitivity has increased and big strides have been taken in meeting the

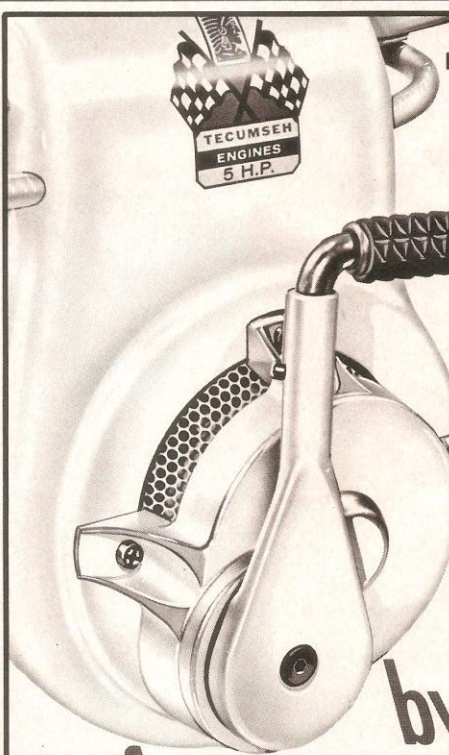
needs of the riding public.

Whatever the individual thinks of the AMA, it is undoubtedly large and strong. It is the only national association that has an effective voice in organizing the sport and protecting the interests of its members in the legislative halls. In other words, imperfect though it may be, the AMA is the best thing we've got going for us. Even though it may not be loved in all quarters, it should be respected and supported for what it has done and is doing.

So why are we rambling on about the AMA? Because it has just added a new touch to its up-to-date look—a Youth

Division for under-16-year-olds. The new Division is a tender offshoot from the gnarled old tree and it will need careful nurturing for a few years. Let's face it, the younger two-wheelers need some sort of umbrella, a place to get in out of the rain, and the AMA's branches spread far and wide.

Ed Youngblood of the AMA is not going to like me for saying this, but the initials of the Youth Division (YAMA) are a little scary. They'll just have to make sure that they don't have any activity that will put an "H.A." on the end. Otherwise, Mr. Honda could get mighty upset.



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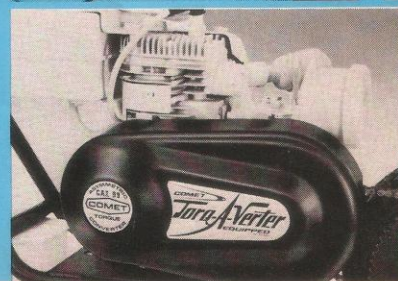
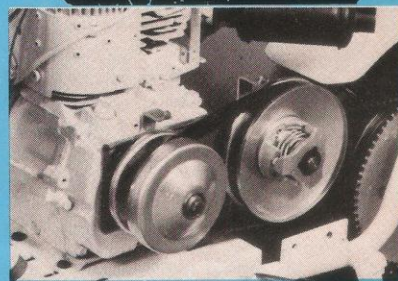
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SUZUKI ROVER

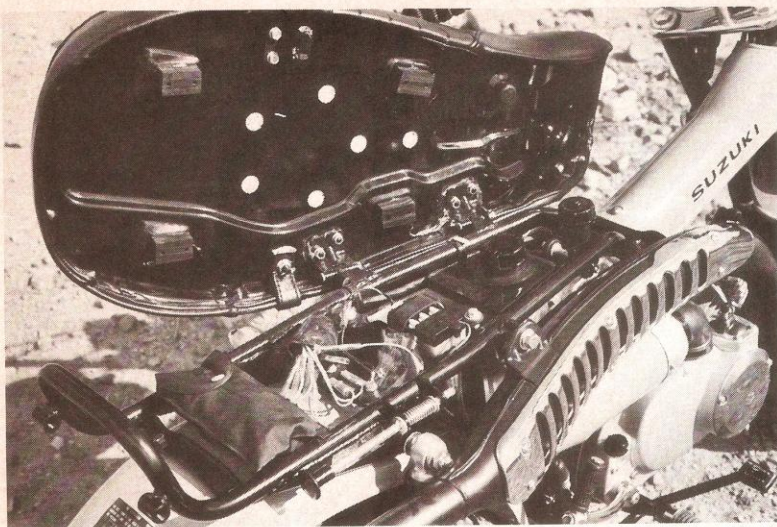
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Japan's answer to America's fat-wheeled trail machines is the Suzuki RV-90J Rover. And it is a formidable challenge. Unlike the automatic drive, industrial-engined, machines that we have come to accept as standard in this field, the Rover is highly innovative. It utilizes the tried-and-true 90cc Suzuki motorcycle engine and a four speed gearbox. In design, construction and components it is like nothing else we have seen from Suzuki. It is an entirely new approach and one that we expect will find favor with a great many people and that will be emulated by other motorcycle manufacturers.

The interest in wide-wheeled trail thumpers runs deep and has been around for a long time. They are not for the competition-minded. Their sole purpose in life is to get from "A" to "B" in not necessarily the shortest amount of time and not usually in the straight line that is the shortest distance. They are built and designed to conquer just about any type of terrain, hauling just about any load. But they usually go about this job in a slow, deliberate, plodding manner. This is irritating in the extreme to the owner of a powerful dirt motorcycle, stuck on the side of a hill, as he watches one of these unattractive brutes sputter on by. But plodding is not in the nature of the Rover so maybe our motorcycle brethren won't feel so bad in the future.

If you'd have thought about it long enough, you'd have realized that sooner or later one of the big motorcycle manufacturers would notice this market. Bonham Corp., with their Tote Gote, was one of the first on the scene but in recent years many other manufacturers have built competitive machines. Heath, Heald, RETEK, Huron Tool and the others pretty well held this market for



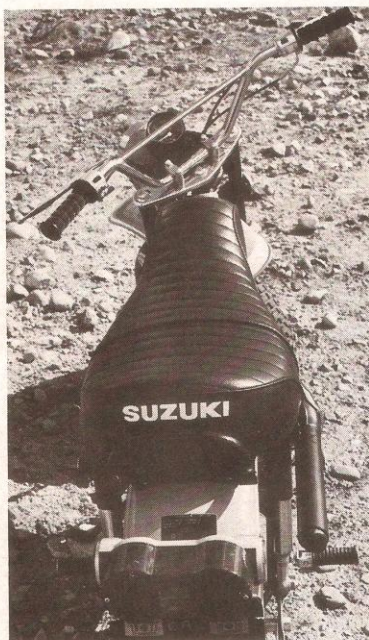


the domestic manufacturers. Now comes this upstart from Suzuki.

Before we go into what the Rover is, we had better define what it is not. It is not a motorcycle. At least, it isn't a motorcycle in the accepted sense of the term. It doesn't handle like a motorcycle, it doesn't look like a motorcycle, and most motorcycle riders will wonder if the Suzuki people have taken leave of their senses. We can imagine riders of Suzuki's in competitive events trying to explain away the Rover as a temporary insanity and having no reflection on their machines.

Not so. Suzuki is not mad. They are very smart. There is a large group of people out there who have no interest in the excitement of motorcycle racing. Most of them would be scared to death of riding a two-wheeler on the streets. Their bag is fishing, hunting, or just generally getting out into the open. For them a two-wheeler is merely an adjunct to their main interest—a means of transportation—not the interest itself. To them a 40 hp burst of sod-cutting speed is sacrilegious. They prefer to cruise over the countryside, not cut through it.

To these people the big-tired trail machines were a Godsend. With their 8-inch wide turf-saving tires or even wider, softer, ATV tires, these machines float over the terrain. However, it is probably safe to say that the advent of torque converters into the two-wheeler field made these machines a practical proposition. Without a fairly wide gear ratio span they were nowhere. The torque converters had another attraction for these people. They are fully automatic. There is no gear shifting to worry about while trying to negotiate difficult terrain.



Which brings us back to the Rover. Obviously, from this description of the domestically-made fat-wheeled trail bike, the Rover is highly innovative. Which is another way of saying that it has to set about finding its own niche in the market. The one occupied by the domestic machines won't be too comfortable for it.

For instance, there is that four-speed gear box. Those people who hanker after the simplicity of a torque converter transmission will be turned off by the thought of shifting gears manually. On the other hand there may be a great many people who are held back from buying the high-flotation type of trail

bike by the thought of a "mini-bike engine and transmission".

A word or two here about that gear box. If ever there has been a four-speed transmission correctly designed for the job at hand, this is it. The gear ratios are right on for heavy trail use and the whole power train seems as rugged as anybody would need. It is, of course, geared low for the trail. Since we had the machine before much literature was available, we do not know the exact gear ratios but they are fairly close. This means that the first gear is not too much of a crawler. In fourth gear, the Rover tops out a hair or two below 50 mph which is more than enough.

Right about here the tale gets curi-ouser and curiouser. All this time we have been talking about the Rover as though it were an out-and-out trail machine. However, this machine leads a double life. In most states it is street legal (for California it lacks only the ability to shine the rear/stop light without the engine running. Since the machine is already equipped with a battery, it is our bet that this will be changed in future production models). This street-riding ability is obviously planned from the evidence of the reflectors, mirrors, massive rear/stop light and, most revealing, the license bracket. In point of fact, our test machine was equipped with a license plate and we rode it around the streets of Los Angeles (in California, naturally) without encountering trouble with the authorities.

Now, take a look at the photographs. If you were a policeman, wouldn't that thing appear to be more at home on the range? Wouldn't you stop it just to check it out? Nobody did, so we must assume that the police in California are so used to weird machines (and people?) that they take everything for granted.

Anyway, it seems to us that the Rover is more suited to roving the wilds of the boonies than the wilds of Sunset Strip. So, no matter what Suzuki imagines are the demands of the market-place, we're a little confused by this dual personality. In fact, we don't think that it is a dual purpose machine, at all. It has all the characteristics of a single-minded, bulldog, personality that clings, stubbornly to visions of unfenced open space. Just look at it and you'll see what we mean.

A headlight, maybe. But all the rest of that stuff: mirrors, horn, reflectors and so on, is just so much added weight and more stuff to get easily broken. There will be those who argue that having the thing licensed is useful if you are camping and want to bop down to the store



for some bread. Okay, but honestly, how often does that occur?

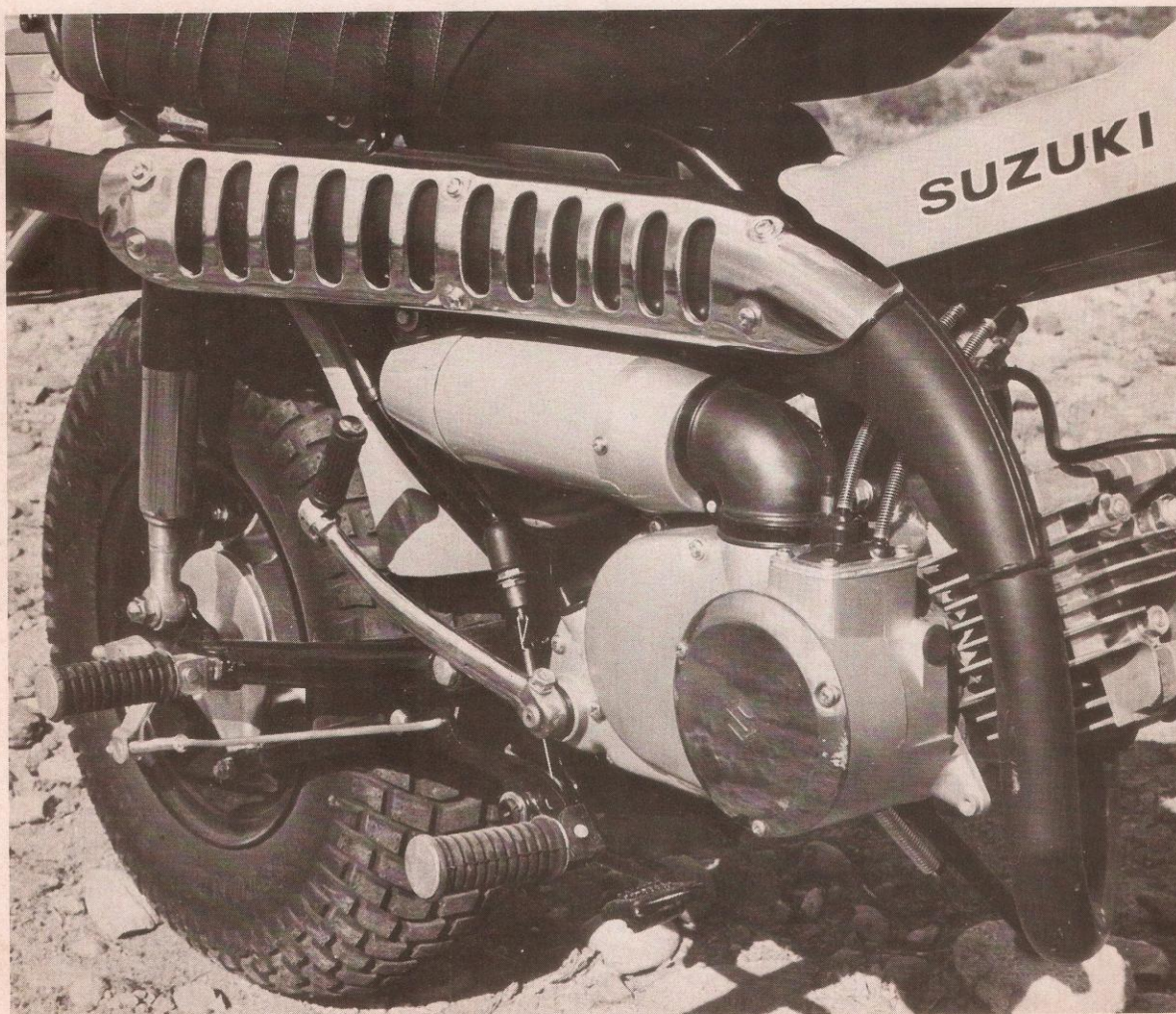
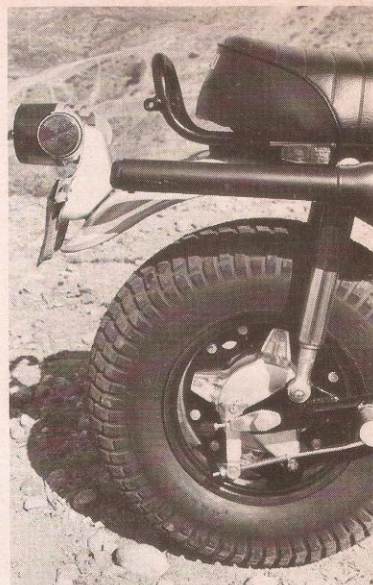
In addition to the headlight, there is one other goodie we would leave on the machine and that is the speedometer. Not for the ability to tell how *fast* you're going (although that is interesting) but for the odometer, which tells you how *far* you've gone. Besides being a good navigational aid, the odometer is a safety item. You see, this machine carries less than a gallon in the gas tank. In all other respects the Rover is a serious trail machine but this fuel capacity is much too small for a boonie basher, especially a thirsty two-stroke boonie basher. If we were planning a trip on the Rover, we wouldn't want to head out much more than 20 miles, so that we'd have a little in reserve to get back safely.

Having nit-picked as much as possible, we are now going to talk about the many fine features of this machine. Stuff like the hydraulically dampened

shock absorbers on the rear swinging arm suspension that offered just about the right compromise between softness and firmness.

The front suspension has us puzzled. The telescopic forks do not appear to have hydraulic dampening (in fact, they closely resemble many mini-bike front forks) yet we never bottomed the forks during our test. There is a floating rubber bushing on the travel portion of the lower legs that would prevent the loud clatter sometimes heard on forks without hydraulics. Still, we might have expected to feel the lack of dampening.

Of course, the whole ride was different from anything you might expect to experience on other Suzuki machines. With this in mind it is more difficult than usual to sort out the various impressions. The lack of hydraulics in the front suspension might have accounted for the fierce bounciness when landing from a moderate jump. You can get



used to this characteristic but after the first try or two, the rider usually tries to avoid the catapult sections. At least, he tries to take them at a moderate rate of speed so that he doesn't get airborne.

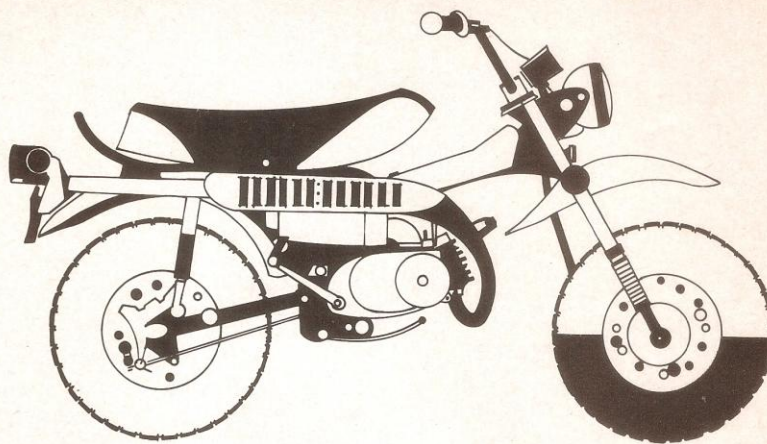
Talking about speed, this machine is no slouch. Up to the speeds when trail riding starts to get really hairy, the Rover can stay with most 100cc or 125cc dirt machines. This is straight line stuff because once the rider starts throwing the machine around, it is best to back off the throttle.

The Rover does not steer like the normal motorcycle but, to be fair, we should point out that we had tire pressures way below those recommended by the manufacturer. Suzuki calls for 11 psi front and rear. We had about 6½ lbs. in the rear and about 5 lbs. in the front. We wouldn't run the machine this way on the pavement but on the trail it seemed to work out more comfortably. In seeking more comfort we sacrificed something in handling. With the tires "flat" the machine had a wallowing feeling when taking corners at anything over 20 mph.

Before we let the air out of the tires, the Rover handled quite nicely when taking turns at a fair lick, although it required plenty of "body English". This need to lean into the corners hard is usual with wide-wheel machines. On the other hand, the Suzuki Rover, with the tires at the recommended pressures, was the best handling fat-tire machine we have tested. Maybe that is because the tires are not quite as fat as those found on most of these machines. Or maybe it was the almost-semi-circular profile that put down the same area of footprint at any angle.

The tires are made in Japan by Bridgestone, one of the largest tire companies in the world, and they seem ideally suited for this type of machine. They have a moderate knobby pattern and an outside diameter of 21 inches. The width is 6.7 inches although the tread circumference is more than 8 inches. They are mounted on small diameter (for a motorcycle manufacturer) wheels of 10 inches and they have unusual (for a motorcycle manufacturer) steel split rims. Aluminum wheel hubs, bolted to the rims, contain brakes, front and rear, that seem designed to stop a much faster and much heavier machine. The rear brake is right-foot controlled and the front brake is right-hand controlled. Both controls allowed easy feathering with a light touch and a dust-raising skid with a little more pressure.

Frame on the Rover is the single backbone type with an extremely stout main



SUZUKI ROVER

Manufacturer: U.S. Suzuki Motor Corp., 13767 Freeway Drive, Santa Fe Springs CA 90670

ENGINE

Engine type	Single two-stroke	Carb	17mm crankcase reed valve
Bore	1.97 inches	Ignition	Flywheel mag/battery
Stroke	1.77 inches	Lubrication	Oil injection fuel mix
Displacement	88cc	Fuel capacity	0.9 gallons
Horsepower @ rpm	8 @ 6,000	Fuel requirement	Regular
Compression ratio	6.2:1		

TRANSMISSION

Transmission type	4-speed gearbox	Final drive	No. 420 chain
Primary drive	Helical gears	Gear ratios	N/A
Clutch type	Multi-plate wet disc		

CHASSIS

Frame type	Single backbone	Tires,	
Wheelbase	46½ inches	Front	6.70 x 10 x 21" dia.
Overall length	71 inches	Rear	6.70 x 10 x 21" dia.
Suspension,		Brake(s)	Int. exp., frnt & rear
Front	Telescopic, mech.	Ground clearance	8½ inches
Rear	Swinging arm, oil-damp'd	Seat height	30½ inches
Wheels	10-inch, split rim	Handlebar height	38 inches
		Dry weight	185 lbs.

PRICE AS TESTED \$435.00

member running from a heavily gusseted steering head down and around the back of the engine. It terminates at the bottom in a thick-gauge box member that anchors the engine at the back. An additional mount is provided from the front of the crank case to the main member. A seat-bearing loop attaches to the main member just before it bends downwards and this loop forms a lifting handle behind the seat. There is a triangulating loop from about the middle of the seat loop that runs down to the engine-bearing box member. This box member is a busy little fella as, in addition to everything else, it provides the mounting points for the swinging arm, foot brake and foot pegs.

There is an unusual amount of ground clearance (nearly 8 inches) for a machine of the Rover's moderate proportions but, still, we feel kind of nervous about that exhaust pipe hanging down,

as it exits from the engine. A couple of down members to form an engine cradle and a bash plate would help ease our minds. The heat-shielded muffler is a real beauty, incidentally, providing an easy-to-take sound level without noticeably diminishing performance. Thank goodness the manufacturers are finally doing something about the noise problem, although it was always more our problem than theirs.

The rather ungainly (by motorcycle standards) looking front end has its appearance dressed up by nicely-shaped polyurethane plastic fenders that give good mud protection. The headlight, speedo and horn mounting display a lack of concern for appearance, although we dig those high, wide and handsome motocross-styled handlebars. It would be difficult to imagine anything more out-of-place than those two rear-view

Continued on page 57

HOW TO build

a

perfect

by Brick Price

One cold winter day our stalwart Thurgood was bragging to his friends that he would build the ultimate mini-chopper. It was to feature a Rupp Roadster frame, CT-70 forks and a Harley 74 engine! Naturally, the townfolks scoffed at the idea but, undismayed, Thurgood disappeared into his basement to build his creation. He emerged late in spring with pictures of the awesome mini plus several other gorgeous creations. It was obvious, even to the doubters, that Thurgood had created the machines, since his name appeared on the tank of each one.

But the mystery remained, how could he do it? Thurgood has all of the manual dexterity of a crippled three-toed sloth. To top it off, he even claims to have entered a contest held by Mini-Cycle. Believe it or not Thurgood has been honest with the townfolks on all counts save one. He built and owns the bikes and he did enter a fabulous Mini-Cycle contest. However, there is absolutely no chance of seeing him, or anyone else, riding his machines.

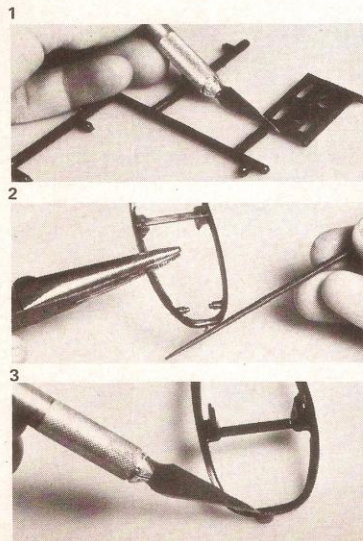
The great looking machines he built are real but are all 1/8th scale replicas, perfect in every detail. As a basis he used the kits on the market now that include details such as individual spark plugs, ignition wiring, working suspension and vinyl seats. It is virtually impossible to tell one of these models from a real bike in a photograph. He used parts from one kit to customize

another bike in the same manner that you would customize a real one.

Building one or more of these models is a great way to melt the winter miseries during those long months when riding is either impossible or too uncomfortable. If you get hooked on customizing, the model can even be used as a blueprint for building a real machine. You would be surprised at how many detail and construction problems can be

alleviated at this stage rather than in full scale. If the design isn't right for a model, then you've lost only a few hours and a couple of bucks. Full scale errors, on the other hand, mean full scale cost.

Plastic is an easy medium to work with. We have used commercially available styrene sheet and structural shapes to modify our bikes. Most hobby shops carry the sheet styrene in thicknesses of



1) Parts should be cut off the tree for a more realistic appearance. Pulling them off leaves dips in the plastic that are hard to fill.

2) The small bit of plastic left on the piece after cutting may be removed with an emery board or file.

3) "Flash" is the thin strip of plastic left on some pieces after modeling. They, and the mold separation lines, should be cut and sanded off.

4) Glue won't adhere to chrome plating or paint so it's necessary to strip the mating surfaces using an ink eraser or knife. Use glue sparingly and apply with a toothpick.

5) Ignore the kit instructions and assemble the entire frame. Tape the frame to a length of coat hanger wire and paint it with a good grade of automotive primer. The paint may be applied directly to the plastic but it will adhere and look better if done this way first. Lightly sand the frame with wet or dry #400 sandpaper to knock off imperfections, high spots or mold lines and re-shoot with primer.

BRICK PRICE is a model-making expert who has raced motorcycles and served as editor of a motorcycle magazine. He knows whereof he speaks. He has created custom two-wheeled models for several large companies and was a judge in the recent Kawasaki model contest.

model

two- wheeler

BRICK PRICE
SHOWS WAY TO MELT
WINTER MISERIES AND WIN
IN OUR GREAT NEW
MODEL CONTEST

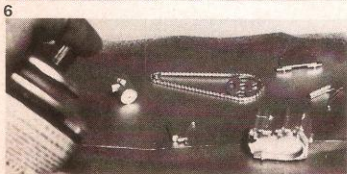
.040, .050 and .060" The .060" is probably the best type to work with. If your town has a plastic supply house then I would suggest buying a large sheet to save on cost. While you're there check on plastic rod. The rod is great for custom built frames, forks, and exhaust systems.

Plastruct is available in most hobby shops and comes in a variety of authentic structural shapes. These shapes can

simplify the building process and the only problem here is that the cost is fairly high. At the same time, only Plastruct glue can be used.

Your imagination is the only limiting factor in working with these materials. We have taken a tank, forks and wheels from a scale Harley and used them on a Triumph to build a unique looking machine. We've even put a Honda 305 Twin in a mini-bike frame.

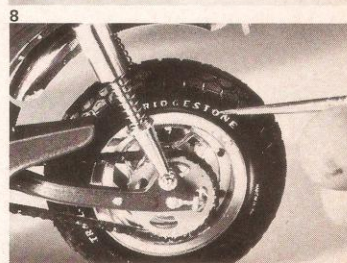
The tools you will need to build a stock kit are very basic. You can get by with an emery board, X-acto knife with No. 11 blade, ink eraser, Revell's glue, assorted bottle paints, brush, rubber bands and a couple of clothes pins. Add to this a razor saw, Swedish file, Mylar backed sandpaper, Testor's liquid glue, tweezers and spray paints, if you want to simplify the job and take less time. Most of the materials may be obtained



6) Small pieces may be painted by hand but they'll look better if sprayed. Select all pieces that will receive the same color and place them on a piece of cardboard. Heat the spray can in warm tap water. This will increase the pressure giving you a more even spray and it will heat the paint allowing it to flow better. Hold the can 9-12" from the subject and spray with several light coats rather than one heavy, runny mist.

7) The tires on any model are usually the giveaway in a picture. To make them appear more realistic try sanding the running surfaces. This will give them a "used" run-in look.

8) The tires on most kits include some fantastic detailing. To show these markings off in the best manner, paint them with flat white enamel. Allow the paint to get tacky and lightly touch the surfaces of the letters. Try not to touch the paint for several hours.



in a good hobby shop and sometimes in artist's supply or stationery stores. Check in the Yellow Pages of your telephone directory, under "Hobby and Model Construction Supplies-Retail" or check with information.

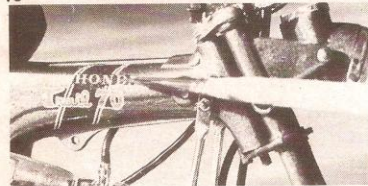
The average time required to build a model mini is 15 hours, a regular two-wheeler takes 20 hours and a three-wheeler takes about 25. These times include painting and detailing the model to make it worthy of display or contest winning. Naturally, you could slap one together in a couple of hours but it may look all too crude.

The following photos will show you how you can build a stock kit and make it look as realistic as a real machine. The secret to good modeling is to take your time. Perform each task as if IT is the most important one. Before you know it, the winter miseries will be over and you'll be back on the seat of your real two-wheeler. □

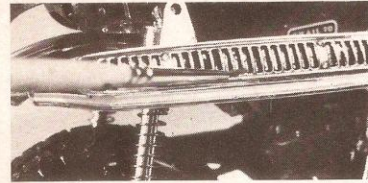
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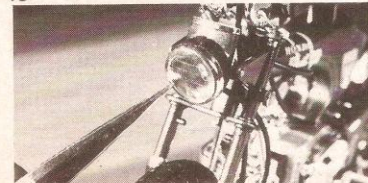
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12



13



TWO-WHEELER KITS (With prices and model numbers, where available)

1/16th Scale

PYRO \$1.30

C151 BSA Rocket
C152 Yamaha Catalina
C153 BSA Racer

C154 Yampaha Daytona
C155 Lambretta
C156 Yespa

MRC TAMIYA \$20.00
Honday 750 Street Bike

1/8th Scale

REVELL \$3.50 to \$6.00

H-1240 L.A. Street Chopper
H-1550 #1 Drag Bike (H.D.)
H-1228 Kawasaki Mach III
H-1222 Tric-up (Triumph)
H-1227 H.D. Police Bike
H-1220 Yamaha Scrambler
H-1225 Yamaha G.P. 350
H-1223 Triumphant Trike
H-1224 H.D. Electra Glide
H-1236 Honda Drag/Custom
H-1234 Honda Racing Bike
H-1232 Triumph Drag Bike
H-1237 Chopped Hog
H-1235 Honda Scrambler
Kawasaki Drag Bike

H-1229 Evil Iron
H-1233 Honda Super Hawk
H-1230 Triumph Custom Show
H-1231 Triumph Tiger 100

MONOGRAM

Devil Chopper 5989
Trike

TESTOR'S

Honda ATC (gas power) 3701

COX

Chopper (gas power)

MPC

Rupp Roadster 416-150
Honda Trail 70 1-1422-250
Thunder Chopper (H.D.)
Baja Burro (H.D.) 418-400
Bronson Bike (H.D.)
Honda 750
Honda ATC

IMC

Low Boy (TEKE)
Easy Rider (TEKE)

MINI-CRAFT

Honda CB 750
Yamaha 650
Yamaha 250 Enduro
Honda CT-70

9) Paint the side markings lights with red paint for the rear and amber in front.

10) Proper decal application is a must for a good-looking model. Trim around the edge of the image with a sharp X-acto knife to remove the film. Dip the decal in warm water for ten seconds. Slide the decal onto the model and force out any air bubbles with a damp cloth. Clear enamel will help the decal in snuggling down into recessed areas. Knead the decal in place with an enamel soaked brush.

11) Several areas of the bike such as fins, springs and this exhaust shield can be detailed with thinned flat black paint. Allow the paint to flow into recesses and wipe the surface with a tissue.

12) Cut all cables to the proper length. Use a picture of a real bike to find out how the cables are routed. Thread may be used to simulate wiring for lights, battery, points etc.

13) The headlight lens will look terrible if regular glue is used to hold it in place. I prefer to use white glue or clear enamel to hold the lens in place.

14) The stock handlebar grips and levers on this model were replaced by a pair off of a Triumph. This allows you to hook up the front brake AND the throttle.

15) The exhaust can be made to look functional by painting the inside flat black.

16) The handlebars on this model fold down just like they do on the real bike.

17) The finished model looks as real as possible and makes a great addition to anyone's collection.

18) The detail on this MPC model is hard to fault with things like a tilting (removable) seat that exposes the fuel tank and battery compartment. Note the working suspension.

14



15



16



17



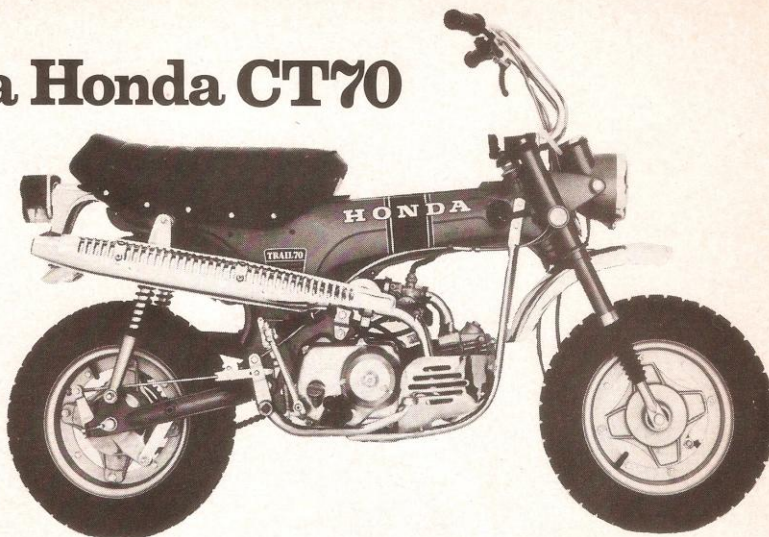
18



WIN a Honda CT70

NOTHING TO BUY
NOTHING TO DO . . .
EXCEPT

Enter the MiniCycle/Honda Model Making Contest



A recent Brick Price creation is an example of custom model making

Let your imagination go wild and build a far-out two-wheel model, take a few pictures, and bop down to the mailbox with your entry. Simple!

Just follow Brick Price's recipe for a perfect model on the preceding pages and you're home free. Of course, there are a few legal details to take care of. There always is. Most of them are listed in the "Rules of Entry" below. But the most important is:

GET YOUR ENTRY POSTMARKED BEFORE MIDNIGHT: MARCH 31st,

When Brick Price gets through casting his steely eyes over your photographs, you may have won a Honda Trail 70 from MiniCycle, in cooperation with American Honda Motor Co.

LOOK AFTER YOUR MODEL—IT MAY BE NEEDED FOR JUDGING

PRIZE LIST:

1st) Honda Trail 70 (CT70)

2nd) Comet C.A.T.

99 Torque Converter

3rd) Mercury Hillclimber Clutch

4th to 10th) One year subscription of MiniCycle to each.

RULES OF ENTRY

LAW: This contest is conducted by Twentieth Century Publications, Inc. The contest is subject to local, state, and federal law and is void where prohibited. The tax liability on the awards are the sole responsibility of the winners. No cash equivalent will be paid nor will any substitutes be given. The winners grant permission to Twentieth Century Publications, Inc. to publicize and promote their winning of the awards.

AMATEURS: The contest is open to anyone regardless of age, sex or nationality, who is an amateur model builder. An amateur modeler is anyone who does not derive any part of his income from model building. Employees of Twentieth Century Publications, Inc. or of their affiliates are ineligible.

MODELS: The models entered must be made using the engine from any 1/8th

scale kit now on the market. Do NOT send in the model.

PHOTOGRAPHS: Submit at least 3 black and white, glossy photographs of 6" x 5" size or larger. No color will be accepted for judging but may be included for reference with B&W shots. B&W photos should include: (1) Front; (2) Side; (3) Rear.

INFORMATION: Print or type out all pertinent information about the model such as paint, source of parts, techniques, time, cost, etc. Label all pictures with name and address and indicate your age. No material submitted for judging may be returned. More than one model may be entered but they must be sent in separate envelopes.

JUDGES: The entries will be judged by Brick Price and Associates (Brick Price, Paul Laxineta, Gene Dietsen). Judges decisions are final.

HONDA CT70 MODEL CONTEST ENTRY FORM

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP CODE _____ AGE _____

Contest closes March 31, 1972

**MAIL TO MINICYCLE, P.O. BOX 978,
NORTH HOLLYWOOD, CALIFORNIA 91603**

ITALJET MK.1

**A neat mini-bike
has something to
talk about**



With a few notable exceptions, mini-bikes costing less than \$200 tend to be look-alikes or stripped down utility machines. Which may explain why there haven't been too many recent test reports on such machines. But the Italjet Mark I from Speed Center USA proves that it "ain't necessarily so."

True, this machine costs a few bucks more than \$200. Around \$235, to be more exact. But a large chunk of this cost is created by President Nixon's 10 per cent import surcharge. It was Speed Center's original intention to bring the Italjet Mark I in from Italy at a figure as close to \$200 as possible but international politics got in the way, somewhat. This is only the first such increase in price we have come across—others will undoubtedly follow when the dust settles.

Still, even at \$235 our test machine is interesting. It incorporates a number of innovative design features, offers a four-horse engine, features front and rear brakes, and provides full suspension.



And it's all put together in an attractive, Italian-styled, package.

The frame is the single backbone, double engine cradle, type. The backbone member, in this case, is an enormous $3\frac{1}{4}$ -inch diameter tube. Obviously, there is no need to have such a big member for strength considerations alone (it's nice to have, of course, but well-over-engineered). It has to serve another purpose, as well, and that is as a gas tank.

We have come across gas tanks that are an integral part of the frame before. We have always liked the idea, for several reasons, since we first saw it back in 1965. For one thing, the tank is usually infinitely stronger than any other type of tank and this is an important safety consideration when the vehicle gets thrown around like most mini-bikes. For another, it seems logical to use the space inside the frame tubes, even if it means over-sizing the tubes as in the case of the Italjet, to carry fuel. This is true because of the usual lack of fuel capacity on a mini-bike.

The Italjet Mark I is not, as it happens, over-loaded with fuel. The tank holds about three quarts but, had the stock engine-mounted tank been left in place, it would have had a respectable five quarts. As it is, don't go making starry-eyed plans about travelling over hill and dale without looking to the fuel capacity problem.

Domestic manufacturers are going to groan again about our favorable reaction to this type of gas tank. It takes skill and time to make this type of tank attractive and leak-proof. It would, undoubtedly, cost a fortune in U.S. dollars to get a finish such as the Italjet's tank. It really is a remarkable thing. The tank isn't simply cut off and ends welded in. The ends gradually and smoothly come down to a cone shape with no evidence of a weld or join. Incidentally, the welding job on this machine is absolutely



MINICYCLE
LOST

fantastic. The only way the welds could be any smoother or complete would be to fill the whole join up and then to grind each one down. Maybe that's what they did.

The engine loop cradle is not welded to the rest of the frame. At the steering head it is bolted to a gusset that triangulates the tank/main frame backbone. It then bends around the engine and is attached to the upper shock mount bolts at the rear. The loops are pinched down at this point to make flat sections and this looks like a likely place for metal fatigue to set in. We would feel happier if this section was gusseted. At the bolt hole the loops bend horizontally, as though to make a lifting handle at the back. Instead, the loops are cut off, swaged out to form a flat face, and the rear of the fender is bolted to the face with a rubber shock mounting for the fender.

Rear suspension is the swinging arm type with cushioning provided by two Sebac shocks. The upper mounting is via a bolt that runs through a transverse tube welded to the back of the backbone/gas tank. The spring rate on the shocks is too stiff and the swinging arms are too short. Both factors leading to a rather unforgiving rear end, at least, for the lighter rider.

The front suspension is nothing to get excited about, either. It is the typical telescopic fork arrangement with the cushioning provided mechanically by internal springs, with no hydraulic dampening. Although the suspension on the Italjet is less than perfect, it should be remembered that most machines in this price range have even more rudimentary suspension, if any. It is, at least, a heck of a lot better than some we have seen.

Rake on the front end is about 28 to 29 degrees, angled out enough to give about 2½-inches of trail and very stable steering characteristics. Part of the reason that the Italjet does so well in this department is the 10-inch wire spoke wheels and the 16½-inch outside tire diameter. This diameter gives a much better ride than the smaller diameter tires usually found on the less expensive machines.

Yet, even with the bigger wheels and tires, the seat height is low enough (25-inches) for the beginning and intermediate rider, the type of people who will be buying the Italjet Mark I. However, this low seat was bought at the expense of ground clearance which was reduced to 5½-inches by moving the swinging arm pivot point up the back of the engine cradle loop. You can't get it all ways. The mounting tab for the swinging arm,



incidentally, is very stout and does not look as though it will easily get an egg-shaped hole in it as some of these things do.

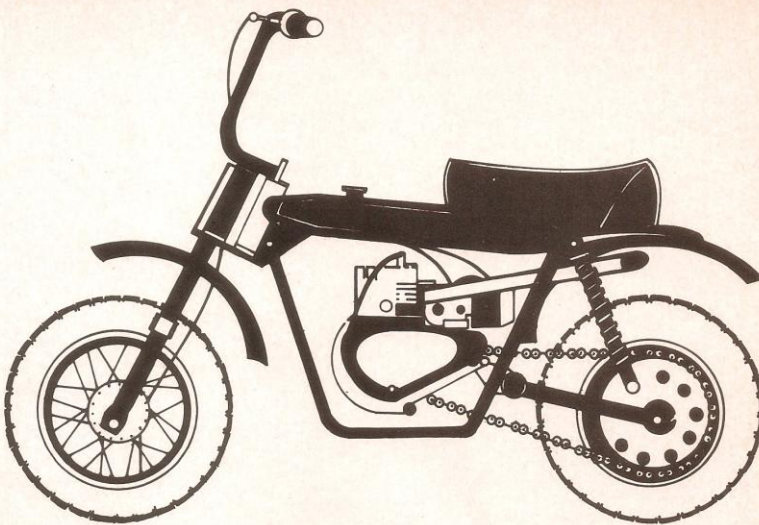
The tires have cobby knobs that are lovely for loose surfaces but that do not get much bite on tracks or other reasonably hard surfaces. The wheels have steel spokes and solid rims which means that the owner better have a couple of tire irons handy.

In the center of the wheels there are full width hubs that carry the brakes. Both front and rear brakes are operated by hand levers on the handlebars. Having two anchors is considered a luxury among mini-bikers and, for most practical purposes, one is enough except for the faster machines. However, it is impossible to have too much braking ability and two brakes give added security if one should let go.

It is especially nice to have two brakes if they are both excellent units, like the Italjet's. And it is doubly especially nice to have two brakes, both of which work well, if they do not push the price of the machine through the ceiling.

We mentioned the handlebars, briefly, before. They are the type that fold independently of each other and, therefore, there is no bracing between them. This type of bar is inherently weak for serious boonie-bashing but the bars on the Italjet are the best we have seen of this type. They are not mounted in cast aluminum crown plates (the cast crown plates on the early mini-cycles were far too thin). The crown plate on the Italjet is stamped steel and there are familiar U-bolts holding a tube clamped across the crown plate. Instead of bending upwards to form the handlebars, the tube is cut off a little wider than the crown plate and short serrated tubes are welded, T-fashion, across the ends.

The two sides of the handlebars then follow the usual "fold-down" style. The matching serrations are clamped into the fixed part of the set-up by a large knurled plastic knob. This arrangement is stronger than others of the type because it has been more carefully thought out and executed. The serrations lock more positively than the "ears" we sometimes see, simply because there is a much larger bearing surface. There is no danger of the crown plate cracking because steel is not as brittle as aluminum. And the bars are probably stronger because they have fewer bends, no holes drilled in them and, possibly, because a stronger tubing is used. Of course, it is more expensive to do it the Italjet way but we haven't noticed that this has priced the machine off the market.



ITALJET MK. I

Importer: Speed Center USA, 825 Victory Blvd., Burbank, CA 91502

ENGINE

Engine type	Single, four-stroke	Carb	Float bowl
Bore	2 1/2"	Ignition	Flywheel magneto
Stroke	1-27/32"	Lubrication	Splash
Displacement	9.06 cu. ins.	Fuel capacity	2 quarts
Horsepower @ rpm	3 1/2 @ 3,600	Fuel requirement	Regular
Compression ratio	N/A		

TRANSMISSION

Transmission type	Direct	Final drive	No. 35 roller chain
Clutch type	Centrifugal	Gear ratios	4.5:1

CHASSIS

Frame type	Single backbone, double loop engine cradle	Tires,	
Wheelbase	48 1/2 inches	Front	300 x 10 x 1 1/2" dia.
Overall length	58 inches	Rear	300 x 10 x 1 1/2" dia.
Suspension,		Brake(s)	Hum-mntd. int. exp., frnt & rear
Front	Telescopic, mech.	Ground clearance	6 inches
Rear	Swinging arm, shock absorbers	Seat height	25 inches
Wheels	10-inch wire spoked	Handlebar height	36 inches
		Dry weight	90 lbs (approx.)

PRICE AS TESTED \$235.00



In front of the handlebars is a competition number plate. Now, will you guys quit giggling.

Power for our test machine comes from an Aspera four-stroke 3 1/2 horse engine. The shape and style of the head fins may have you fooled for a time but you'll soon recognize the rest as belonging to the Tecumseh design. This engine is made in Italy under a license from Tecumseh but does not come under Tecumseh's service policy. Nevertheless, just about anybody with Teke experience will be able to give the engine all the attention it needs.

The major difference between an Aspera Engine and a Teke, apart from the head fin configuration, is that the Italian job uses, naturally, a Dell Orto carburetor. Don't get all excited, now, because this carb is indistinguishable,

Continued on page 64

Last month we did a technical piece on the new engine being offered by PABATCO, importers of the Hodaka line. As we told you then, this engine, called the F.480, is a smaller brother to the Hodaka Ace 100 engine and displaces 80cc. The Hodaka, of course, is a 100cc engine.

Just to recap, really briefly. The F.480 is produced by Fuji Motors in Japan from a design cooked up by PABATCO and Hodaka engineers. The idea was to produce an engine ideally suited for mini-cycle application and to back it up with a wide network of service centers and parts supply houses. As far as we know, this is the first attempt to provide the rapidly growing mini-cycle field with an engine specially designed for it and to back it up with proper service. This does not detract from the excellent service facilities of the large motorcycle

companies who happen to have a mini-cycle in their line. However, the emphasis seems to be different.

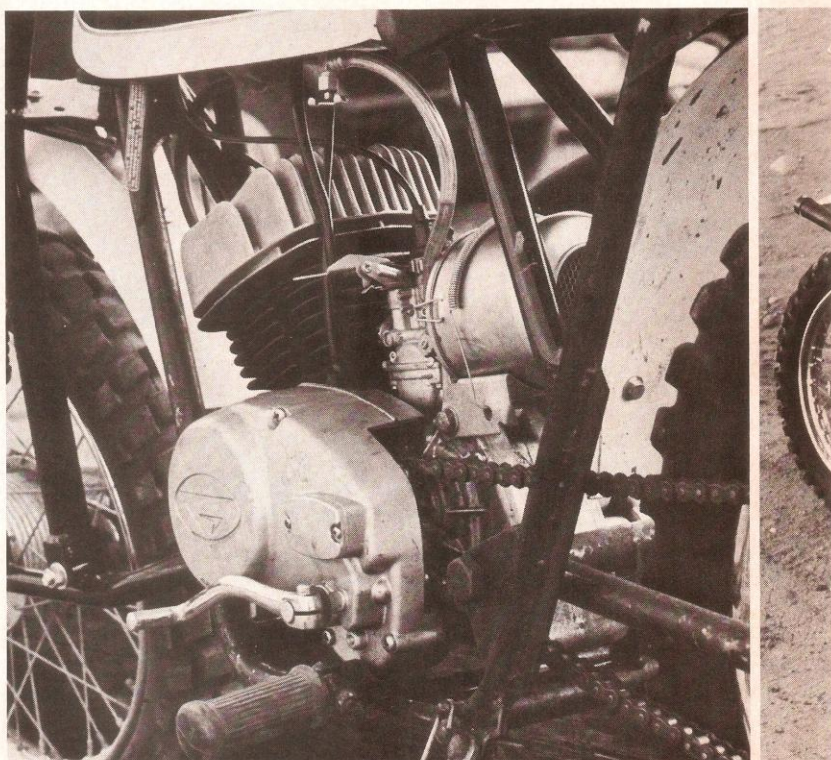
So much for the recap. Now, what are we doing, talking about this engine again. In the previous issue, we promised to test the engine's performance in actual operating conditions. It's all very well to talk about an engine's design and quality of manufacture. It's another thing to see how it goes.

PABATCO sent us an F.480 to install in any machine we chose. The problem was, picking out the machine. We had been meaning to test the Steen's 100 with the new leading link front end for some time. Since this frame is built to take the Hodaka Ace 100, and the F.480 was close, dimensionally, it was our thought that we could kill two birds with one stone. Then we began to think, why not get three birds, if we could. There was a desert race coming up that should be covered. Why not install the F.480 in a Steen's with a leading link front and enter the combo into the desert race? Why not, indeed.

NEW ENGINE FOR Zap-Cycles

PART 2

zap-cycle
engine
gets zapped
but in
the process,
proves
itself
highly
competitive



BULGE - Foot peg mount had to be ground down for bulge under gear shift lever

We got our good friend out at Steen's, Neal East, and asked him if he could pull any strings for us. Time was getting short, as it always seems to be. Neal had bad news. Steen's research and development wiz, Ron Benham, was on vacation and by the time he returned we'd be right on deadline. Anyway, the day he returned we were burning the lines to Steen's trying to work out some way of getting the job done. Ron said not to worry. He already had one of these Fuji F.480's that he had been playing with. And it was mounted in one of the leading link Steen's motocross 100's. Great! We were all set.

Trouble is, when Ron Benham has been playing with something mechanical, it rarely stays the way it was built. His F.480 was no exception. He had taken off the stock head and installed a head from a Super Rat engine. The carb had been changed from the stock unit to the carb found on the standard Ace 100 engine. Apart from this the engine remained the same except for a "...little minor filing on the piston." Benham said this was his secret and he wasn't about to divulge it but he felt that it wouldn't make much difference, one way or the other.

So we were on the horns of a dilemma. We hadn't time to install the stock engine but was it fair to judge its performance on the results of a test with a modified engine? We think so. After all, the major changes were made to the head and carb. The guts of the thing remained the same. And if the engine performed well under the forced feeding of a larger carb and wasn't upset by a higher compression head, then it should be able to handle the milder demands of the stock components. In fact, some people who might be considering the F.480 for competition, might also consider the test incomplete unless it was done on a modified engine.

Anyway, we decided to go with it. We bopped on over to Steen's to pick up the machine and have a chat with Benham. He told us that he was very impressed with the F.480 although he said the design was more reliable than innovative. "It should be around a thousand years from now", he said, "and there is plenty of room for modification. One of the things I really like about it is the gear box. For one thing, the shift pattern is in the right direction, one down and the rest up."

Dimensionally, as we said before, the

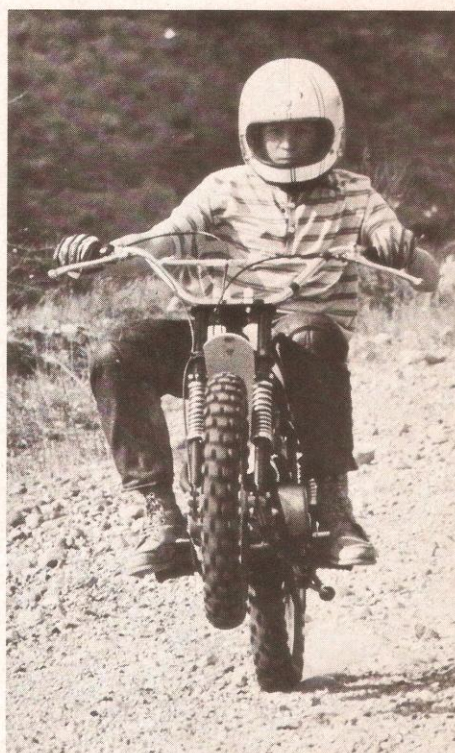
F.480 corresponds closely to the Hodaka Ace 100. Only one modification had to be made to the standard, Hodaka, mounting in the Steen's machine. This was to grind down the foot peg mount on the left-hand side to accommodate a bulge in the case under the gear shift lever. Since this is a peculiarity of the Steen's machines, and necessary only so that the standard Hodaka mounting could be used, it is entirely possible that no changes will have to be made in other frames. Any frame that is large enough and of the right shape to take a Hodaka, should be able to accommodate the F.480 without trouble.

Since the installation job was so simple (all the controls hooked up perfectly) we did not see much need to spend a lot of words and pictures on it. So we went straight to the heart of the matter—how does it perform?

By the time we picked up our test machine, the race was only one week away. We had to find a rider who could adjust very quickly to a new machine since he wouldn't have much time for practice. By now we were caught up in the project and wanted the test machine to win, or at least place well. Nobody around MiniCycle felt confident enough



NEAT - New engine fits where Hodaka went and makes a neat, lightweight package



POWER - Wheel-lifting strength from 80cc

of winning one of these back-breaking hare scrambles so we asked Greg Lersch if he would take a crack at it. In previous hare scrambles, he had been one of those "hard-luck" riders. His riding had always impressed us as being in the winning class but he had never had equipment strong enough to stay together for the whole race. It had always been a case of the "dollar breakdown". We felt the Steen's/F.480 combo would give him a fair crack at it and Greg jumped at the chance.

For his 13 years of age, Greg is a big, raw-boned, lad with the stamina necessary for bone-jarring cross-country racing. He is easy-going and relaxed about the whole thing, leaving the worrying to his dad, Bob, who acts as his pit crew and racing manager. Cleo, his mother, stands around wide-eyed and amazed. Greg's style is not the flashy, risk-taking, riding that wins closed circuit races. He has a dogged, stay-with-it attitude that pushes machine and rider hard but not to the breaking point. His dad may be disappointed if a part breaks and costs them the race, but no matter how exhausted he might be, Greg accepts it all with a philosophical grin and a shrug.

Bob and Greg were happy about the ride they had picked up and met us out at Saddleback Park the weekend prior to the race. We were there to try out the machine ourselves and to see if Greg and the bike were compatible. They took to each other very naturally. We let the Lersch take the machine home in case Greg could find time for more practice during the week before the race. It didn't work out that way but Bob had an opportunity to satisfy himself that everything was tight and would stay that way. He also took the precaution of wiring the spokes together so that if one did come adrift, it wouldn't get into the rest of the works and cause a major disaster.

We met them out on the cold California high desert, the day of the race. Around this time of the year the desert winds get a real bite into them but for this particular National Recreational Vehicle Racers meeting the weather was perfect. Prior to the start, we talked with Bob and Greg. The younger Lersch was all set in his boots and leathers and relaxed as ever. Bob, on the other hand, was in tune with the pre-start electricity that always crackles around the pits.

A hare scrambles starts with a smoke

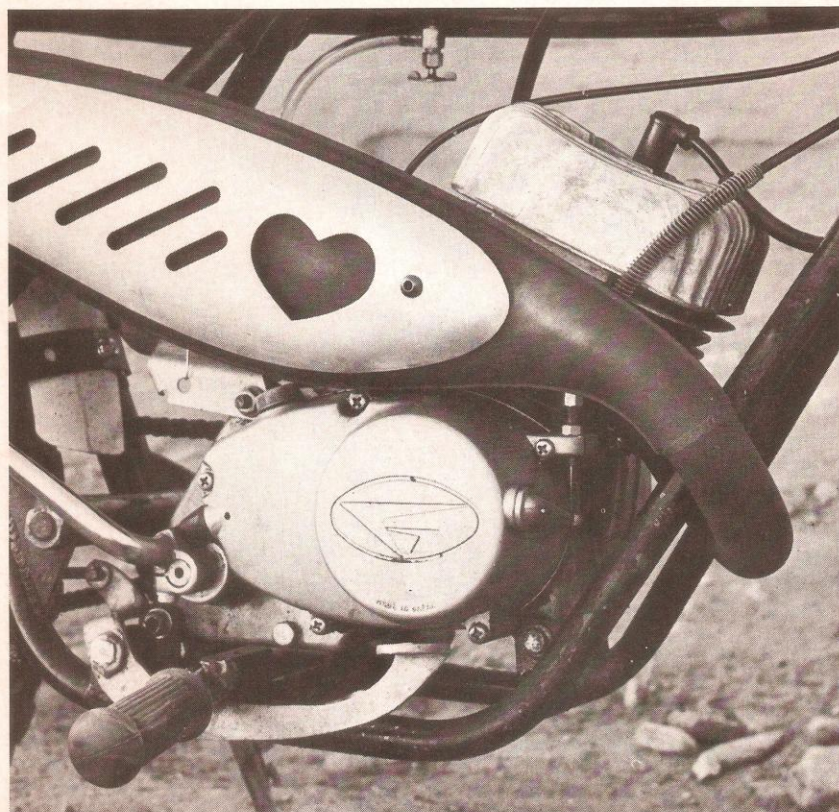
bomb being lit in the hills and the riders have to find their way to this marker. It doesn't much matter how they get to the bomb but once they are there, they have to follow the trail laid out from that point. Everybody starts at the same time so there is usually a mad charge for the best route to the bomb, with riders going every-which-way as their instincts direct them.

Our photographer was out at the smoke bomb waiting for Greg but in the confusion, he got by without being photographed. Another photographer, out at Loop Two, also had problems catching the flying Lersch.

Coming through the pits at the end of the first loop, Greg was laying fifth overall and still going strong. The first loop was about eight miles long and Greg's average speed was around 24 mph. It doesn't sound fast unless you've ever done any riding over the unmarked, trailless, California desert with its bottomless sand washes and steep rocky hills. If you've competed in desert races, you'll know that 24 mph is flying.

Greg gave the thumbs up sign as he pulled to a hurried stop to get a checkmark on the card stuck to his helmet,

Continued on page 56



EASY-MOUNT - Hodaka mounts on the Steen's 100 frame accept the fuji engine without change

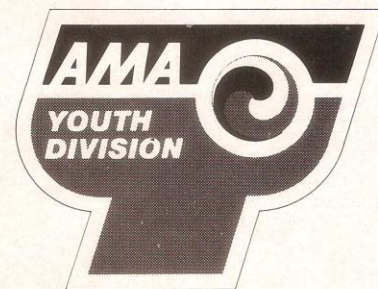


UP - Hill-climbing power aplenty

Mini riders
get big
boost
from
major
motorcycle
organization

AMA SETS UP NEW YOUTH DIVISION

By June Reed



When a powerful, long-established, national organization such as the American Motorcycle Association takes an interest in young riders, it makes MiniCycle a very happy rag. That's why we're in an upbeat mood as we announce the formation of a Youth Division of the American Motorcycle Association, to be called the Y-AMA. Its aims are to organize the riding activities of young mini-bikers and mini-cyclists. It will provide guidance in all areas of cycling including maintenance of machines, protection of riding privileges and fostering sportsmanship in competition.

Qualifications are simple. The minimum age is 9 years and the maximum age is 15 years. After your 16th birthday you are no longer considered a Youth Division member. Some youngsters already hold full (\$7) AMA membership and compete with the big guys in AMA sanctioned events. However, nobody who holds an AMA membership will be allowed to hold a Y-AMA membership at the same time. AMA spokesman Ed Youngblood told MiniCycle that this was intended to keep Y-AMA competition on the "amateur" level and to prevent "professionalism" from creeping in.

Ed uses a phrase that described the intent of Y-AMA beautifully, "casual recreation without the pressures of professionalism." In other words, a place where average young riders can enjoy themselves. Whatever you may think about this policy, you've got to admit that the average rider is not happy about being wiped out, week after

week, by the hot shoes. On the other hand, we think the good riders need consideration, also. Maybe a novice, amateur, expert rider classification is needed. It's more complicated but the AMA may find that the response to their Youth Division is so strong that it will warrant the extra work.

Youngblood said that the Association will be feeling its way in the first year and they fully expect to make changes to correct early mistakes. This flexible approach is refreshing and if everybody stays loose, all the initial hassles can easily be cleared up.

There are no barriers against race or sex (what's a race without girls?) and all events will be based solely on age and type of machine ridden. It is not necessary to own your own machine, but when participating in Y-AMA activities you must ride a two-wheeled vehicle described as a mini-bike or mini-cycle and defined as follows:

MINI-BIKE: Must have a motor of 90 cubic centimeters (cc) or less, if a two-stroke or overhead valve four-stroke, and 250 cc's or less if a side-valve four-stroke, with wheels of less than 14 inches in diameter.

MINI-CYCLE: Must have a motor of 90 cc's or less, if a two-stroke or overhead valve four-stroke, and 250 cc's or less if a side-valve four stroke, with wheels of more than 14 inches, but less than 18 inches.

MiniCycle is reviewing these definitions with the organizers of the Youth Division and it is hoped that the classifications will be changed in the future.

The AMA told us that the definitions were made to gear this new organization to the younger, more inexperienced riders, in line with the basic "anti-professionalism" policy.

This is all well and good but there are many widely-used mini-bikes and mini-cycles that would not be included in this designation. These are the newer, more sophisticated, machines. They are ridden by people in the Y-AMA bracket and that's what really counts, not the type of machine. These riders would be an asset and should not be by-passed. They are not, necessarily, "professionals" although they might be more experienced. These more experienced young'uns can give some of that guidance needed by beginners. This, in turn, will lead to a better understanding and a greater tolerance by both groups.

Now, back to membership applications. Individual and unaffiliated Youth Division memberships are \$4.00 per year and these members are welcome to participate in any Youth Division event. But the way to get the full benefit of Y-AMA affiliation is to join or start a Y-AMA Club. All of you who nag us about the lack of clubs . . . dig on this!

Ten members or more are necessary to start a club and there are two types of clubs to choose from. A "sub-division" of a chartered AMA Club may be formed at a charter fee of \$5.00 or an "independent" Youth Division Club may be chartered at a fee of \$10.00. However, independent clubs must have at least two adult sponsors. Clubs are encouraged to elect their own officers

and conduct their own meetings, with one adult advisor present at those sessions. They may also appoint a youth member as a "club referee" to serve as an assistant to the adult advisor. How many of you have relatives or friends in the AMA? Get them to help you form a sub-division club.

It is not necessary that the sponsors be familiar with motorcycling. After working with a group for a short period of time they will know where-it's-at with mini-bikes and mini-cycles. How about your YMCA, YWCA, Scout Troop or even 4-H Club? Start a Youth Division club within your church group and liven up that summer camp program.

We suggest that when applying for membership, you use the application form at the end of this story. It is a facsimile of the official form and will enable the Youth Division to correctly and efficiently process your membership. If you want more information before joining, address your request to Youth Division Director, Box 146, Westerville, Ohio 43081. When applying for a Club Charter include the names of sponsors and/or AMA affiliated club.

Let's take a look at some of the benefits derived from the Youth Division membership. The AMA is a responsible, positive, progressive, non-profit, membership association. The Youth Division will have the aid of the AMA's full-time legislative department working with local and national leaders to provide safe, fair laws governing two-wheelers. This is combined with a computerized staff combating land closures to provide

more and better parks and recreation areas where the sport can be freely enjoyed without harrassment.

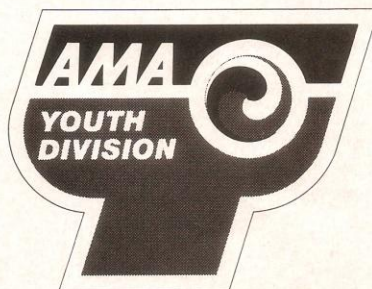
Your Youth Division membership card will entitle you to participate in any Y-AMA sanctioned event. These will include hillclimbs; scrambles, cross country, moto-cross, or desert hare scrambles; observed trials; field meets; or even ice racing.

There will be three mini-bike and three mini-cycle classes, divided by age, for Y-AMA competitive events. Rider classifications will be: Under 10 years of age; 10-to-12 years of age; and 13-through-15 (remember 16 is the "out" age). All participants in Y-AMA sanctioned competition must be members of the Youth Division. AMA members are ineligible to participate and an individual may not be in both organizations at one time. How about that! Now you have a chance to compete without the threat of being wiped out by an "old man".

By the way, they have a regulation which we gratefully applaud and it is a sensible one whether you are a Y-AMA member or not. It prohibits the use of any machine in a Youth Division activity if its exhaust emits a sound rated higher than 85 decibels measured at a distance of 50 feet. The day will come when all recreation areas will make sound suppression part of their rules (Saddleback Park in Orange, California has put a January 1, 1972, deadline down for their noise pollution resolution). Remember, less sound, more ground. And dat's da truttthhh.

The AMA includes in their member-

*FOR A LONG TIME, MINI RIDERS HAVE FELT THE
NEED FOR ORGANIZATION, FOR A LITTLE OF THE
PROTECTION THAT COMES FROM STANDING
TOGETHER. HOWEVER, UNTIL THE AMA CAME
ALONG, NOBODY WAS BIG ENOUGH TO TACKLE THE JOB*



ship program, accident insurance coverage, as many of you are aware. However, insurance coverage will not be feasible for Youth Division members for the first year. By then insurance companies will have enough safety statistics on this age group to set the premium at a fair rate.

The Youth Division Handbook will be sent to each member with his annual membership and the Youth Division Rule Book will be sent to all clubs free of charge. Individuals may obtain the Rule Book by sending \$1.25 to the Youth Division Director. Both books are well thought out and indicate the future success of Y-AMA.

The Youth Division handbook will be about the size of an AMA rule book and will be sent to a member each year with his membership card. It will have a kind of passport format in the front including a place for personal information, membership number, and photograph. Following the contents there will be a dozen or so pages of "activity record" where the youngster may keep a journal of his riding.

Each year of his membership he will receive this book with a membership card, jacket patch, and two stickers.

Once the project is rolling, the Y-AMA will move into second gear with a program that will include product discounts for the members. They hope to be able to supply youth-size leathers, gloves, boots, helmets, sweat shirts, and windbreakers at a good price to members. Several suppliers are already lined up but this program will not begin immediately.

As a means of getting the Youth Division discount program off to a good start, a special MiniCycle subscription rate of \$4.00 will be offered members. Also, Mini-Cycle will cover Y-AMA activities fully. AMA News may be subscribed to optionally, but it is not included in membership.

This program dovetails with regular AMA membership. If a youngster is a real hot shot and still wants to compete in adult amateur activity, he may continue his \$7.00 membership.

Youth Division Clubs of the American Motorcycle Association must conduct all of their activities according to their official rule book. Fifty years of AMA experience gleaned from the 130,000 members and 7,000 charter clubs provide a solid foundation for this new organization. The AMA feels that the more experience a rider has, the more he improves his handling skills and common sense reactions. The National Safety Council and independent research organizations agree that the chances of accident and injury lessen as the experience of the rider increases. The majority of accidents happen during the very first weeks of riding and those of you who took your best ends during those fateful times will not argue about this.

The establishment of the Youth Division will prevent some of these awkward learning problems for the newcomer and refine the knowledge of more experienced riders. There is no need to point out the obvious advantages of learning maintenance procedures. If you can't install a spark plug or if you don't know

when your bike needs more oil, you are in trouble, bub!

The experience of the AMA will be passed on to the young groups, through the adult advisors and the rules and regulations, to insure safe, fair and enjoyable competition. Laws regulating highway safety and the use of unlicensed machines by unlicensed riders are considered foremost. Anyone disregarding these important obligations will be expelled from membership, as is only fair to those who do realize the importance of these rules.

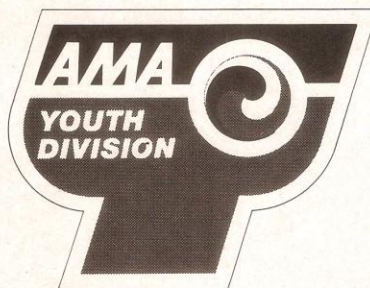
The Youth Division rules include those common sense regulations, such as no riding in prohibited areas or areas which may be ecologically damaged by excessive use. Of course, helmets, shirts, long trousers and sturdy shoes are required. Boots and gloves are recommended.

No one likes a smart guy. The Y-AMA will try to eliminate hazards to riders and others by promoting safe riding habits. A well maintained mini-bike or mini-cycle will help provide safety for the rider.

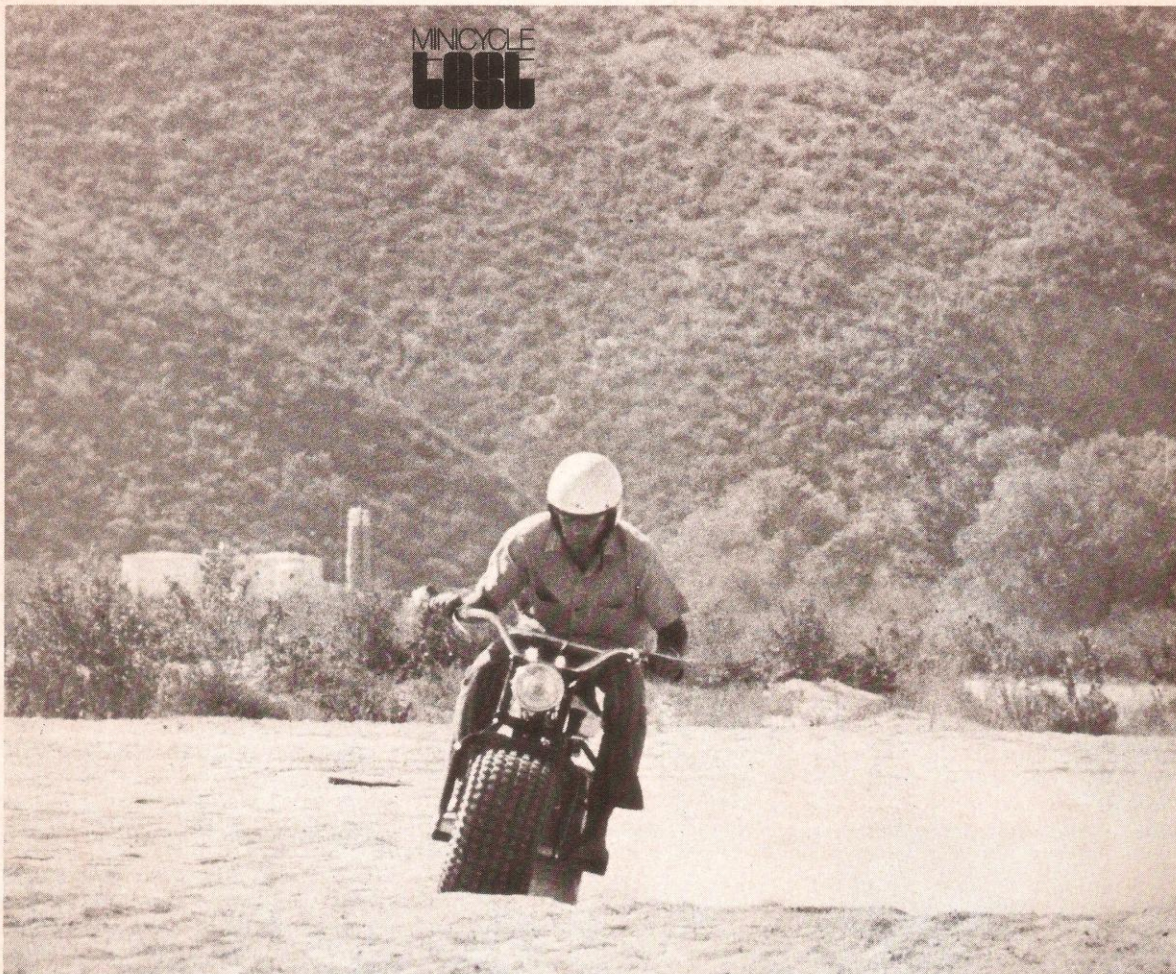
The establishment of the Youth Division of the American Motorcycle Association will help ensure the continuance of the safety record established by the AMA over the past fifty years. It will also provide the AMA leaders of the future.

Now, for the old locker room pep talk. You guys are always griping about the lack of organized clubs and activities. Here is the greatest opportunity in the world for you to go into action. Having asked for help, help is now on the way, from an organization with muscle. □

*THE FUTURE OF TWO-WHEELING IS IN THE HANDS
MINI RIDERS. THE FORMATION OF THE YOUTH
DIVISION OF AMA, OR Y-AMA FOR SHORT, IS
RECOGNITION OF THIS FACT. BELONGING TO
Y-AMA SHOULD BRING A SENSE OF "FAMILY",*



MINICYCLE
LOST



RETEK'S CHEETAH

Heavyweight gets slimming treatment

We have come to expect that trail machines such as the Recreational Technology (RETEK for short) Cheetah will be clumsy looking. The need to accommodate tires that are about 11 inches wide would seem, at first, to leave little chance of being delicate. And, to a certain extent, that is true. The most predominant feature of these machines are the tires and they will always overshadow whatever the manufacturer tries to do in the way of styling.

However, with the Cheetah, RETEK has made a valiant attempt to make their machine less chunky. With minor differences, most trail machines with

wide wheels back and front have frames that follow the double loop pattern set by mini-bikes. Because of the width of the wheels the frame loops are usually set far apart. The result is usually a simple, rugged, assembly that makes no bows in the direction of the stylist.

The Cheetah, on the other hand, has a frame that is slimmed down in the seating and upper portions. The frame widens out to accommodate the tires and wheels, instead of having the whole thing as wide as the tires. This has permitted RETEK to install a chromed saddle gas tank. This remote location of the tank helps to set the machine apart

from the general run of these machines.

Of course this frame design means that the members have more complicated bends. Generally speaking, the more bends a piece of tubing has, the less strength it retains, especially if the angle of the bends are fairly sharp. RETEK compensated for this fact by building the front forks out of 1½-inch tubing and by strongly bracing the 7/8" frame tubing.

If the design of the machine is such as to make it look a little less clumsy, we feel that a little more along these lines could have been done for the front forks. The hub of the wheel is about 2 inches too long and this means the forks are spread further apart than they need be.

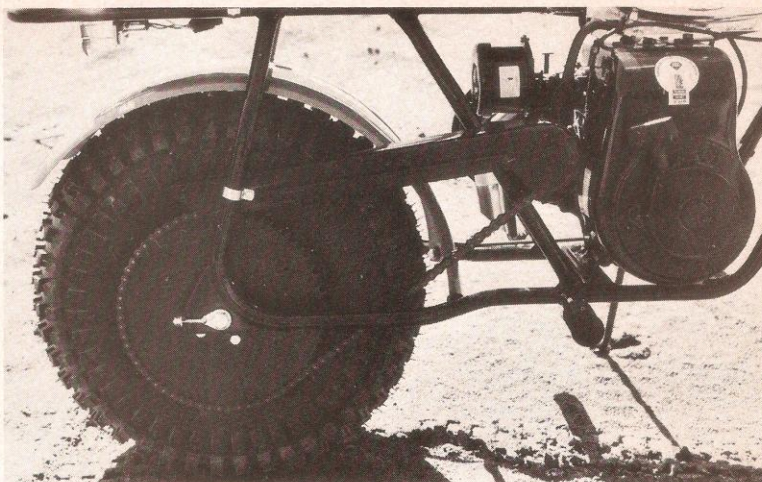
The frame is essentially the double loop type with the upper member forming the seat base and bending behind the seat to provide a carrying loop. The forward section of this member is formed close together to allow the saddle gas tank to fit over it. At the bottom of the steering head, which is formed from 1½" tube, is welded a gusset that also provides a lower mounting point for the gas tank.

The lower frame loop is triangulated with the gusset, widens to accommodate the engine mount plate and then widens again to fit in the wheel/brake/sprocket assembly. From the rear axle the loop bends around the tire to meet up with the upper frame member under the seat.

Tube braces run from the upper member, about one-third of the way along the seat, down to a point just behind the engine mount plate. This effectively turns the frame into two triangles and provides it with great rigidity.

The tube braces also provide mounting points for the Comet torque converter. Using the brace for this purpose allowed the designer to get the rear sheeves up high so that the engine/transmission package takes up less room. This gives the machine a reasonable length (wheelbase is 45 inches) while allowing the designer to plan the front forks with enough rake for steering stability.

Power plant is the powerful seven horse Tecumseh (a five horse version is available) four stroker. This is a heavy engine but, with its scads of low end torque, it is ideally suited for this application. Certainly, we would not go much below the power rating provided by the smaller engine in the RETEK line. A spark arrestor muffler is provided and the exhaust pipe bends down to exit the hot gases safely towards the ground behind the engine. Completing the power train is a sturdy No. 40 chain.



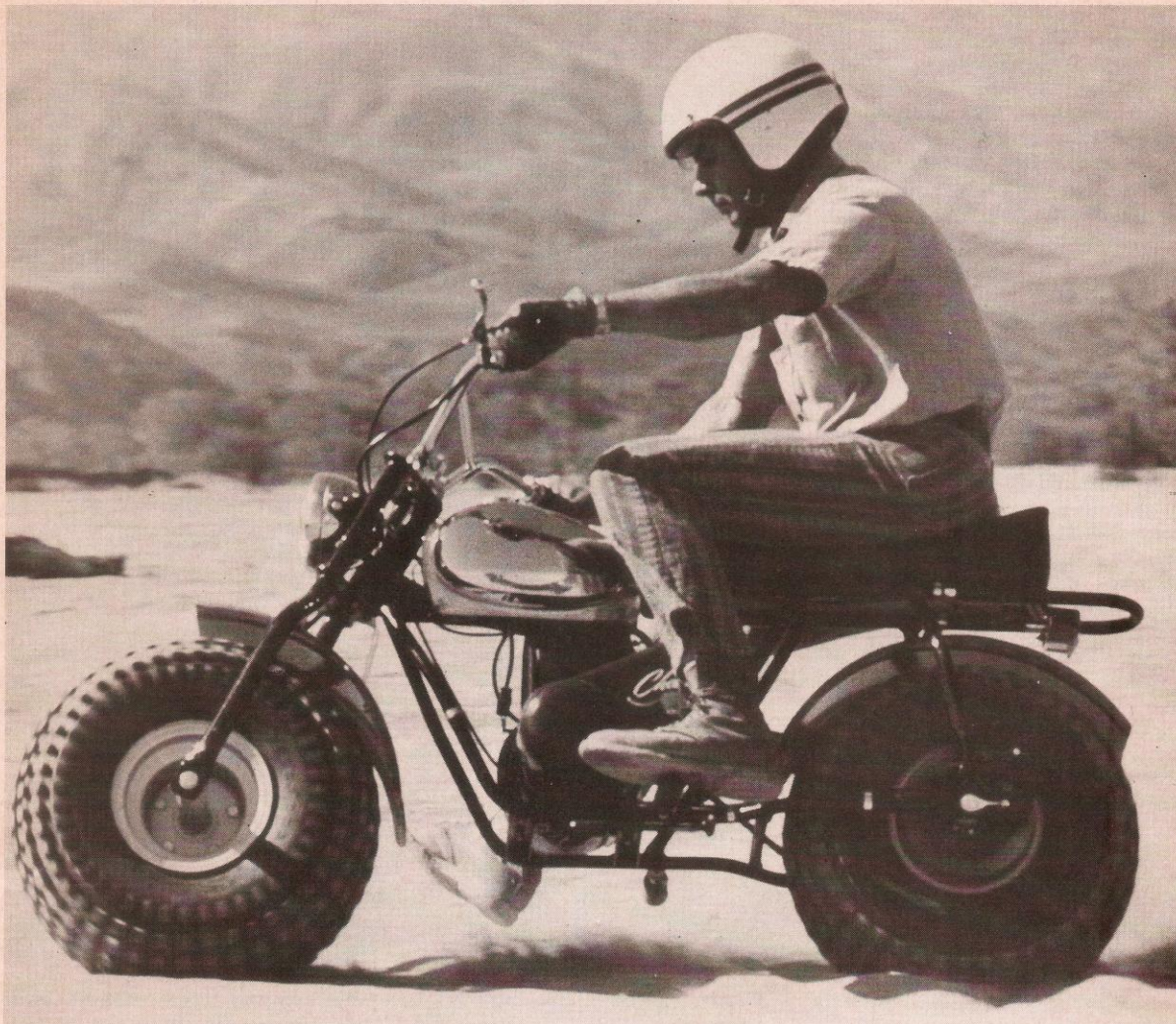
Gear ratios range from about 6:1 in high to about 22:1 in low. To our way of thinking, this is a shade on the high side for a machine such as this. At least, it shouldn't be any higher. We would prefer to see high around 7:1 or even 8:1, not only to increase the stump-pulling power at the low end but also to limit top speed. Only the very daring will want to go faster than 30 mph on this type of machine and the Cheetah is capable of around 45 mph, with everything going right.

Even with a low gear of around 28:1, there is very little likelihood of spinning this rear wheel. The tire is the new, more rigid, ATV type with those great square knobs that look more suited to an earth-moving truck than a two-wheeler. For traction, we doubt whether there is anything more effective on the market. They are ideally suited for travelling cobby terrain as the knobs are sufficiently spaced as to ensure that the tread stays clean under almost any conditions.

The increased rigidity that the canvas sidewalls give (the other type of ATV tire, with the paddle tread, has no sidewall) makes for better handling because the tire deforms less when making turns. Also, the air pressure is increased somewhat.

Since the tires make or break the practicality of this type of machine, we should spend a little time discussing tire pressures. Most manufacturers of two- or three-wheelers using ATV tires, tend to recommend pressures that are too high, we feel. This may be because nobody really believes that a tire can run on less than 2 pounds per square inch. In the literature you will find recommendations of anywhere between 5 and 3 lbs. psi. We have found that the best ride, without sacrificing much in the handling department, can be had from the cordless ATV tires with 1½ to 2 lbs. psi. With the canvas-bodied tires, like those on the Cheetah, 2½ to 3½ lbs. psi is enough.

Now comes the question, how the



heck do you know whether you have a half pound of air pressure, more or less? There is no way you can tell from a tire pressure gauge built for automobiles. However, there is a special dial-type pressure gauge, guaranteed to be accurate, that goes up in clearly marked quarter pound increments. We couldn't do without ours, now. We don't often make this kind of editorial plug for a product but we remember how much trouble we used to have, measuring the circumference of the tire to get a rough idea of the pressure. The manufacturer of this gauge, G. H. Meiser & Co., Blue Island, Illinois 60406, doesn't do much advertising so you may have trouble finding them, unless we tell you. We understand this gauge is going to be available from Montgomery Ward but if you're writing for it, make sure you get the 0-15 psi range. There is a higher range that is not as good for ATV tires.

Our Cheetah, the deluxe model, came complete with a lighting kit run from an alternator on the engine. The less deluxe, five horse, job does not have the lights but has the alternator with a plug-in arrangement for addition of lights. The headlight seemed fairly useful (although there was no upper [bright] beam) but the rear light was not equipped with a brake switch so half of its usefulness was eliminated.

Control for the lights was a simple on/off switch on the left-hand side of the handlebars. This unit incorporated a push button ignition kill switch that was correctly placed, handy to the thumb. Other controls, such as the six-inch, knobbed-end, brake lever, were good (we wish the big motorcycle manufacturers would take a lesson from domestic manufacturers and use pressed steel brake levers).

We remember the days when most



manufacturers were using folding handlebars that folded when they were not supposed to. It was a case of the blind leading the lame as they copied Honda's early mistakes. We are happy to see the type of 'bar used on the Cheetah coming more into play. This is the so-called motocross style, fairly wide, with the correct natural grip angle and a brace across the top.

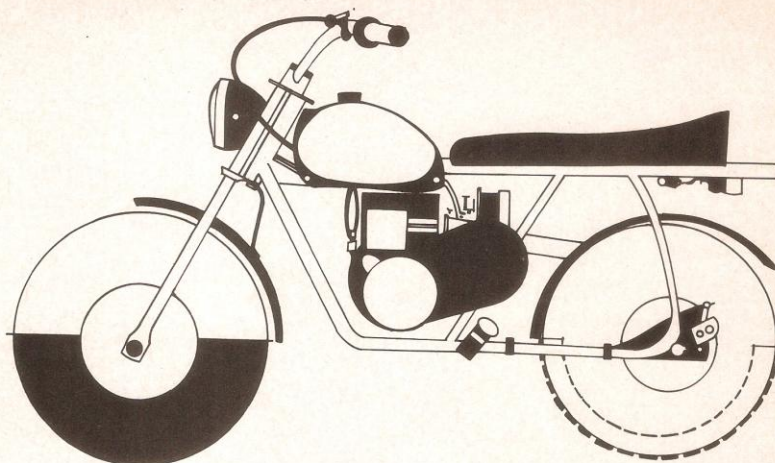
We found, during the riding test, that there was an excellent relationship between the handlebars, foot pegs and seat. Going over the rough stuff at speed, standing made things comfortable and it was possible to hold this position without getting unduly tired. The only problem with this, we found, was the tendency to get the heel of our boot into the path of the chain. Although the power train is well shielded, this one area is open.

The brake was a disc unit mounted on the rear wheel, the correct location. We have had problems of adjustment with disc brakes and were a little leary of this unit. However, it was a new design from H-H and seemed to work very well. It stopped the machine positively, could be feathered for long periods, and there was no drag when it was not in use.

During the "wet test" the brake recovered much more quickly than just about any drum brake we have encountered. The "wet test" is when we run the machine through various depths of the stream that runs through Indian Dunes, our favorite test area for this type of machine. Apart from the fact that we think this is fun, it also tests the ability of the engine to stay alight under adverse conditions, checks out braking ability when the brakes are wet and determines the amount of mud protection that the fenders give. On all counts the Cheetah performed very well. The wide, full-coverage, fenders were really excellent.

The riding technique for these fat-wheel machines is special. In taking corners, even relatively slowly, it is best to lean the thing over in an angle that would be considered extreme for just about any other two-wheeler. This is because the foot-print of the front wheel moves well over into the inside when the wheel is turned and the weight of the machine has to be brought over the center of the foot-print as much as possible. Some people watching, may get the impression that you're trying to show off but it's just to make things a little easier.

Generally speaking, there is no suspension. The cushioning is done by the soft tires. This works out well at fairly slow



RETEK CHEETAH

Manufacturer: Recreational Technology Inc., 2200 South 43rd St., West Milwaukee, WIS. 53219

ENGINE

Engine type	Single, four-stroke	Carb	Float bowl
Bore	2 1/4"	Ignition	Flywheel
Stroke	1-17/32"	Lubrication	Splash
Displacement	15 cu. in.	Fuel capacity	1 gallon
Horsepower @ rpm	7 @ 3,600	Fuel requirement	Regular
Compression ratio	N/A		

TRANSMISSION

Transmission type	Torque converter	Final drive	No. 40 chain
Primary drive	V-Belt	Gear ratios	Automatically variable from 6:1 high to 21:1 low
Clutch type	Centrifugal		

CHASSIS

Frame type	Double loop	Tires,	
Wheelbase	45 inches	Front	11 x 8 x 20 1/2" dia.
Overall length	65 1/2 inches	Rear	11 x 8 x 20 1/2" dia.
Suspension,		Brake(s)	disc, rear wheel only
Front	None	Ground clearance	9 inches
Rear	None	Seat height	27 inches
Wheels	8-inch, pressed steel	Handlebar height	35 inches
		Dry weight	150 lbs. (approx.)

PRICE AS TESTED \$449.00



speeds, which is where it's at for this type of machine. But if you *do* get airborne over a jump, be prepared for the landing with well flexed knees. The feeling is like riding a rubber ball as it rebounds when it hits the ground. First time out this can be disconcerting enough that you miss the next turn and end up in the marshes.

But once you get used to these quirks, bashing around the boonies on one of these machines can be a real ball. Like with the Cheetah. There was this particularly nasty hill climb, steep but made even tougher by a covering of loose stones. The dirt bikes were screaming up the climb, spitting stones left and right, some making it, others not. Then came this "big mini-bike" chugging up the slope, hardly disturbing a stone. With no fuss, it rode up to the top. Watching their faces, watching the Cheetah, was beautiful. □



RAISING THE DESERT



SMOKE - A leader in the dirt race passes under the smoke



FAST - Ron Burpo, a class winner, screams across desert sand.

Shortly after ten o'clock, a thin wisp of black smoke wavered up from the top of a California desert hill, thickened as it billowed faster, and then was streamed away by the chill morning wind. The recent National Recreational Vehicle Racers' hare scrambles for mini-bikes, mini-cycles, three-wheelers and mini-four-wheelers was under way.

Simultaneously, the roar of engines filled the pit area as 60-odd entries clawed away at the sand in an effort to be first up the hill. The firing of the smoke bomb was in the tradition of starting a desert race, although some people might have reservations about the pollution from setting fire to a stack of old tires. In a hare scrambles, competitors are free to fight their way to the bomb by any route they choose. The column of smoke indicates the beginning of the be-ribboned course and the first competitor into the marked trail has a definite advantage. Perhaps the most important thing about being first at the smoke bomb is the psychological effect it has on the other riders.

So they dug out as fast as they could. There was some confusion as to the exact moment for beginning the race and most competitors got going as soon as the burning tires sent up the first wisp of smoke. They should have waited



dust here scrambles attracts all types



REPAIRS - A, common sight in desert races is trail-side repairs.

for a starting signal but the officials, seeing what had happened, waved off the few who did wait. From atop the smoke bomb hill there was no sign of confusion nor any sound of engines. The winded signed but that was all.

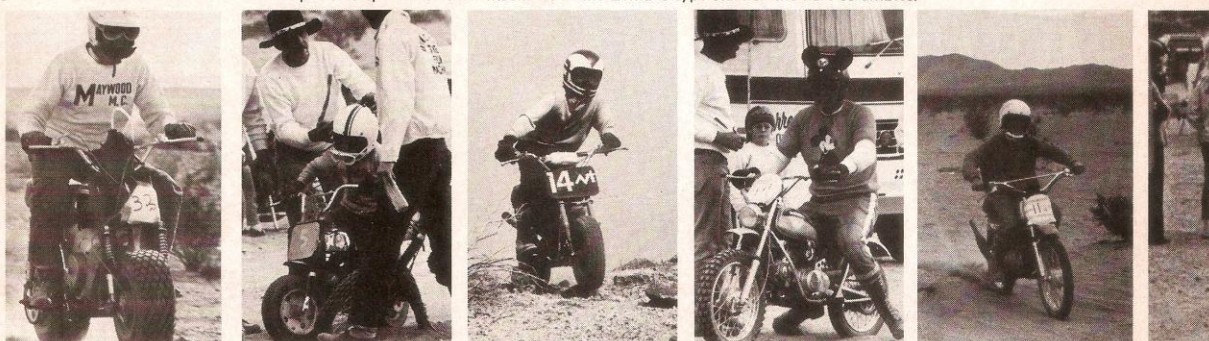
Down on the desert floor the first riders were making dust wakes like battleships laying a smoke screen. Those following learned the taste of the desert unless they were like some desert-wise riders and wore bandanas over their faces. In the distance they looked as though they were approaching slowly but as they got nearer the speed became apparent and the engine noise wafted in as though they were an angry swarm of bees.

There were three good routes to the smoke bomb, up three hill crests then converged at the top towards the beginning of the course. "Good", referring to these routes, was a relative thing. Any other way to the smoke bomb was practically impassable so these three ridges were actually the only routes. The trails up the crests were about three feet wide with almost sheer drops on either side.

There were about 60 riders on machines of all types, sizes and power, including a six-wheeled ATV that was running but not officially classified. Things got a little crowded and who was in front was largely a matter of who had the



START- The tension breaks as the competitors sprint for their machines in the LeMans type start of the hare scrambles.



SCENES - Activities and competitors during the recent desert race shows the variety of entries. This grueling type of racing gets more and more popular.

most nerve, as they funnelled together for the shot at the hill. Still, it all got sorted out with no accidents and the bulk of the field swept by the smoke bomb, going strong.

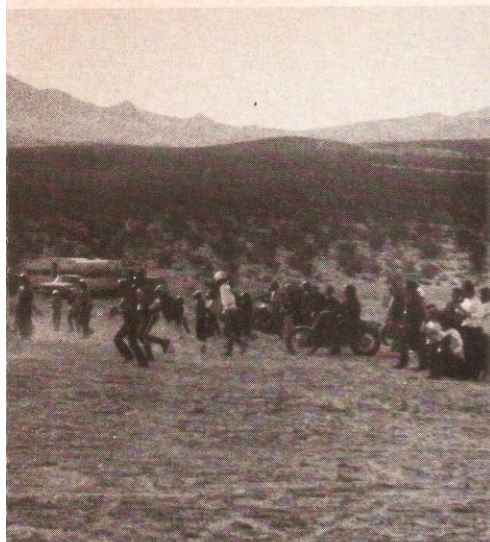
If it was exciting up to then, the real fun began after the smoke bomb - eight miles of racing across the rugged California high desert. And that was only the first loop.

The course had been laid out in tow loops, the first eight miles long, just to get the competitors warmed up for the real test. The second loop was 15 miles around. Both loops started and finished in the pit area so those not riding had a check on those who were. There was a mandatory pit stop at the end of the first loop but not many pit crews made use of this for refuelling. The smaller mini-bike classes had only the first loop to ride and this proved wise because they finished about the same time as the machines that had both loops to travel.

At the head of the pack in the beginning of the race was 38-year-old Jack Morgan, a well-known desert racer who likes to compete on small displacement machines. He roared up the center ridge to pass under the billowing cloud of smoke to be first on the marked course. He stayed that way throughout the race with a comfortable lead over Ron



WINNER - Jack Morgan, overall winner, is first at the smoke bomb.



TEST - Greg Lersch on MiniCycle test machine

Burpo who was riding a much-modified Honda SL-70. Ron is a 31-year-old Honda dealer who is also an experienced cross-country competitor.

When asked why he entered the NRV events which, after all, started out as races for youngsters, Ron said he used them for tune-up purposes. He was planning to enter the SL-70 in the Barstow-to-Vegas race, one of the nation's toughest, and, the NRV events were the only races with proper classifications for small displacement machines. Both Jack and Ron feel that NRV is the only organization that treats small two-wheelers seriously.

Ron headed his class (0-80cc, Expert) and was second overall. Jack Morgan was, of course, the winner overall and also the winner of his class, 81-125cc, Expert. Jack was mounted on a Steen's F.100 with the Hodaka engine and Ceriani front forks. Third overall was MiniCycle's entry ridden by Greg Lersch, aged 13. Our machine was the Steen's F.100 with the leading link front end and the 80cc Fuji engine.

The race served as the ultimate test of the machine's ability to withstand punishment. Taking third spot was an excellent testimonial to the frame design and suspension as well as the strength of the engine. And, of course, Greg was outstanding

as the machine was unfamiliar to him. The pressures of publishing only allowed him a few hours practice before the race. Greg was second in his class, behind Burpo, and the first of the younger riders to finish. Knocking off third and first spot was a creditable performance for the Steen's machines. Morgan asserted his right to the first spot by finishing about three minutes ahead of Burpo but Lersch was only a short distance behind the second place man. All three front runners finished well ahead of the pack.

The race was run in ideal temperatures, not too hot and not too cold, while the wind remained moderate enough not to cause dust storms. The number of entries was only about 60 per cent of the previous run (nobody seemed to have a good reason for this drop). Still the organization was excellent and having a restaurant and gas stations practically in the pit area made things a little more civilized than most desert locations.

The course was not too rugged, allowing the three-wheelers and ATVs to run a little faster than usual. Probably it could be made a little more competitive for two-wheelers. As it was laid out for the event reported, the three front runners turned in average speeds of about 24 mph. That is nearly as fast as the bigger machines turn in for big bike runs. □

CLASS WINNERS, Desert Hare Scrambles, National Recreational Vehicle Race

OVERALL POSITION	NAME	AGE	HOMETOWN	MACHINE	CLUB
Mini-Cycles, 81-125cc, Expert					
1)	Jack Morgan	38	Lawndale	Steen's 100	Mickey Mouse M/C
Mini-Cycles, 0-80cc, Expert					
2)	Ron Burpo	31	Rancho Mirage	Honda SL70	Mickey Mouse M/C
Mini-Bikes, 5 to 6 hp, Expert					
5)	Warren Barr	15	Manhattan Beach	Powell Challenger	SCMBKA
Stock Three-Wheeler, Expert					
6)	Mel Lebard	7	Lynwood	Honda ATC 90	NRVR
Mini-Bikes, Open, Amateur					
7)	Harvey Campbell	31	Bakersfield	Mini Gote	NRVR
Mini-Cycles, 0-80cc, Amateur					
8)	Mike Real	12	La Mirada	Yamaha 60	Fantasy RT/NRV
Mini-Bikes, Open, Amateur					
9)	Richard Watson	33	Bakersfield	Mini Gote	No affiliation
Mini-Bikes, Open, Novice					
10)	R.O. Bates	57	Maywood	Bates Trail Leader	Baywood M/C
Mini-Bikes with Trans., 51-80cc, Novice					
11)	Frank Baragas	16	Downey	Honda 70	No affiliation
Mini-Cycle, 0-80cc, Novice					
13)	Charles Newbourg IV	10	Diamond Bar	Yamaha 60	Santa Fe R/T
Stock Three-Wheeler, Amateur					
15)	Jim King	34	So. El Monte	TriCat	Circle Flyers Industries
Stock Three-Wheeler, Novice					
19)	Keith Myer	16	Downey	TriCat	Coachilla M/C
Mini-Bikes, 5-6 hp, Novice					
22)	Dan Kelley	10	Perris	Powell	NRVR/SCMBKA
Stock Four-Wheeler, Novice					
24)	Bob Thompson	24	Riverside	DuneCat	No affiliation
Open Three-Wheeler, Expert					
32)	William Uriarte	30	Torrance	Honda ATC 90	NRVR
Open Four-Wheeler, Expert					
33)	Dale Weick	16	Orange	DuneCat	No affiliation
Youngest Rider to Finish					
1)	Frank Shader	8	Orange	Honda 50	Sledge Riders M/C
First Girl to Finish Both Loops					
34)	Cindy Schrank	11	Pedley	Yamaha 60	No affiliation

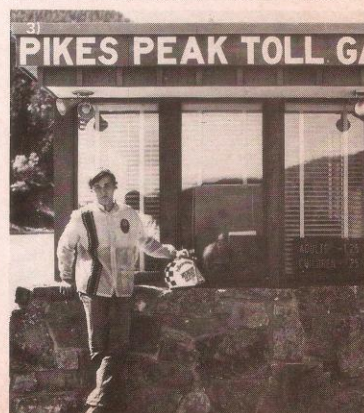
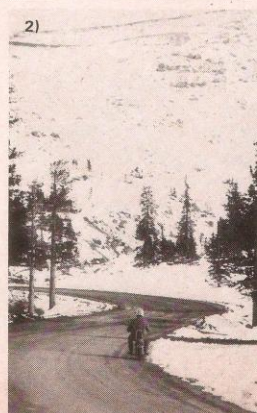
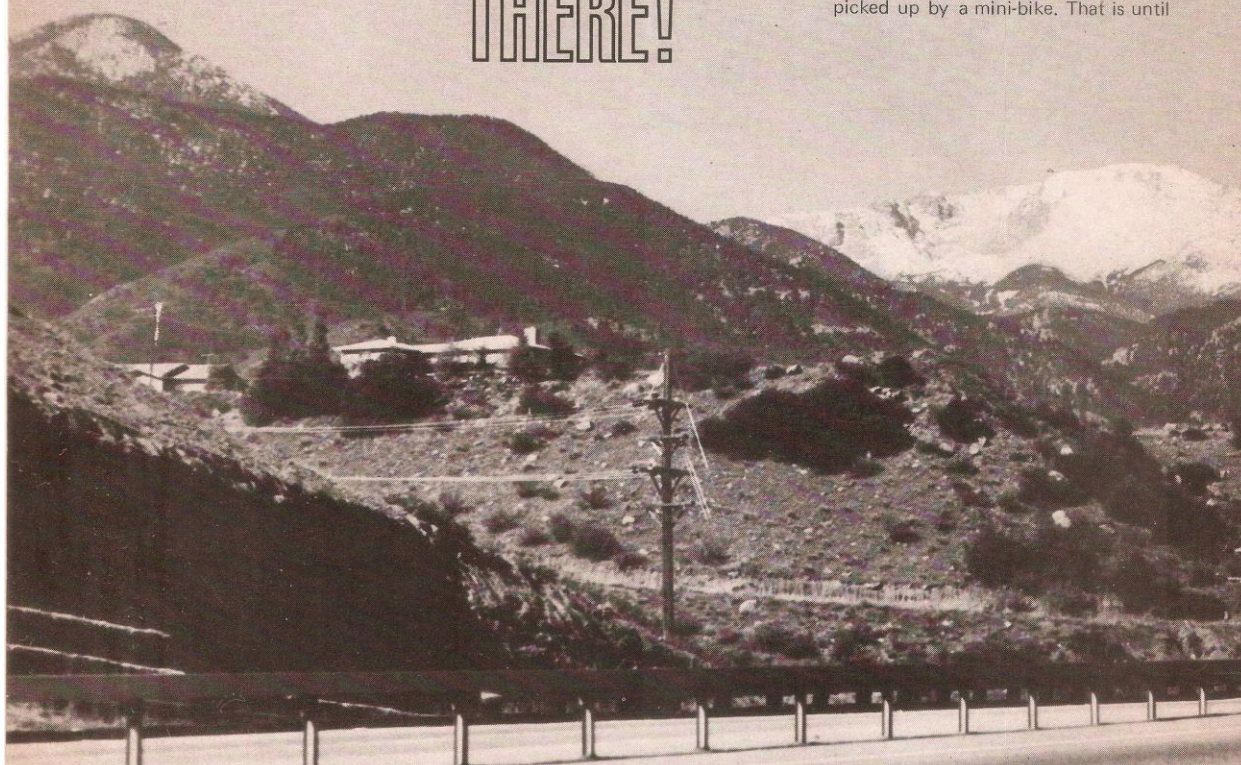
PEOPLE MAY ASK, WHAT
MADE ROGER FALASCO
TAKE A MINI-BIKE
UP PIKES PEAK'S COLD,
SNOWY, MIST-COVERED
14,000 FOOT SLOPES.
THE ANSWER IS
CLASSICALLY SIMPLE. . .

"BECAUSE
IT
WAS
THERE!"

"What are those mini-bikes doing up here?!", exclaimed a startled woman at the top of Pike's Peak, Colorado, this past September. It was a good question! The answer is in this tale of grit and derring-do.

People who live around the foot of the famous mountain have become used to seeing horses; burros; cog railroads; Model T's and modern automobiles; even high-powered motorcycles; successfully assault its slopes. This fascination with humbling the proud mountain comes from its recognition as one of the most challenging hill climbs in America.

But the challenge had never been picked up by a mini-bike. That is until



that cold Wednesday in September 1971, Roger Falasco, a 17-year-old high school student from Chagrin Falls, Ohio, became the first mini-bike rider to make it to the top of the cloud and snow covered mountain 14,110 feet above sea level.

Roger established a new record for mini-bikes but the real purpose was to prove the stamina of Mercury's Hill-climber centrifugal clutch. This four-inch clutch was tested on these pages some time back and we were pleased with its performance then. Mercury felt they had to go one step further. Said Pete Taflin, president of Mercury, "We wanted to forever silence critics who feel that you have to go to 'something different' when you have hillclimbing on your mind."

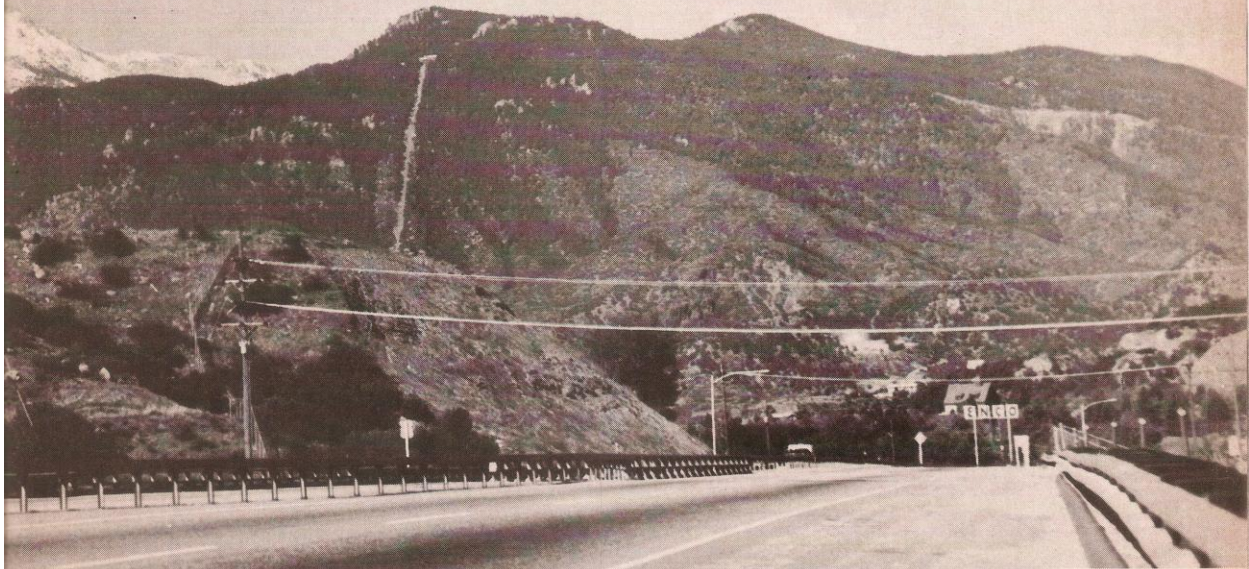
Despite the commercial nature of the project, it was still a remarkable achievement. The Pike's Peak climb is 20 miles long and includes sections that have beaten automotive equipment that cost thousands of times more than Roger's little mini-bike. The tale of his feat and the 1,500 mile journey from Ohio to Colorado is best told through the notes he kept on the project for a school assignment:

Saturday, September 18, 1971

Mr. Engel (advertising agency executive) picked me up in his Chevy wagon. Mom was up and waved us off. Mr. Engle's son, Jon, a junior at my high school,

had been scheduled to make the run but came down with mononucleosis. Jon knew I liked to ride so they gave me the chance to make history and take a break from ye olde school house. Picked up the two bikes and Larry Elliott (Sales Engineer at Mercury Clutch) at his home in Canton.

The wagon was really loaded, in fact, the rear tires sagged. We put some air into them and took off up Interstate 77 to the Ohio Turnpike and then the Indiana T.P. Rain hit us as we grooved into Illinois on Route 90. From there to Des Moines, it was more of the same. Mr. Engel appears worried about the weather. It was his idea to make the Pike's Peak run and he's afraid the weather will kill his whole promotional idea. As we hit the sack, it was really pouring—



ABOVE - The snowy head of Pikes Peak seems to threaten those who approach.

- 1) Dwarfed by the snow-covered slopes, Roger climbs higher (lower left).
- 2) The road zig-zags among the pines and the engine labors from lack of oxygen.
- 3) Prior to the ordeal, Roger relaxes at the toll booth jumping off spot.
- 4) A rest for the weary, not-new, Fox mini-bike after it reaches the mountain top.
- 5) After the tree-line, only stunted growth can be found near the top of Pikes Peak.



heard more bad news over the radio: 16 inches of snow in Denver!

Sunday, September 19, 1971

Up at 6:30 a.m. More rain. These guys don't let a growing boy sleep much, that's for sure. Car radio report confirms bad news. We got plenty of the squishy white stuff where we're heading. Getting there we passed from wet Iowa into Sunny Nebraska! Wow—what a change! So, this is where the buffalo roam. What a mini-bike park this state would make! We're climbing now on Route 80 and here we go into Colorado. We fuel up and take a doughnut break. Waitress shakes her head when she hears we're heading for the Peak. Doggone, it seems everyone knows there's 16 inches of snow in Denver.

This is my first jaunt into Colorado and I see a queer contraption on wheels which stretches for 75 yards or so. Mr. Engel says it's a portable irrigation unit to keep the corn growing tall. Water is a

problem here. As we approach Denver, we see evidence of the snow. Then, we're past Denver and the snow is gone. Maybe, we'll be lucky after all.

It's still clear weather when we arrive at the motel in Colorado Springs, our headquarters. Our hopes soar.

We decide we just gotta see what the entrance to the Peak looks like. So, off we go on the 10 mile west journey on Route 24. There it is—the sign saying Pike's Peak ¼ mile ahead. We're really climbing now and I notice the colder temperatures. We stop at the Road Manager's brick house at the gate and knock. Jack Sullivan, head man at the Peak, opens the door and we "clear" for making the run at 7:00 am the next day.

The officials have been real nice to us but don't permit mini-bikes on the road. For Our "clutch" test, however, they'll let us go as long as we're off the road when the traffic opens up at 8:00 am.

Back to the motel, we unload the wagon. What a jumble of stuff: two bikes,

safety helmets, heavy clothing, tool box, spare parts, suitcases, camera equipment. Pour in a little fuel and start my 4 hp Teke. Not so easy to start. Must be the altitude. Finally get it going by holding up the rear knobby. Noise kind of gets to some of the other motel visitors. Lights begin to pop up all over the place. I put on my helmet and zip around the parking lot. Bike feels good. Now, it's Larry's turn, no problem to start his 5 hp machine. He makes a few turns around the yard and we take both bikes inside the room.

Two beds, one roll-away for guess-who, two bikes, suitcases, boots, shoes, etc. I keep falling over things. Larry checks his machine. Looks okay. Then he tests my No. 35 chain. Too much slack. I help him move the real axle. By time we tighten bolts, the chain is too tight. I tell Larry I don't think too much of No. 35 chain and tell him I want to lube it some more. He says "no", so I listen to the man, but I'm

Continued on page 60



mick andrews

world's
trials
champion
talks
about
his
riding

A quietly-spoken, gentle-mannered young man recently visited these shores from England. He came to teach trials riding to all who wanted to learn. He listened to questions attentively and answered them carefully. He was tall, young and the girls thought him handsome (like a more rugged Lawrence Harvey, one said).

He is Mick Andrews, world champion trials rider, and in his unassuming manner he is everything you'd expect a world champion to be, although all too often they are not.

Andrews was in the United States on a tour sponsored by Ossa Motorcycles, for who he rides, teaching trials riding schools at various locations. MiniCycle caught part of the school being held at Saddleback Park, California, and attended in the main by members of the American Trials Association. We were invited to attend the school by Ossa, following the article in which we urged the holding of mini-trials events ("A Stampede of Turtles") in the January issue of MiniCycle.

We attended the school because we wanted to know what the top trials rider was like and what he had to say.

We were introduced to Andrews by an Ossa representative and found a shaggy-haired young man in a set of nondescript baggy blue overalls. He looked like the local garage mechanic who might work on your little English car.

LISTENS - Mick Andrews, hunched down, listens carefully to a question



Somehow you knew he would feel pretentious walking around the pits of a major motorcycle race in a Bell Star full coverage helmet, flashy leathers and racing gloves trying to eye the competition with a cold, steely, gaze. Mick's eyes are wide, blue and full of fun. He seems surprised that somebody from a magazine would want to talk to him, yet he could safely lay claim to being the most skillful motorcycle rider in the world. Not the fastest, just the most skillful.

The excitement and glamor of the Daytona road racing type of event is a far cry from the down-to-earth business of trials riding. Even the sport's top event, the International Six-Day Trials (which really is not the same thing as observed trials since the ISDT includes pavement racing and motocross), is casual by comparison.

Spectators at trials events sit close to the action and actually APPLAUD when a rider cleans a section (rides through without touching the ground with his feet). It wouldn't mean much to applaud a road-racer or motocrosser. They'd be on the other side of the circuit before you got really started and they wouldn't be able to hear, in any case.

According to the Andrews philosophy, that is the very essence of trials riding. It is a personal affair between the rider, his machine and the terrain. Much more so than any other type of motorcycle competition. The trials rider is concerned about every rock, every tree, every slope and every deviation of the "line", one at a time.

On the other hand, most two-wheel racers are usually riding 20 to 30 yards in front of themselves. They have to. When they see something coming up 20 yards away, they are on top of it in a split second. They have no time for the individual obstacle and, in point of fact, their courses seldom have really serious obstacles. This is true of even the worst cross-country race.

It would be difficult to imagine the officials of a hare scrambles laying out the course so that it deliberately went over a large log. Hitting such a log at 30 mph would be disastrous. Yet a large log is the least of the problems that a trials rider has to worry about.

Mick Andrews, for instance, used an 19-inch diameter log as part of a riding lesson. But the log was only part of the problem. It was laid on the face of a hill, lined up with two closely spaced trees. Looking up the hill, the spectator could see the first tree; about four feet behind that was the second tree; and a few feet uphill from the second tree was one end of the log with the other end further uphill. The idea was to start at the bottom of the hill, traverse the slope between the two trees, make a sharp 90 degree turn around the upper tree, lift the front wheel over the log while continuing to make the turn on the rear wheel only. All without putting the feet on the ground for balance.

The average good rider would have laid everything on the ground, including his body and the machine.

INSTRUCTIONS - Mick Andrews gives young rider the benefit of his expertise.



We learned from Andrews that there was a way of doing this maneuver that involved a delicate combination of weight shifting and throttle control. After explaining how to do it, he picked up his Ossa and demonstrated the technique. If ever one can talk about grace in motorcycling, this man and his machine has to personify it. This difficult maneuver was performed effortlessly. No flourish of trumpets.

He simply dodged through the crowd and did it. The following trips through the section he carried on a running commentary on what he was doing, answering questions as he did it. Not showing off but making an effort to be properly understood. Beautiful!

It was obvious that there was a great deal of rapport between Andrews and the 30 or so riders that had turned up for the school. It was a gathering of equals with none of the superiority that turns people off in his attitude. The mutual respect was similar to that found between an Indian guru and his pupils. It wasn't until Andrews climbed aboard his machine and practically made it come alive that one remembered he was watching a world champion. Number One in a sport that is among the most demanding and most keenly contested of two-wheeled activities.

That the rapport was there became evident when a few of the students made it through the difficult uphill/narrow gate/log obstacle section without dabbing (putting their feet down). And, of course, they received a round of applause.

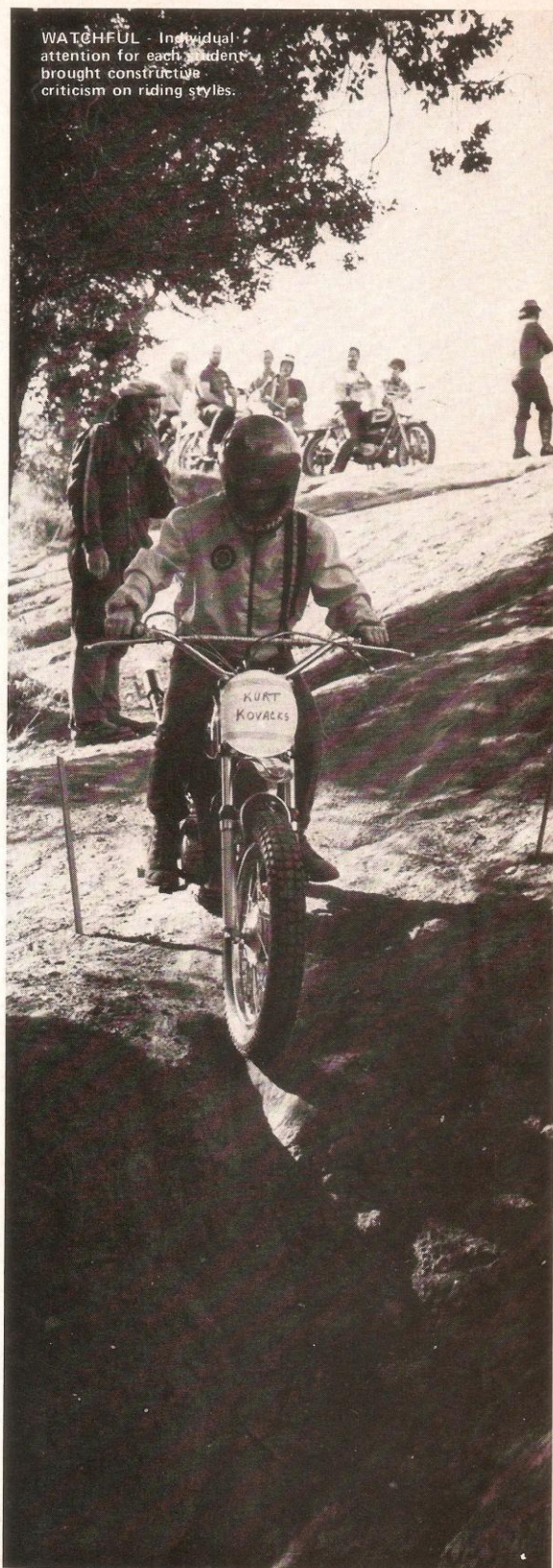
If his soft, middle-class, English accent was strange to American ears, one can imagine the difficulty he had understanding the variety of American twangs. So it was that he partly misunderstood a question about balance. Still, his answer was revealing.

He said it was a misconception that being able to balance a motorcycle was the most important thing in trials riding. Some top riders, he said, could sit on their machines in the same spot for long periods, just balancing, but he had never been able to maintain his balance unless the machine was moving. Successful trials riding was less a matter of balance, in the sense of tight-rope walking, than it was a matter of sensitive "feeling" of the conditions within a section. The rider had to respond automatically to these conditions with the right combination of body movement and throttle.

He stressed the need for practice saying this was the only way that the correct responses would become automatic. It was no good riding the sections that came easy. A trials rider had to find something he couldn't do then tackle it over and over until he could do it. Andrews said it helped to have somebody show the correct way (which was always the easiest way) but if there was nobody around like that then the novice had to make it on his own.

A lot of the question and answer periods revolved around the proper machine set-up. One of the younger riders said that he had tried the practice route but got too frustrated when he couldn't make it through a rough spot. Andrews asked him what machine he was riding and the student

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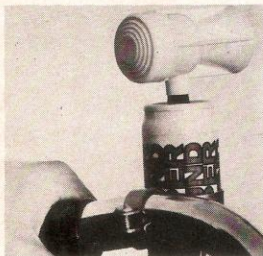
WATCHFUL - Individual attention for each student brought constructive criticism on riding styles.

MBGMISCELLANY

SUPER SOUND

Super Sound, a palm-sized protective warning device (weighing three ounces and measuring 4½") does double duty as a unique horn with its handlebar attachment. It is being introduced to the consumer market by Thorpe Industries, Inc., a division of Falcon Safety Products, Inc.

The loudest horn in the world, SUPER SOUND is easily heard above the roar of traffic and construction noises. Super Sound provides more than 100 blasts. The Super Sound package retails for \$2.98, the handlebar attachment for 49¢, and a package of two refills for an additional \$2.98. Available nationally through hardware, drug, specialty and department stores.



TECUMSEH MINI-BIKE PISTONS

Wiseco Piston Company announces their newest Hi-Performance piston line addition ... *Tecumseh Mini-Bike Pistons*. Models feature a raised dome for increased compression, power thrust "L" ring for low frictional drag and a multi-piece steel oil control ring. Available in standard, +.040 and +.080 oversize. Write to Wiseco Piston Co., Inc., Dept. MC-2, 30200 Lakeland Blvd., Wickliffe, Ohio 44092.



SUN METAL WIRE SPOKED WHEELS

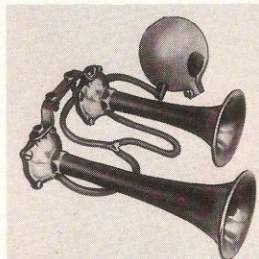
Sun Metal Products has become the nation's first domestic source for wire spoked wheels as deliveries are being made from their completely new facility in Warsaw. A leading supplier of all types of wire spoked wheels, Sun Metal has now entered the mini-cycle and motorcycle wheel field to meet OEM needs.

Sun Metal wheels are offered with or without pneumatic tires in sizes from 10" to 21"; to fit tire widths from 2.50" through 4.00". Brakes and sprocket sizes are furnished to meet manufacturers' specifications; as are a wide range of foreign and domestic tires with various tread designs. For complete information contact Sun Metal Products, Inc., Dept. MC-2, N. Detroit Street, Warsaw, Ind. 46580.



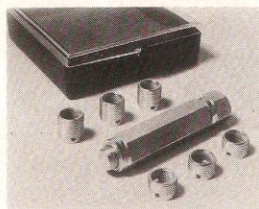
SOUND OFF

Maserati Mini Horns, the mini horn with the maxi sound, for bikes, scooters, motorcycles, snowmobiles and other recreational vehicles. Features dual Italian racing red plastic trumpets with indestructible diaphragms. The horns are activated by depressing the handbulb for a distinctive, penetrating tone. Complete with all mounting hardware. \$9.95 retail. Distributed nationally by Vilem B. Haan, Inc., MC-2, 10305-07 Santa Monica Blvd., West Los Angeles, Calif. 90025.



HELP FOR STRIPPED PLUGS

Spark Plug Thread Repair Kit from Groov-Pin Corporation provides fast, simple and economical repair for stripped threads in spark plug ports. The self-tapping inserts require two installation steps—drilling of hole and insertion. The positive release driver, pictured above, can be used with all reaches of inserts. The inserts are used in cast iron, aluminum and magnesium cylinder heads. Write Groov-Pin Corporation, Dept. MC-2 Ridgefield, N.J.

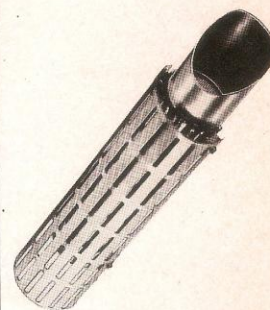


LOW-COST REPLACEMENT BARS

Quality motocross-style handlebars at a budget price are now available from Cosmopolitan Motors, Inc., Hatboro, Pa. 19040. The bars are heavy chrome-plated steel with a re-inforced cross brace. They measure 28½" wide, 7" high, and 7/8" in diameter. List price is \$6.75. Write: Dept. MC-2, Cosmopolitan Motors Inc., Jacksonville and Meadowbrook Roads, Hatboro, Pa. 19040

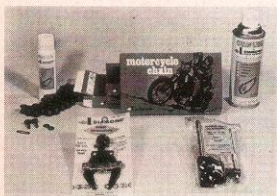
MUFFLED GLAMOUR

More glamour for Tecumseh-powered mini-bikes can be added with a chrome plated muffler and heat shield for "flash" and extra long life. The model 300 spark arrester is fully approved for Forest Service Trail use. (Standard U.S. 5100-1A USDA). Spark arresting screen is easily replaced by removing just two screws. At all authorized Tecumseh service dealers listed in the Yellow Pages under "Engines-Gasoline". Or write: Dept. MC-2, Tecumseh Products Company, 900 North Street, Grafton, Wis. 53024.



DIAMOND CHAIN

High speed motorcycle chain with "Diamond" quality is offered by Diamond Chain Company, Indianapolis. It's American-made and prepackaged in standard motorcycle chain lengths, and is ready for immediate delivery. Diamond Chain also offers chain pin extractors, chain connecting tools, and foam type lubricant in 4 and 16-oz. aerosol cans. For the location of your nearest dealer, contact John Duncan, Diamond Chain Company, MC-2, 402 Kentucky Ave., Indianapolis, Ind. 46225.



MINI ENDURO SHOCKS

The famous Boge shock absorber, patented in Germany, now available for competition Mini Enduros. The secret to better handling and control is said to be the Boge patented inner valve. This special inner valve gives improved double dampening action. The hard chrome rod won't bend or break. The entire unit is factory sealed. Beautifully chrome plated. Replaces stock units in minutes. Boge manufactures shock absorbers for all cycles. Dealer inquiries invited. Write: Moto Imports, 172 Freedom Avenue Dept. MC-2, Anaheim, California 92801



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Torn leathers? Don't junk them yet! Endura of California comes to the rescue of racers and other wearers of protective garments with their packaged repair kits for both leathers and vinyls. Each kit contains a 6-inch square section of material (available in all the popular colors), a bobbin spool of proper, first quality thread, a heavy-duty upholsterer's needle and a small tube of glue to really seal up the patch.

Leather colors include tan, gold, red, blue, green, orange, black, white and undyed (roughout), and are of domestic and imported heavy garment cowhides. Suede colors are natural, rust, gold, brown and charcoal brown. Retail price for both Repair Kit and Extra Material Kit is \$1.95 each. (Direct orders must include 50¢ handling per order.)

Mini-bike, motorcycle and RV dealers will want to stock these fast moving display packs, taking advantage of prevailing volume discounts. Inquire on your letterhead.

Get Endura's newest 4-color catalog of protective wear and saddlery for bikes by requesting item no. E-285 from them at 312 South Palm Avenue, Alhambra, CA. 91803. Please enclose 25¢ for handling.



H-H DISCS

H-H Products, Milwaukee, Wisconsin, a division of Kelsey-Hayes Co., has developed a self-energizing caliper-type disc brake for mini-bikes, bicycles, and other recreational vehicles. It yields three times greater stopping power than conventional non-energized disc brakes. Harold E. Hollnagel, general manager of H-H Products, said that the new disc brake, Model 200-E2, incorporates an innovative tilting pin action that is unique to braking devices for powered and unpowered small vehicles. Write H-H Products, Dept. MC-2, 8601 N. 43rd St., Milwaukee, Wis. 53209.



NEW IRON-ON EMBLEMS

New sign of the times for the seventies is LESS SOUND EQUALS MORE GROUND. If you wish to help further this worthwhile campaign, display this emblem on your T-shirt or sweatshirt. Offered as an iron-on emblem, each sheet contains one 7-inch emblem for back of shirt and one 3-inch emblem for pocket area. Two-color green emblems are made of long-wearing, fade-resistant, rubberized ink. Retail: \$1.50 per sheet, postpaid. Order from Arcadia Graphics, Dept. MC-2 Box 3046, Arcadia, Calif. 91006.



BUCO VISTA VISOR AND SHIELD

A unique visor and shield combination is now being offered by the BUCO Products Division of American Safety Equipment Corporation. The Vista Visor and Shield combination meets or exceeds Z2.1 Standards and offers sharp appearance, eye shade protection and free air circulation to prevent fogging. The visor fits regular front helmet snaps with replaceable clips attaching the shield to the visor. Visors are available in white, black, blue, smoke, and red while the shields are available in a 3" smoke, blue, clear and green with an additional 6" clear shield also available. For further information write to BUCO, 16055 Ventura Blvd., Encino, Calif. 91316.



MICK ANDREWS *Continued from page 51*

pointed out a powerful motocrosser. Andrews suggested that he had reached the stage in trials riding that required a machine built for the job before he could progress further. When the pupil pointed out that his had more machine horses than Andrews' trials machine, he said that didn't have much to do with anything.

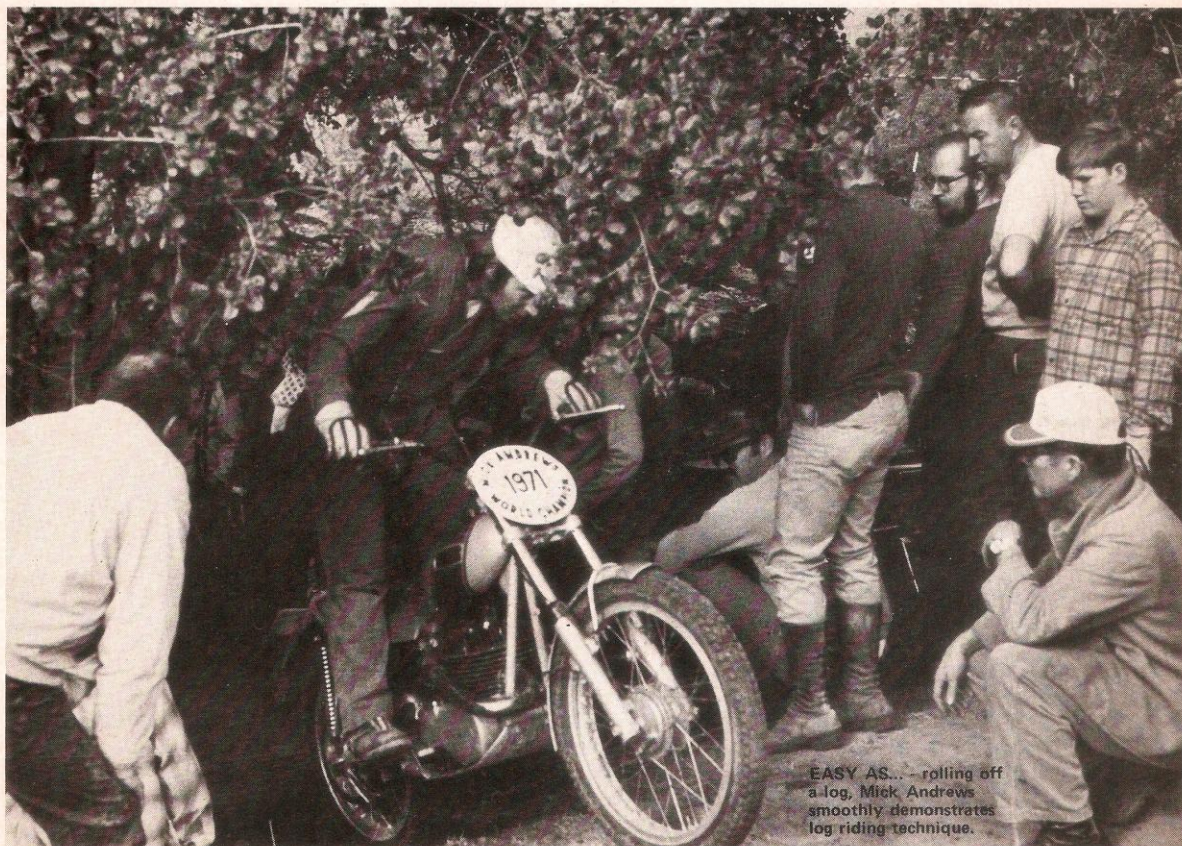
The next question was, of course, which was the best trials machine? Dutifully, with a glance at the Ossa people, Andrews said that he found the Ossa the best for his own tastes but he was willing to concede that there were several makes that other riders found as good.

The basic requirement was a need for unstoppable low-end torque. That is why the 500cc four-stroke thumpers in English motorcycles had been predominant in the field until the lighter weight, specially designed, 250cc two-strokes had been introduced. Andrews said that as long as the throttle was rolled on, no matter how little, the rear tire of a 250cc trials machine should keep turning. Of course, this requirement was a little harder on the smaller engines but the principle held.

With a 250cc trials engine there should be no need to slip the clutch to keep the engine cleaned out. Throttle response



DISCUSSIONS: Friendly group discussions followed each section instructions.



EASY AS... - rolling off a log, Mick Andrews smoothly demonstrates log riding technique.

should be immediate and smooth. Wild or unexpected increases or decreases in engine revolutions are trouble. Too much can cause wheelspin and loss of traction which is almost the same as saying loss of control. Hesitation in throttle response could leave a trials rider hung up for power when he needs it most.

Light weight; steering stability; rigid frame; high ground clearance; soft suspension; good engine protection; narrow machine cross section with minimum of protrusions; a quiet muffler; and good rearward location of the foot pegs, were all important considerations.

Still, it was possible for a rider to get a lot of fun out of a out of a machine that would be uncompetitive in top trials events. However, Andrews said that such a rider shouldn't get discouraged if he couldn't do with his machine what another rider on a special trials machine could do. A trials motorcycle is a highly specialized machine and not much good for anything else except a little trail riding.

From this it is possible to say that mini-cycles and mini-bikes are not ideal machines with which to enter the International Six-Day Trials. The mini-bike, with its high torque industrial engine, comes closest to the ideal but the automatic clutch would put it out of contention. The mini-

cycle, built for average riding conditions and with a "peaky" power curve, would have the advantage of a manually-operated clutch but not the necessary torque characteristics.

Does that mean mini riders should not consider trials riding? Not on your life. Trials riding is still about the best competition for minis and certainly the best training for most other types of competition. However, to provide any sort of excitement mini-bikes should only compete against mini-bikes and mini-cycles with mini-cycles. Power is only a secondary consideration. The competition is the thing and if everybody has the same type of handicap then nobody has a clear advantage. Just don't go challenging the rider of an Ossa trials machine with your 4 hp Teke.

Observing Mick Andrews, his manner and his riding, we can only hope that a generation of mini-trials riders will produce more like him. Trials riding is a sport that is more notable for its skill rather than its speed; for its camaraderie rather than cut-throat competition; for being matched against nature rather than other riders. There is talk of how the "professionals" cheat during the big International Six-Day Trials. Maybe they do. But on this side of the Atlantic the sport is clean. And Mick Andrews makes the ideal champion for us. □

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ZAP-CYCLE ENGINE

Continued from page 34

had made up two places in the second loop and was still fresh and strong. The machine had been perfect. Bob wore a pleased grin and even the imperturbable Greg seemed happy.

Considering the fact that Greg had managed only a few hours practice with the Steen's/F.480 prior to the race, finishing third overall and second in the 0-80cc class, was a remarkable achievement. No small part of this success was due to the reliability of the F.480, despite its modest modifications, and the ability of the Steen's mini-cycle to

absorb punishment.

Greg reported that the engine was very responsive and that he had found nothing that could bog it down in second gear. He felt the up-shift from second to third was a little too tall for desert racing but was not enough to worry about. A little closer spacing of the ratios might be better, though, since third and second, in a four-speed gear box, are the gears most used. Still, the gear box was smooth and the clutch very positive. Greg felt the springs on the clutch were a little too fierce for younger riders. When we compared the action of the F.480 clutch with a stock

Hodaka Ace 100, we found that the smaller engine required much more pressure on the lever to release the clutch. Many mini riders will not have the wrist strength to do this too often.

After the race we took the machine out for some low speed tests and we found the torque characteristics of the F.480 to be respectable if not excellent. It would plonk along in mid-range pretty good and would quickly clean itself out when blipped a couple of times. Our test engine was equipped with a Hooker expansion chamber/silencer which seem to do an excellent job of keeping down the noise level without loading up the engine.

As for the handling qualities of the Steen's frame and suspension, we found them impeccable for cross-country work. At speeds above 45-50 mph (we found a piece of deserted desert road to try a couple of high speed runs) the front end tended to wash out but this is generally faster than you'd normally go across open country. We asked Greg about this and he said when it happened he just kept it cranked on and didn't worry about it. We should have known.

For normally fast speeds across the ruts and bumps, however, the leading link front end is the way to go, in our humble opinion. This one absorbed the rough stuff much better than most telescopic front ends and, over the long haul, left the rider feeling much more refreshed. At the same time it didn't have that squishy feeling that is sometimes evident with soft, long-stroke, telescopic front ends that are installed on dirt bikes. Altogether a nice arrangement.

Both bike and engine received a thorough work-out during this race and both came through with flying colors. It should be remembered that the engine was modified and, thus, the internal components were under more stress than in a stock engine. Yet no part of the engine gave us any cause to worry and it was pulling as strongly after this hard grind as it was before. This is where reliability, rather than clever design, has the edge. Although the price tag, \$164.40, is not particularly cheap, it is probably worth it for a strong-pulling, long-lasting, engine to power the upper echelon of mini-cycles. □



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SUZUKI ROVER

Continued from page 23

mirrors (if you notice them missing in our photographs you may find them behind that bush there, on the left, or was it the right?). Handlebar controls were excellent with the throttle an easy-working, instant-returning, proposition but we do wish we could get steel instead of aluminum levers.

Below the muffler is a long, torpedo-shaped, air filter that adds to the machine's appearance, although we are not sure what it does to performance. The side-mounted carburetor has a modest 17mm throat feeding the engine through Suzuki's new-for-72 CCI reed valve (old hat to karters).

Aside from the tires, the most outstanding visual feature about the Rover is the enormous seat. When we first saw it we were not sure whether you sat on it or went to sleep on it. It is a full 29 inches long (27 of them useable) and is 13 inches at its widest. It is soft and cushiony and sinfully comfortable. Naturally, it is long enough to carry a passenger in comfort. A set of buddy pegs have been provided on the swinging arm and there is a grabstrap on the seat. The seat is hinged on its side and swings away to reveal the tools (complete with air gauge), battery, plastic gas tank and oil reservoir for the auto lube system (no premixing of the fuel). All this stuff is neatly tucked away making the Rover as sleek as this type of trail machine can be.

We had the Rover out at Saddleback Park when Mick Andrews, the 1971 World Champion trials rider, was holding a riding school there. This man is an artist on two-wheels (but that is another story) and we kidded him into taking a ride on the Rover. He thought it was a ball and demonstrated long wheelies up the side of a hill with it.

We concurred with Mike's opinion. This machine has to be one of the best of its kind. It is loaded with all the little goodies that are the ace-in-the-hole for Japanese manufacturers—stuff like ignition switch and a front fork lock, a take-it-with-you tire pump and, of course, the speedo.

For those "cow trailers" who like the idea of a motorcycle engine and transmission and prefer the rugged fat-wheeled type of machine over dirt bikes, this is their machine. It is all put together in a solid package that is ("oh, joy") street licensable, too. And the kicker in this whole deal is the low price for this type of machine—a mere \$435 suggested. □

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SUMMER VACATION From pg. 12

motorcycles and dune buggies, which led to annoyance complaints.

MBCC had other problems with racing. The boys like to race at Mosport, a large motorcycle park. Seeing the spectators as potential customers, the mini-bike factories started fielding racing teams. Young beginners, with only a basic knowledge of racing, found themselves up against factory riders in their 20's, most of them seasoned motorcycle and snowmobile racers. Accidents and a chipped ankle bone spoiled the club's clean record.

So MBCC eased off on racing in favor of their less intense activities, like camp-outs and rallies and setting up displays at sportsman shows. It seemed the most sensible approach, under the circumstances. Maybe it will take the heat off, and allow the club to operate for the good of mini-bikers who will go on using their machines, no matter what public opinion says.

Since riding areas are getting scarce in the city, Canadians are looking for ground further out. MBCC national president, Bob Marshall, bought a farm 80 miles out of Toronto, and is converting it to a park for camping and cycling, bike sales and rentals. Bob figures he won't get too many noise complaints, since most of his neighbors are stock car fans, and those things really blast the eardrums.

Of course, urban sprawl will eventually bring the city to the country, and those 80 miles will rapidly disappear. Meanwhile, anyplace is better than the streets and alleys, where the competition is 3000 pounds of Detroit steel, and one mistake can be final. □

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"...BECAUSE IT'S THERE"

Continued from page 48

getting concerned now. I've plenty of experience with having trouble with dry chains before but Larry says it has enough lube so I help loosen rear axle again.

Larry told me he had to make a few alterations on his used machine, a 1970 Fox Spoiler, for the clutch test. He wanted to keep the sprocket ratio as low as possible. He ended up with a 6.5:1 ratio with an 11-tooth sprocket on a Mercury Hillclimber clutch from the shelves of S & W Speed Shop, Akron, Ohio, to fit a 3/4" shaft size.

I test my brake lever again and it won't work. And here it is 12 pm. Larry starts to give me directions like a drill sergeant. We're all dead tired but we're not about to make this run without a stopper, I'll tell you! Fortunately, Larry has brought plenty of back-up parts. We manage to install another brake cable and now the stopper is working. And so to bed but not before I get some Vitamin C pills for my cold. It's 1 am. "Reveille", Mr. Engel says, is 6:00 am! Yech!

Monday, September 20, 1971

Room clerk rings alarm at 5:45 am. I'm

in a daze but manage to help load the bikes. Dress in my long johns, heavy shirt, whipcord trousers, two pairs of socks and riding boots. Fast breakfast and off we go.

Fantastic colors and dramatic rock formations as we go toward the Peak. Jack Sullivan, head Peak official is waiting for us in his squad car at 7 am. Fill both tanks from our auxiliary gas cans. Larry and I are wearing our yellow racing jackets with red and black racing stripes. They should show up well in the movies.

Again, I'm having trouble getting my machine started but it catches and we're off. Only 20 miles of curves, grades, switchbacks, horseshoe turns! Do I have the power to make it? Will this 4-inch clutch heat up and start slipping? Will my wheels spin on those steep grades? Maybe I should have softened my rear tires. Well, it's too late to worry now.

I spot Mr. Engel's blue wagon disappearing around a bend so I begin to have a look for myself. This is really God's Country. Some snow on the sides of the slopes but not on the road. Lots of tall evergreens. Larry honks, passing me. That 5 hp. jobby's got a little extra oomph, but my "baby" is doing well, too.

Just passed the 3 mile marker and now, we're beginning to climb. Mr.

Engel just caught us with his camera as we flashed by. Now, he runs to his wagon and passes us up again. He plays leap-frog with us for the next 10 miles.

Some of these grades you wouldn't believe. Thirty-five degrees at least for several hundred yards and then a sudden change of direction and another long, tough, grind. The power seems to be going out of my engine. I'm leaning forward to help things, at least it can't loop on me. Is it the muddy road? No, it's not that bad and my knobbies were clean this morning. It must be the air or something. Whatever, these never-ending turns and steep grades are MURDER! Yet, the clutch isn't slipping. It's doing its thing!

Here we are at 11,110 ft. This engine has had it. It just won't go. So near and yet so far. I see Mr. Engel and Larry. They don't appear to be too happy. No wonder. The station wagon has conked out, too. We load both bikes into the wagon, carefully back the heavily-loaded Chevy down and turn it around next to the safe side of the mountain.

We've got to do something about the air-fuel mixture at high altitudes for both bikes. So, we find a lawn mower engine dealer in Colorado Springs and he changes the carburetor settings and it's wait for tomorrow for me. Back at

Continued on page 62

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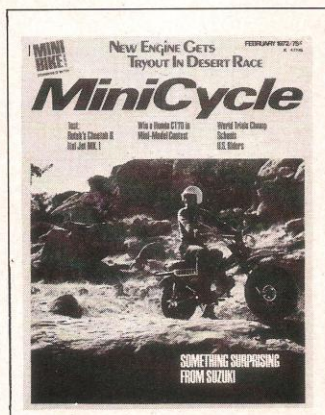
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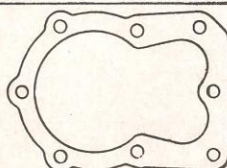
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"...BECAUSE IT'S THERE"

Continued from page 60

the motel, I make sure the air filter is clean and install a new spark plug. I vow tomorrow's the day!

Tuesday, September 21, 1971

They took pity on me this morning. They only wake me at 6 am. I did my fast tooth-brushing routine and a dab-and-a-half of water on my face and I'm ready to roll. Weather looked mean and cold. I'm the only one riding today. Larry and Mr. Engel want to take pictures. So, off I go.

They soon pass me up in their rented red Duster and I'm alone again chugging up the mountain. But, I can tell there's a difference. I felt it the minute I started up that long grade just before the 3-mile marker. Yesterday, the engine started to fade at about that spot, but now it wants to move out.

Hillclimber clutch is doing great. I make the first bad horseshoe grade and I'm starting to get excited. I'm going to make it! I can feel it. It's colder than yesterday, though. I keep my fingers moving inside the gloves. I see the Duster ahead peeking around a turn and I spot my buddies off the side of the road aiming their cameras. I've never had so many pictures and movies taken of me in my life. Wait till Mom sees them.

I'm climbing up past the timber line. Strange feeling as I look down the trail and see treetops on the level with my head. Now, the sun begins to play peek-a-boo and it gets even colder! There's the place where I conked out yesterday, but no problem today.

Going great, and then... Oh, no! Doggone! There's the red Duster and a police car straddling the road. They've closed the road to the Peak. I was afraid of that. They say the wind is blowing the snow across the road and it's dangerous, I know they're looking out for our safety, but doggone, I really had it made.

Now, what? Suppose a real big snow hits us? That would kill the whole project.

Mr. Engel patted me on the back. He's disappointed, too, but he buys me some of those great Pike's Peak doughnuts, the kind they say can't be found anywhere else. Seems the batter is much thinner than you can use in lower altitudes. We're up over 11,250 ft. I eat a few and notice Mr. Engel eats four. Well... it's try again tomorrow. Weather report sounds encouraging so we decide to go all out, the whole bit. Larry, and

me, and my Hillclimber clutch.

Wednesday, September 22, 1971

Our room looks like a garage when we leave. Lots of clouds over Colorado Springs, but the Peak looks better. At the entrance, they tell us it's "GO". So, we waste no time. Mr. Engel is so confident he has a professional photographer on hand. He told me that he called Pat Mackie of MiniCycle last night, long distance, to invite him to watch the event. On short notice, Mr. Mackie wasn't able to make it although excited for us.

We're off! I take the lead and just like yesterday, the bike feels strong. In no time, I'm up past the first pit stop area, Glen Cove. I spot the photographer's VW bus making a U-turn above the Cove and now I know: it's go for broke!

Then, I begin to worry. What else can stop us? Maybe one of those golden eagles will fly by and grab me, mini-bike and all. I've never been up so high in my life. The air is really thin up here. Wow—look at those two long grades, at least 35 degrees or more. Well, Hillclimber, old buddy, here's the "do or die" test.

I'm slowing down. Road is muddier and the knobbies are digging in more. I can't be moving much more than 5 mph, but I'm still moving!

I pass the 18 mile marker. Only two more to go. No more trees. It's bare up here. Just road and rocks and snow on the nearby mountains.

Suddenly, I'm hemmed in by clouds drifting across everything. Eerie feeling like a science fiction movie. I can barely see more than 30 ft. ahead. Lucky we don't have any traffic to worry about. Just as quickly, the clouds are gone and the sun is out. Now, the sun is gone again. I bet the photographer is flipping his wig over this hide-and-seek game! The 19-mile marker goes by.

This is it! Keep going, baby! It's a good thing we've got photos and witnesses. Nobody will believe this! There's a sign saying "Summit Ahead". It's just around the next bend. I can't help it. I let out a holler. Larry, too, is squeezing the life out of his 5 hp "honker". I think they must have heard us back in Chagrin Falls. It doesn't matter.

The photographer "shot" me as I rolled across the finish line, 14,110 feet UP. Mr. Engel's grinning like a Cheshire cat. People asking me questions about all the excitement. I was too cold and too happy to know what I said to them. I stopped making mental notes right then and there. I, Roger Falasco, had met the mountain and conquered it on the smallest powered vehicle to ever make the attempt. That's a good feeling. □



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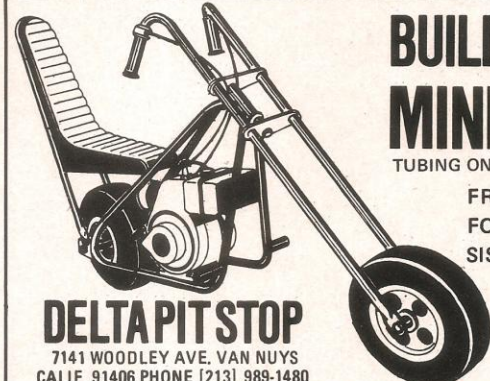
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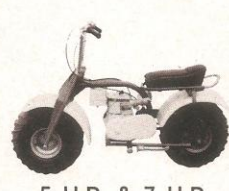
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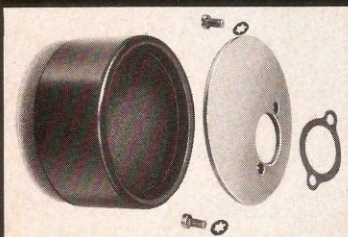

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ITALJET

Continued from page 31

outwardly at least, from the Teke float bowl carb. Our test machine was equipped with a long chromed, exhaust that exits under the seat—right under the seat. It needs to be extended by about four or five inches to avoid the possibility of "hot pants".

Transmission is direct. That is to say, there is a centrifugal clutch on the PTO and there is a final drive chain that runs back to a rear sprocket on the same side. The clutch is of a make we have never seen before, probably Italian. The friction material in the clutch is one piece, instead of the usual three piece shoes most domestic clutches use. We don't know if the clutch was ever properly attached to the power-take-off shaft but, when prying around, we found it wasn't for our testing. It appears that the bolt holding the clutch in the tapped end of the shaft had come adrift. Only about half the width of the shoe was in contact with the drum.

Considering this condition, the clutch worked reasonably well. However, it had an almost impossible task to perform. The gear ratio was so high, around 4:1, that it was a wonder the machine moved at all, even if the clutch had been attached properly. To make this machine a viable proposition the gear ratio should have been no taller than 7:1. This, we are sure will be changed in production models since it is merely a matter of rearranging the number of sprocket teeth.

The chain, too, was unusual. Normally we are not in favor of No. 35 chain for mini-bikes but the chain on the Italjet had the saving grace that it had roller bearings. The No. 35 chain that you still find, sometimes, in mini-bikes is usually without rollers and this means rapid wearing. The chain may be able to handle the modest power of our test machine but we wish it had been a little heavier.

One of the nice things about the Italjet Mark I is its light weight. When we were unloading it, ready for the test, one of our young riders braced himself for the load he had come to expect from our test machines. He was surprised to find that he could heft it around with no trouble.

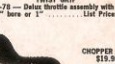
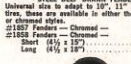
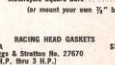
The same thing applied on the trail. The light weight, combined with the larger diameter tires and good front-end trail, produced a feeling that the machine could do almost anything. Unfortunately, the engine didn't feel the same way. Of course, that badly installed

clutch might have had something to do with it but the basic cause, we felt, was the under-powering of the machine.

On talking this over with the Speed Center people we were told that the four horse engine would be standard and that a three horse engine would be offered as an option. As a bonus we were told that the price for the four horse engine machine would remain the same and the cost of the three horse jobbie would be slightly less. Nice guys!

Since we feel that the four horse Tecumseh/Aspera engine is in a different league from the 3 1/2 hp engine, the difference in performance will probably be noticeable. And with the smaller engine, the Italjet will be everything a lower-priced machine should be, not too spirited but with excellent handling characteristics.

Although domestic manufacturers will wince at the thought of another competitor from overseas, they are receiving some incentives to do as well from the 10 per cent surcharge on imports. If the Italjet Mark I makes it on the market place, it will be in spite of this extra charge and that must mean something. What it probably means is that this machine is most of the things that a middle-priced mini-bike should be. □

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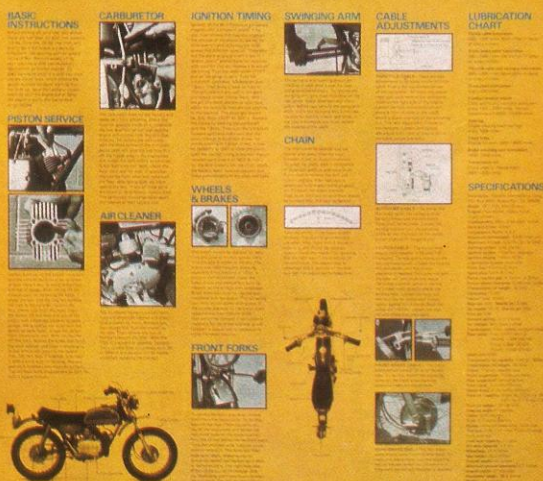
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THE REAL MACHINES



MINI-ENDURO. This mini-cycle looks and acts like its big brother! 65cc, 2-stroke with 4 speed foot shift transmission. 14" spoked wheels. Motocross handlebars, fenders and exhaust. Knobby tires to take you over anything! Heavy duty rear shocks and Marzocchi forks. Complete lighting, horn and speedometer. Street legal.*

DYNAMO II. The famous Dynamo series is now better than ever! Powerful on or off the road, this mini-cycle is the real thing! 65cc, 4-speed engine with foot shift transmission. 10" knobbys and skid plate. Complete lighting, speedometer and horn. Lots of built in exclusive safety features! Street legal.*

WOODS II. Same as above without lights, speedometer or horn.

COMPACT II. Same as Dynamo II with street tires and no skid plate.

HURRICANE. 65cc. Here's a real miniaturized motorcycle that's engineered for super-easy operation. Gas and brakes are the only controls. 7" knobby tires provide a soft ride. Folding handlebars and retractable luggage rack let you take it with you for fun anywhere you go! The big, comfortable saddle is designed for easy riding. All the famous Benelli safety features are included and the complete lighting, horn and speedometer make the Hurricane street legal.*

VOLCANO. 180cc's of brute power! World's most powerful mini-cycle that's only mini in size! 4-speed engine with foot shift transmission. Hydraulic Marzocchi forks. High ground clearance. Folding handlebars and retractable luggage rack. Easily carries 2 adults and all their gear! Complete lighting, horn and speedometer. You've got to try the Volcano to see what a mini-cycle can really do. Street legal.*

BUZZER. The little brother of the Benelli line of Real Machines! 65cc's of miniaturized motorcycle. This one has an automatic clutch and transmission. Just climb on-and go! This little beauty folds down to suitcase size. Put it in the trunk of your car and take it anywhere. Instant fun and excitement! Kick starter, lights, horn and speedometer. Street legal.*

BUZZER JR. The same machine without lights, horn or speedometer.



*Street legal in most states. Check local regulations.

Benelli

ALL MINI-CYCLES ALSO AVAILABLE IN CANADA

SOLE U.S. IMPORTERS: **COSMOPOLITAN MOTORS INC. / HATBORO, PA. 19040**

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Check Out Our YouTube Channel for some great mini bike videos!

https://www.youtube.com/channel/UCSfQbGyWgUKm9OTIUyzYvKQ?view_as=subscriber

Sarah's first ride on a mini bike (Honda QA50) with a transmission

<https://www.youtube.com/watch?v=RiHh-Obvtg>

Build Your Own Mini Bike Video...

<https://www.youtube.com/watch?v=lr9M3GCQF-U&t=225s>



COMPLETE VINTAGE PLANS HOW TO BUILD A MINI BIKE PLUS.. "RUTTMAN MINI BIKE STYLE PLANS"

<http://www.allaboutminibikes.com/vintage-mini-bike-plans.html>

Original Plans from "Boy's Life Magazine" 40 years ago.

You might have to explain to a young person what this is. But if you grew up in the 1950s, '60s, or 70s – you saw this exact Mini Bike all over America. It was frequently constructed by kids working with their Dad. It usually had a lawnmower motor on the Mini Bike and made a lot of noise as it screamed down the block. But it was COOL!

I did some research back in the 1990s and actually found the guy who created these plans. These exact plans were the ones sold in Boy's Life Magazine for 40 years. Yes, THIS is the Mini Bike you remember seeing and loving as a kid.

Please take a moment to look at the image up close. You can get a good idea of how this is built. It wouldn't be much work to make one of your own, especially when you have the FULL ORIGINAL PLANS.

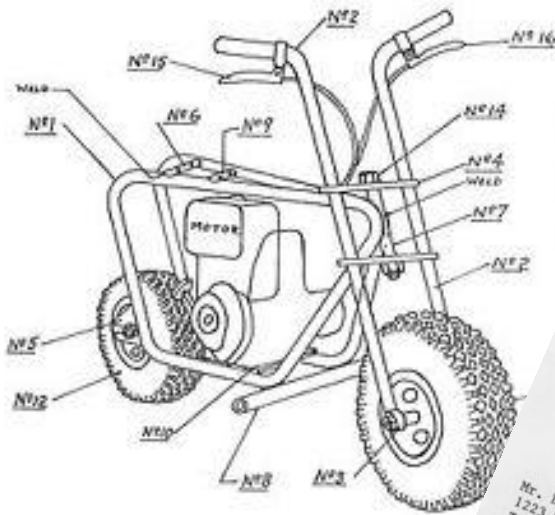
You can modify the plans to the size you want just like we did on the pictured MiniBike!

Take a trip back in time. Or simply share an important part of Americana with your kids or grand kids. Back when having a Mini Bike was the most fun a kid could have.

ORDER YOURS NOW!

PDF Download **PLANS ONLY - NO PARTS INCLUDED!**

MINI VEHICLE PLANS
P.O. BOX 687, CHAZY, N.Y. 12021
MINI-BIKE
Plan No. 1



VINTAGE JB RACING AD FROM 1974

Popular 1970's Ad From MiniCycle Magazine

This is a clean copy of the JB Racers ad that was in the Aug/September 1974 MiniCycle magazine, NOT the original, ad copy. It was an ad that was two pages when you opened up the magazine. I had the center crease photo shopped color filled in because the original ad is on two pages. Suitable for framing. Would look great in your den or garage. Ad will be shipped in a tube so there will NOT be a fold. P.S. THE WATERMARK IS NOT ON THE COPY YOU WILL RECEIVE. Thank you, Dan. <http://www.allaboutminibikes.com/jb-racer-ad.html>

INTRODUCING THE

RACE READY, TRACK & DYNO PROVEN
J&B Racers are based on three of Honda's best...the CR-125; the XR-75; and the MR-50. But, aside from their excellent handling characteristics, the J&B Racers have little in common with the stock machines.
In the J&B Racer line-up there are two versions of the CR...a 125cc and a 100cc. The XR comes in four versions...a 60cc, a 75cc, an 80cc and a 100cc. Our Junior Mini-cycle, the MR, is a 50cc screamer.
The J&B Racers are not toys. They are full-house racing machines, track-developed by the J&B racing team (Brad Dutoit, Jeff Ward, Dave Carlson and Brian Myerscough) and dyno-refined by the J&B tech crew. With the right rider, J&B Racers are winning machines. The record proves it.

JB racers

FROM J&B RACING EQUIP, 5041 West Vermont Ave., Glendale, Arizona 85301. (602) 931-9235
Dealer inquiries invited

All About Mini Bikes

J&B ELSINORE 100cc & 125cc

J&B XR 60cc, 75cc, 80cc & 100cc

J&B MR 50cc JUNIOR MINI-CYCLE