

WPS
34355

HONDA MX SECRETS REVEALED!!

**DIRT
BIKE**

DIRT BIKE

HARD-HITTING YAMAHA YZ125K

JUNE 1983

\$1.75

UK £1.10



**SUZUKI RM250:
FROM MILD TO WILD
FOR ONLY \$45**

**HONDA XR350R:
LESS FAT - MORE SNAP**

**3-WHEEL SHOOTOUT:
HONDA vs. SUZUKI**

KX500: BIG & MEAN



**WIN!
"BARNETT
BOMBER"
SUZUKI RM
pg. 55**

ISSN0364-1546

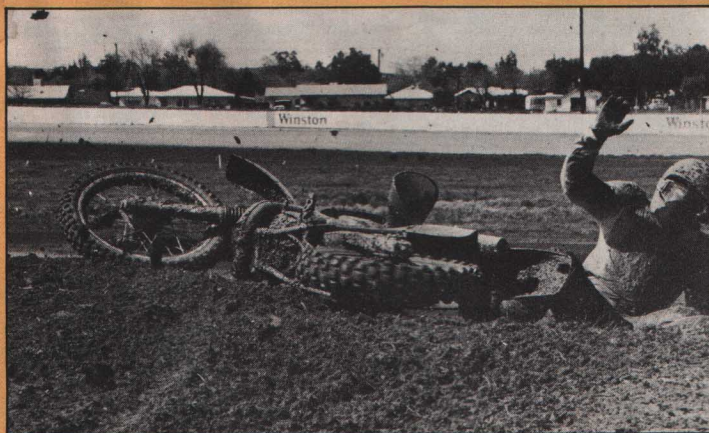




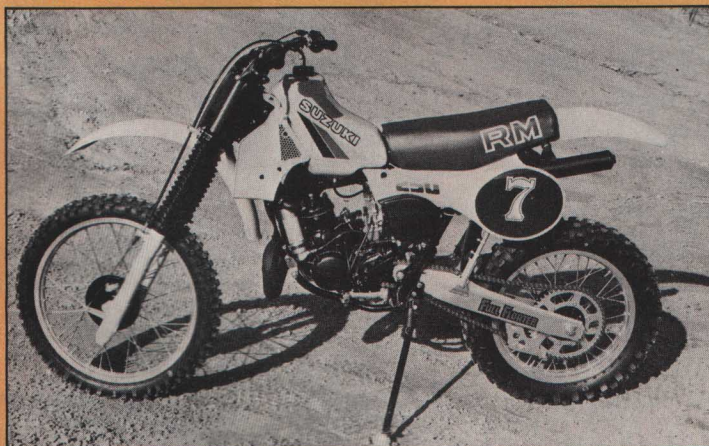
KAWASAKI KX500



HONDA XR350R



VIEWFINDERS



SUZUKI RM250



ATC vs. ALT



YAMAHA YZ125

TESTS

- 20 HONDA XR350R**
A truly competitive four-stroke?
- 26 KAWASAKI KX500**
The monster returns to Team Green
- 38 YAMAHA YZ125**
Carved, chopped and full of technology
- 56 SUZUKI RM250D**
Second time around
- 62 HONDA ATC70 vs. SUZUKI ALT50**
Entry-level three-wheelers get the acid test

FEATURES

- 32 PRODUCT EVALUATION**
Performance Products' Programmable computer
- 34 ON THE BEACH**
300,000 spectators at bizarre French race
- 46 PRODUCT EVALUATION**
Kal-Gard Assembly Lube

TECHNICAL

- 48 125, 250 AND 480 HONDA MODS**
CR tips and tricks

COMPETITION

- 52 15th ANNUAL VIEWFINDERS GP**
2,000 racers at Riverside

DEPARTMENTS

- 7 FROM THE SADDLE**
Good news, bad news
- 8 LAST OVER**
Shoot the moon
- 10 BITS AND PIECES**
Bits of nonsense—
some of it might be true
- 14 MR. KNOW-IT-ALL**
Talbot teachings
- 16 RIDERS WRITE**
Missives from the masses
- 18 NEW PRODUCTS**
Must-haves for the masses
- 74 CRASH & BURN**
Ugly pick and peel

ON THE COVER:—
Gentleman Jim Holley takes to the skies once more. Startled birds immediately left the area.
INSET:— Tom Webb skids the KX500 through a loamy Dunes turn. Both photos were taken by the well-built but obviously malnourished Paul Clipper. Color separation by Valley Film.

DIRT BIKE Magazine, ISSN 0364-1546 (June '83) is published monthly by Daisy/Hi-Torque Publishing Co., Inc., with editorial offices at 10600 Sepulveda Blvd., Mission Hills, California 91345. Subscriptions \$14.98 for 12 issues (one year). Foreign subscriptions add \$5 per year and Canada \$4 per year for additional postage. Copyright ©1983 by Daisy/Hi-Torque Publishing Co., Inc. All rights reserved. Nothing in this magazine may be reprinted in whole or in part without the express permission of the publisher. **CONTRIBUTORS:** Photographic submissions must be 5x7 or 8x10 glossy black and white, or 35mm and larger color slides. Please mark each photo with owner's name and address. Manuscripts should be typewritten. Unsolicited contributors must be accompanied by a stamped, self-addressed envelope. Unless special arrangements are made in advance, all published material becomes the sole property of Daisy/Hi-Torque Publishing Co., Inc. The publisher does not assume responsibility for unsolicited material. Second-class postage paid at Van Nuys, California 91408, and at additional offices. **DIRT BIKE**, P.O. Box 9502, Mission Hills, California 91345-9502.



YAMAHA
YZ125K

HIGH TECHNOLOGY

*Slimmed down,
smoothed up
& sleek*

By the Staff of DIRT BIKE

The 125 motocrossers make up the most hotly contested class, not just on the track, but also on the drawing boards. In no other class will you find the same degree of technology used to extract the maximum from such small engines and spindly frames. Radical changes are the rule in this class, and we're used to seeing completely different bikes competing for the top spot each year.

"New Technology" should be the YZ125's middle name. This year marks the third year in a row that we have seen a new rear suspension system make its debut, along with a host of other changes, mostly in the interest of saving weight.

Why? Because Yamaha wants to be on top again, pure and simple. The YZ125 was the 125 shootout winner in 1980; it fell to second in 1981, behind the RM125; and last year it once again finished in the second-place slot, tied with the CR, both taking a back seat to the RM.

We'll tell you right now, Yamaha does not like to be second. The YZ125K is a confirmation of that sentiment. The big changes include a huge weight reduction, more engine mods and a brand-new chassis. How does it all add up? Read on and learn.

WHAT'S NEW?

First, and perhaps most important, the radiator has been moved from the steering head to down on the frame backbone, where it belongs. Surely we don't have to explain why this is one of the best things that could ever have happened to the YZ.

The rear suspension is completely new. The monoshock has a 26mm shorter stroke, a 4mm smaller rod diameter, and a 58mm shorter overall length—changes made to increase oil capacity and reduce overall weight. The 25-position rebound and 15-position compression damping adjustments are standard.



With a gallon of gas in the tank, the YZ tips the scales at just under 200 pounds, making radical skyshots a breeze.

"YPVS" is no longer engraved in the head of the new, smaller cylinder, although the Power Valve system is still in use. The pivot system, we are told, has been beefed up to resist the bending problem of last year's bike. The timing of the system has been changed, and the linkage cover is now plastic rather than aluminum. Numerous other minor details in the engine have been changed for lighter weight and greater reliability.

A new airbox has been installed, in order to fit around the rear suspension, and the filter is now common to the entire YZ lineup.

The frame and forks also reflect many changes. The forks now use a spring-loaded blow-off valve in the compression circuit, and high-tensile, thin-wall tubing has been used for a stronger, lighter frame. The steering head angle was increased from 27.5 degrees to 28 degrees ten minutes, in an effort to reduce headshake and allow the front end to work with the revised weight distribution.

And, speaking of weight, we're looking at a serious weight loss of over ten pounds. The indescribably accurate *DB* scales (precise to plus or minus .00173 swigs per blintzes on the ascending scale) reveal that the YZ weighs in at 193 pounds wet, with no fuel in the tank. For you trivia fans, that is exactly one half pound more than the Honda CR125, the lightest 125 motocrosser we've tested yet this year.

HORSEPOWER

The changes in the Power Valve system can be immediately felt in the powerband. The K model comes on stronger earlier than last year's J model. There still is not a whole lot of low-end power, but it is widely agreed that low-end power is more of a hindrance than a help to a 125 rider. Rather, the mid-range comes into play sooner, and the serious power starts to build at least a thousand rpm sooner than last year's engine.

The mid-range does not come on in a huge rush. On first impression, the YZ actually seemed to feel slow, but the first drag



Team O'Neal rider Jim Holley demonstrates the mid-range roosting out of a sandy turn.

race told the tale. The YPVS holds the rush back just enough to keep the rear wheel hooking up, and once the top end comes into play, it's "see ya, Freddie" time. This engine literally screams. If the start of your local track uses all six gears plus a few deep breaths into the first turn, you will be hard pressed to miss the holeshot on the YZ. It will snake a CR125 in the mid-range, while staying with the KX125.

If the tracks you ride are long and fast with a minimum of tight turns, you may like the YZ just as it comes delivered. But, if you need to use the lower gears to cut and thrust your way around a tight track, you will be much happier once you lower the gearing somewhat. We would suggest the use of a 50-tooth sprocket on the rear end, rather than the stock 48. This modification makes the YZ much more rideable in the tight stuff, while putting the top end on a dead heat with the KX125.

Aside from the final gearing, the overall gearing is fine for just about any situation. First gear is just low enough to make clutch slippage unnecessary, and the upper five gears follow without any annoying gaps or tall spots in the range. If you are coming from any other bike, the clutch may feel a little "lightswitchy," meaning there isn't a whole lot of progression in the lever throw, but the clutch itself is strong and very resistant to abuse.

KEEP YOUR VALVE HAPPY

By now, we all should know what the YPVS does for a living. A centrifugal advance mechanism pushes a series of levers that raise and lower the pivoting "top" of the exhaust port. In order for such a complicated piece of machinery to function reliably, it is going to need at least a little care and feeding. Keep the linkage cover plate on and the linkage clean and lubed with a light spray oil. Don't be afraid to change the transmission oil often. This little bit of care alone should help to keep the linkage mechanism in proper working order.

The actual valve itself is another story. It's hard to believe that something living in the exhaust port can survive under all the abuse it's going to receive. But it does. You



Airborne antics are no problem on the lightweight YZ.

should help it along by keeping it as clean as possible. The best way to do this is to *not* use a castor-based oil in the gas. Castor oils are very gummy and sticky—although they do a really good job of lubing things—and the gumminess can slow down the action of the Power Valve, adversely affecting the power.

Plan to pull out the Power Valve after every few races, clean it up, and put it back in, per the instructions in the owner's manual. Doing so will ward off many problems. If you must use castor-based oils, plan on cleaning the valve after every race weekend.

SUSPENSION

The new Monocross suspension system is a real improvement over last year's design. It uses two separate links, one forged aluminum, one forged iron, to achieve its rising rate. All four pivot points have grease fittings installed for easy maintenance. The entire assembly weighs

two pounds less than the old design, and the center of gravity has been lowered dramatically.

So much for the tech description; how does it work? Well...it works fine, more or less. It is much better than last year's system, although in stock trim it is difficult to adjust for all types of track conditions. Fiddling with the preload, compression damping and rebound damping, you can set up the YZ to soak up the small ripple bumps or absorb the giant crushers. But, it is hard to dial it in for both at the same time.

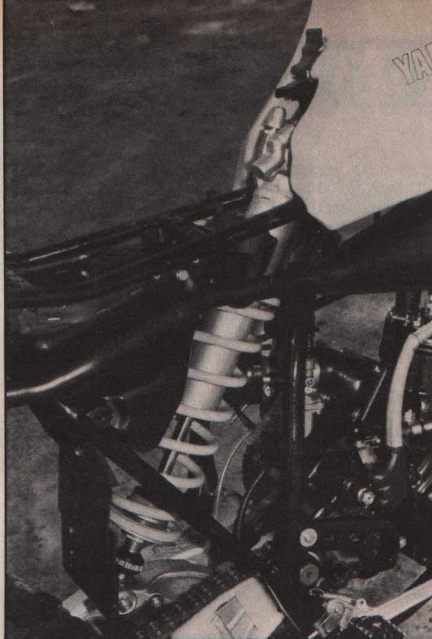
Our problems with this may be traced to the fact that all our testers are in the above-160-pound weight class, and for us, the stock spring is just a tad too soft—meaning that we have to increase the spring preload to preserve the handling, which throws off the spring rate for the rest of the stroke. To heavyweight riders, we would suggest setting up the bike with the

YAMAHA YZ125K

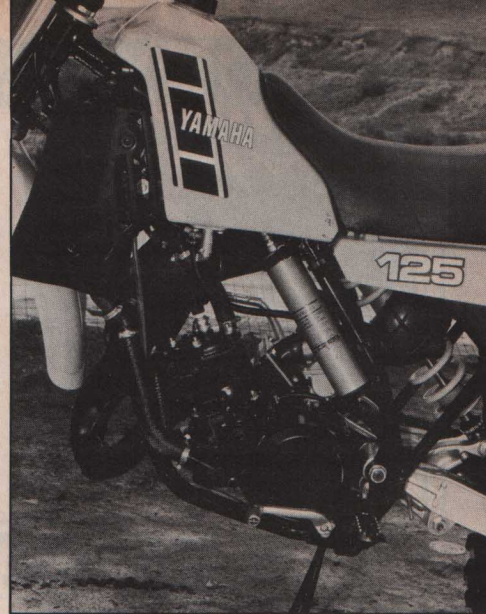
stiffer accessory spring available from Yamaha. This would give you a lower initial preload setting for the small stuff and the full rate of the spring for the giant whoops.

Once dialed in, the rear-end action is very good. The YZ does not have a *plush* rear end, like the CR125. It is comfortable, but not cushy. The overall feeling is taut, very businesslike. We were happiest with the compression damping set at five clicks out, and the rebound damping at 12—two clicks higher than stock.

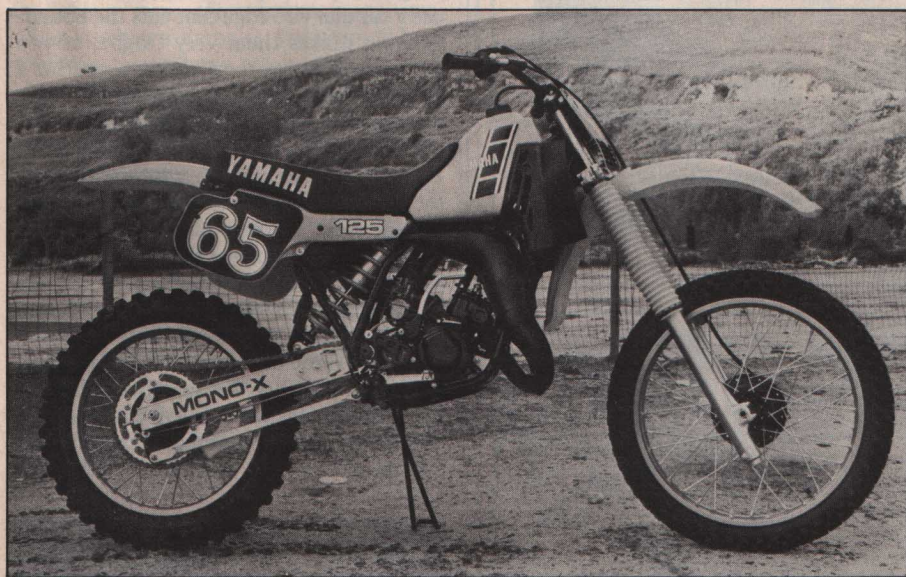
The forks provide a contrast to the rear end, in that they are the picture of simplicity. There are no damping adjustments available, as with the rest of the bikes in this class, and frankly, we never missed them. Yamaha forks are the standard by which all other forks have been judged in the past, and these latest forks are no exception to the reputation. They soak up any



The new monoshock sits lower than it ever has before, keeping the C.G. down. Compression knob is at top, rebound at bottom.



The YZ125K engine is still chockablock with plumbing and doodads, but every spare ounce of metal has been shaved away. Result? A weight of 193 pounds with an empty tank.



YAMAHA YZ125K

ENGINE TYPE	Reed valve, liquid-cooled, 2-stroke
BORE AND STROKE	56mm x 50mm
DISPLACEMENT	123cc
CARBURETION	34mm Mikuni
FACTORY RECOMMENDED JETTING:	
MAIN JET	280
NEEDLE JET	Q-0
JET NEEDLE	6F21-3
PILOT JET	.60
SLIDE NUMBER	2.5
RECOMMENDED GASOLINE	Premium
FUEL TANK CAPACITY	7.0 L (1.8 gals.)
FUEL TANK MATERIAL	Plastic
LUBRICATION	Pre-mix
RECOMMENDED OIL	Yamalube at 24:1
OIL CAPACITY, TRANS.	.085 L (0.89 qt.)
AIR FILTRATION	Oiled foam
CLUTCH TYPE	Wet, multi-plate
TRANSMISSION	6-speed
GEARBOX RATIOS:	
1	2.46:1
2	1.857:1
3	1.500:1
4	1.250:1
5	1.105:1
6	1.000:1
GEARING, FRONT/REAR	12/48
IGNITION	CDI
PRIMARY KICK SYSTEM?	Yes
RECOMMENDED SPARK PLUG	ND W29ES-GU
SILENCER/SPARK ARRESTER	Yes/no

EXHAUST SYSTEM	Up-pipe, right side
FRAME, TYPE	Double cradle
WHEELBASE	1450mm (57.08 in.)
GROUND CLEARANCE	350mm (13.7 in.)
SEAT HEIGHT	940mm (37.0 in.)
STEERING HEAD ANGLE (RAKE)	28° 10 min.
TRAIL	121mm (4.76 in.)
WET WEIGHT, NO FUEL	193 lbs.
RIM MATERIAL	Aluminum alloy
TIRE SIZE AND TYPE:	
FRONT	3.00 x 21 Bridgestone M33
REAR	4.25 x 18 Bridgestone M32
SUSPENSION, TYPE AND TRAVEL:	
FRONT	38mm Kayaba air/spring forks, 300mm (11.8 in.)
REAR	Yamaha Mono-X, adj. rebound and comp. damping, 310mm (12.2 in.)
INTENDED USE	
COUNTRY OF ORIGIN	Japan
RETAIL PRICE, APPROX.	\$1769
DISTRIBUTOR:	
Yamaha Motor Corp.	
6555 Katella Ave.	
Cypress, CA90670	
PARTS PRICES, HIGH-WEAR ITEMS:	
PISTON ASSEMBLY, COMPLETE	\$42.30
RINGS ONLY	5.70
CYLINDER	110.50
SHIFT LEVER	20.60
BRAKE PEDAL	14.50
FRONT SPROCKET	6.80

type of terrain with no ill feedback whatsoever, and during the test they received no complaints, only praise.

HANDLING

Lowering the shock and radiators and going on a diet were the best things that could have happened to the YZ. The K model is much more predictable in the turns, and far easier to handle over rough ground. The YZ loves to be thrown into turns with wild abandon, although it prefers a berm, if there's one available. On a flat, bermless corner, it has a slight tendency to wander around, demanding more attention from the rider, but this trait can easily be blamed on the stock tires. The Bridgestone M33/M32 combination works okay, but overall they leave a little to be desired. A good set of tires—Dunlops, or, of course, Metzlers—will allow the Yamaha to handle as well as any bike made.

Stopping is just as important as starting, and the YZ's brakes are up to the job. No complaints about the rear, and if there weren't better units available, we would also be raving about the front. The better units we're talking about are, of course, the latest crop of disc brakes turning up in this class. If you had a race between a YZ and KX to see which could dive into a turn harder, we would bet the KX would win. The YZ brake is good, but a disc brake is better.

For anyone who would like to use the double-leading shoe setup found on the 250 and 490, we offer this little gem of wisdom: All of the YZ front hubs are the same, which means that the double-leading shoe backing plate will fit right in the 125 hub.

BITS AND PIECES

One feature of the YZ that we must rave about are the excellent manuals that come with the bike. The *Owner's Manual* and the *Race Preparation and Tuning* manual contain just about everything you could ever want to know about working on the YZ,

When you're talking #1... You're talking Hannah!



BOB HANNAH

I got my first pair of Hi-Point's right after I got my first bike. That was a long time ago. The reasons I wore them then, are the reasons I wear them now. They fit better, feel better and protect me better than anything else.

A few years ago I wore other boots that I felt offered special advantages that were not available in leather. Those advantages were discussed with Hi-Point and they went to work. After a lot of conversation and testing, they solved the problem. I've been wearing Hi-Point's ever since. The new Hi-Point's delivered everything I was looking for and more. A larger stiffer steel insert was built into the sole. Coming of big jumps, that insert made all the difference, spreading the impact throughout a much larger area of my foot.

**When you're talking
Boots . . . You're talking**

The new latches allowed me to tighten up the boots as securely as I wanted, especially around my ankles. The special built-in fiber inserts give me all the protection of a plastic boot, without the robot feel.

I take my equipment and racing serious and the advantages of Hi-Point boots are the reason I wear 'em. I recommend them if you're looking for the best in boot technology.

**Latch 'em up at your Hi-Point
Racing Products dealer**

**Available in Red,
Blue or Black**

**"HURRICANE"
RACING POSTER**
4 full color posters of
"Hurricane" and 3 other
stars. Send \$2.50 to
"Hurricane", 3709 West
Erie Ave., Lorain, OH
44053



Hi-Point
Racing
USA

YAMAHA YZ125K

along with many hot tips on setting up the bike. For the serious racer, these books are worth their weight in gold, much like the magazine you now hold in your hands.

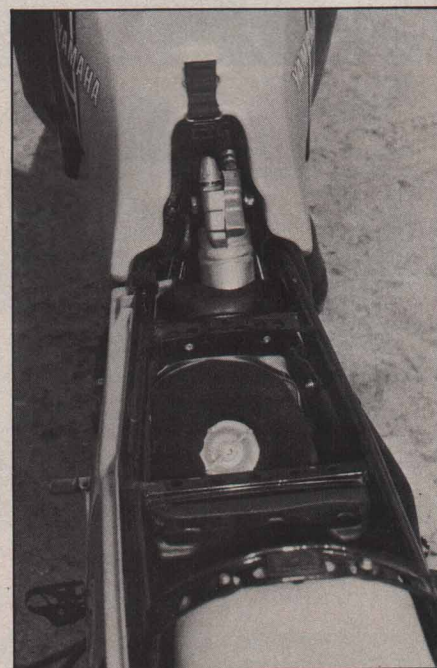
The handlebars, however, are not so hot. All of our testers complained that they were too high, promoting the "sit up and beg" seating position. Go with a set of bars with a lower rise and the bike will be much more comfortable. Leave the stock grips on the old bars, and you will find nirvana.

Unlike most of the other single-shock bikes, it is extremely easy to get to the preload adjustment on the YZ. You needn't remove side panels or pound on rings with a hammer and drive pin. Just put the wrenches on it and adjust. Four stars.

Talk about weight savings. By redesigning the rear hub and using a new-style rim, Yamaha managed to save 3.7 pounds on the rear wheel alone. That's all unsprung weight, boy! The problem is, the new rims use a tubular rim edge that cuts the poundage, yet makes them very fragile. If you don't bend a rim the first time you hit a rock, consider yourself very lucky. Light weight does have its disadvantages.

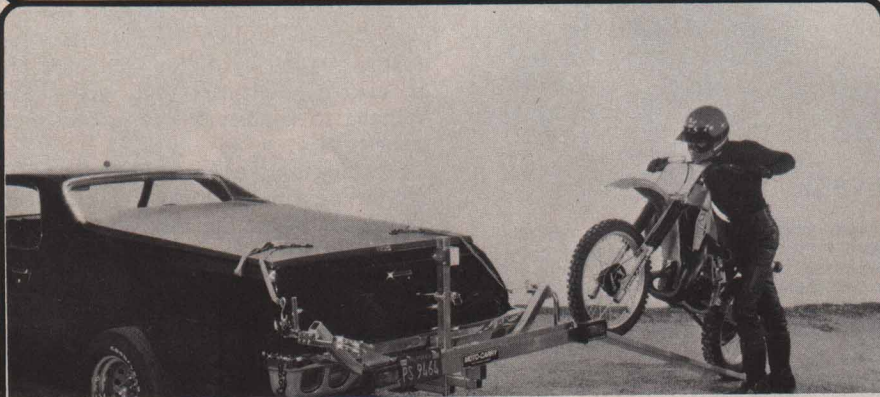
Getting at the air filter is a snap this year. Pull off the seat and it's right there. Handy. Just like the front hubs, all the seats are the same throughout the YZ line.

Hot tip department: If you want to get out in front and stay there on a YZ, replace the 34mm carb with a 36mm Mikuni, change the rear sprocket to a 50-tooth, cut 5mm out of the headpipe and then weld the pipe back together. Instant rocketship, no lie. This is straight out of the Yamaha *Wrench Report*. Your dealer should have all the info if you want to hop up your "K."



Access to the airbox is gained by removing the seat. Plenty of room around the filter makes it easy to get in and out.

MOTO-CARRY™



MOTO-CARRY HITCH MOUNTED CARRIERS FEATURE:

- Quick installation using a single 2" sq. trailer hitch receiver
- Full sized dirt bikes carried safely
- Motorcycle and carrier stabilized to prevent movement
- Model #300 rated for use on unimproved roads
- Model #330 installs easily and uses self-storing ramp
- Design engineered for safety, convenience, and long life with 2 year warranty

For free brochure and ordering information contact:

Model #300 - \$199

Model #330 - \$249

YSS
YOUNG
SPORTS
SYSTEMS
INCORPORATED

1030 Duane Avenue
Santa Clara, Ca. 95050
(408) 727-8211

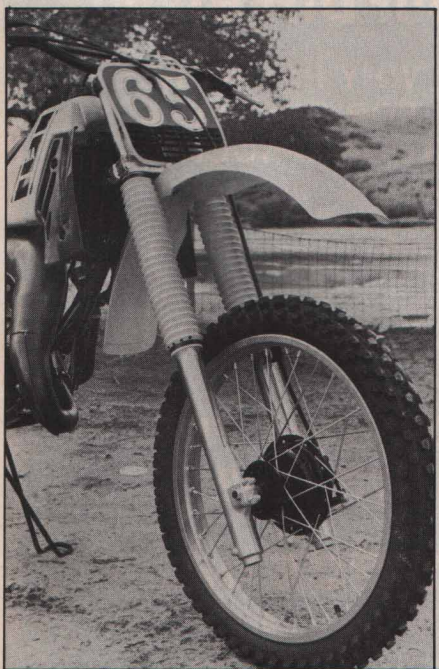


If the YZ ever tried to get out of shape, Jim found it a simple job to just muscle it back in line.

FINISH LINE

Which brings up one last point in the Yamaha's favor: They have a lot of support. Yamaha USA puts out the *Wrench Report* as often as needed to tell you the latest hot setup for your bike, and for some reason, all types of hop-up materials are available from aftermarket suppliers. When you buy a Yamaha, you seem to buy your way into a huge, supportive family, which is a pretty good deal by anybody's standards. You never know when you might want to add a little boost to your bike, and with the YZ, you'll have no problem finding the parts.

But, you may never have such a desire. In stock trim, the YZ125 is a darn good machine—the rear shock may have a quirk or two, but the bike is capable of winning, and that's what this whole game's about. We won't be naming the top dog in the 125 class until we get to the annual 125 shoot-out in the August issue, but we'll tell you this much—the YZ will be right up with the heavy fighting. There's no doubt about it. □



Yamaha forks are still the standard of the industry. YZ front brake is good, but disc brakes are better.

AROUND THE WORLD

Your ticket to the zoot-capri, full-size, full-color, globe-trotting, custom-busting, visa-getting, passport-stamping, full-race Foreign Sticker Kit. The hottest stickers from Japan, England, Germany, France, Finland, Austria and any point north and south that you could ever find. Imagine what it would cost to fly all over the world to collect these rare stickers. We're saving you plane fare with this HOT TICKET!



FOREIGN STICKER KIT

ACTUAL STICKERS ARE LARGER THAN PICTURED

FOREIGN STICKER KIT

I'm saving money by buying directly from you rather than flying around the world.

Enclosed is a check for \$ _____

Send me the stickers circled below:

E1 E2 E3 E4 E5 E6 E8 E9 E10 E11

E12 E13 E14 E15 E16 E17 E18 E19 E20

PLUS PRODUCTS • Dept. S • P.O. Box 9501 • Mission Hills, CA • 91345-9501

Stickers are 75 cents plus 25 cents postage and handling each.

Get the entire FOREIGN STICKER KIT (19 stickers in all) for only \$7.50 plus \$1.50 postage and handling.

NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

California residents please add 6 1/2% for state tax.

AROUND THE WORLD