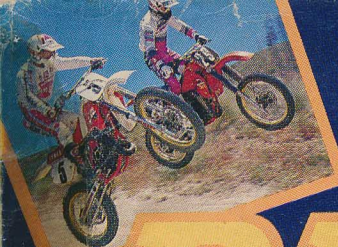


# 125 SHOOTOUT: HOT AERIAL DOGFIGHT FOR #1



DIRT BIKE

JULY 1986

WPS 34355

\$2.00  
UK £1.60

# DIRT BIKE

**WHICH BIKE HAS THE RIGHT STUFF?**  
PAGE 24



F-14 TOMCAT

SUZUKI RM125

KAWASAKI KX125

YAMAHA YZ125

HONDA CR125

**HI-PERFORMANCE HOP-UPS:**  
XR250, CR250 & KTM 250  
VISIT DB'S GO-FAST FACTORY!

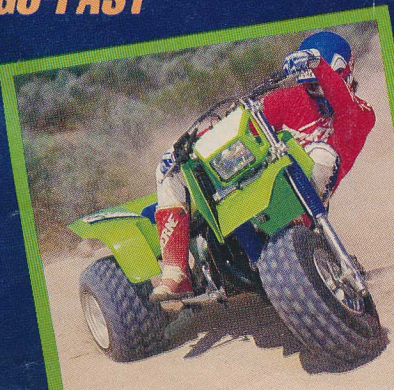
**GIANT MX BOOT SHOWDOWN:**  
EVERYTHING YOU NEED TO KNOW ABOUT THE TOP 24 BOOTS!



**KXT250: MEAN GREEN ATV KING?**

**YZ80: GO TO THE HEAD OF THE PACK!**

**MINI BUYER'S GUIDE - PART 3: ALL OF THE HOTTEST GEAR IN YOUR SIZE ONLY!!**



ISSN 0984-1546



# DIRT BIKE

JULY 1986

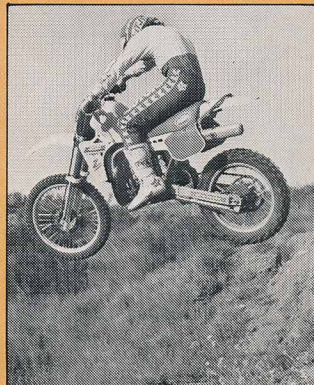
VOLUME 16, NO. 7



HANGTOWN



XR250 HOP-UP



KTM 250MXC



HONDA XL250



RJ REPLICA



125 SHOOTOUT



YZ80



KXT250

**DIRT BIKE** Magazine, ISSN 0364-1546 (July '86) is published by Daisy/Hi-Torque Publishing Company, Inc., with editorial offices at 10600 Sepulveda Boulevard, Mission Hills, California 91345. Subscriptions \$14.98 for 12 issues (one year). Canada add \$4 per year, and all other foreign add \$5 per year for additional postage. Copyright © 1986 by Daisy/Hi-Torque Publishing Company, Inc. All rights reserved. Nothing in this magazine may be reprinted in whole or in part, by mimeograph or any other means, 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 contributions, manuscripts, photographs and illustrations 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 Company, Inc. The publisher does not assume responsibility for unsolicited material. Second class postage paid at San Fernando, California 91340, and at additional mailing offices. POSTMASTER: Send address changes to **DIRT BIKE** Magazine, P.O. Box 9502, Mission Hills, California 91345-9502.

## TESTS

### 22 YAMAHA YZ80

The last of the Big Four's minis takes the stand

### 24 125 MOTOCROSS SHOOTOUT

We fly Japan's hottest 125 MX fighters

### 44 HONDA XL250

Is it the ultimate commuter 'crosser?

### 60 KAWASAKI KXT250 TECATE

Jolly green dune shredder

### 64 KTM 250MXC

Why this *could* be the ultimate off-road 250

## COMPETITION

### 36 AMA NATIONAL HARE SCRAMBLES

Shasta Dam shocker

### 48 HANGTOWN!

Aerial warfare over Sacramento

## FEATURES

### 20 DIRT BIKE'S BOOT BUYER'S GUIDE

Forty-eight feet can't be wrong

### 42 HOW TO RIDE

Getting across those off-road obstacles

### 47 PRODUCT EVALUATION

KEW pressure washer

### 56 MINICYCLE BUYER'S GUIDE, PART III

The final chapter

## TECHNICAL

### 33 HONDA XR250 HOP-UP

The White Bros. woods rocket gets the test

### 53 HONDA CR250 HOP-UP

How to build a Rick Johnson Replica

### 71 KTM 250MX HOP-UP

How to make a Honda rider miserable

## DEPARTMENTS

### 7 FROM THE SADDLE

Yet another true story

### 8 BITS AND PIECES

The world comes to the U.S.

### 12 RIDERS WRITE

No phone calls, please

### 18 MR. KNOW-IT-ALL

Larger than life and twice as ugly

### 62 HOW TO SUBSCRIBE

Less than the cost of a large pizza

### 74 NEW PRODUCTS

Things you didn't know you needed

### 82 CRASH & BURN

Tips from the world's premier C&B shutterbug

**ON THE COVER:** Official Team Dirt Bike test pilot LCDR John Wroblewski and the U.S. Navy's awesome F-14 back up the regular *Dirt Bike* wrecking crew and Japan's hottest 125 MX fighters. At 1400 mph, Lance Johnson and Steve Schmitz thought the stock jet was plenty fast, but Randy ("Which one's the bomb button?") Johnson said it could use a pipe for more top end. Mike Webb was quoted as saying, "Hey, when you gonna port this thing?" The in-flight 125 snapshots, Tom Webb's Tecate shredder and our boot shoot round things out. Photos by Fran Kuhn, cover design by DeWest and, as always, color seps provided by Valley Film. Special thanks to LCDR Don Lewis, LCDR Steve Duba, Chief Petty Officer Gary Rice and the United States Navy.

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



Our rear brake never gave a hint of trouble while testing above the snow line, but it overheated and failed miserably during the first loop of our enduro test. We tried bleeding the rear disc caliper between loops, only to discover that it's virtually impossible to reach the bleed bolt without completely removing the rear wheel.

# AUSTRIAN DIGITAL DISPLAY

Stopping just short of perfection

By the Staff of DIRT BIKE

**K**TM's 1986 250MXC is not the kind of bike that leaves a blank in the impression column. One ride on the machine left us not only impressed, but thoroughly confused, as well. Let's take a moment to clarify.

The Digital Control 250 mill pumps out enough voltage to juice a Third World nation for a week, but the machine's high-quality White Power suspension components need some serious attention before they'll deliver the kind of performance of which they're capable. In addition, there are a number of design flaws which need to be sorted out before the machine is ready for serious off-road warfare. But, all things considered, the motor itself is enough reason to pay the price of admission.

### DIGITAL POWER

First, let's do some talking about the DCI powerplant. What KTM has done is build one of the best motors ever for high-speed off-road work. The DCI motor is easy to start, carburets cleanly throughout the powerband, and produces nothing short of amazing thrust across a wide range. At low revs the engine feels almost electric, and while it's not exactly a trails bike, there's enough smooth, tractable power down there to allow the rider to finesse his way through delicate off-cambers or other limited-traction situations. Good stuff, but what follows is even better. The engine vaults from lower revs into a mid-range charge that is comparable to that of today's best 250 motocross-

ers—a smooth, powerful burst that allows the rider to loft the machine over the toughest terrain, rather than wallowing through at slower speeds. The engine is also willing to rev to the limits of sanity, but the stunning mid-range burst is the KTM's strongest attribute and the KTM rider's most effective weapon. In fact, if it wasn't for the powerplant's marginal shifting action, this motor would be close to being what we consider the perfect 250 cross-country engine.

### TRANSMISSION TRIVIA

For 1986, KTM altered the MXC's transmission ratios, tightening the spread a bit from that of the 1985 model. First gear is slightly higher than last year's cog, and the gap between fourth and fifth is a shade closer than before. When we first ran the bike, it felt as though there was too much of a gap between second and third gears, but once the machine was broken in and we started to push the machine harder, the ratios felt about right.

Our biggest complaint about the gearbox is sloppy upshifting—this is the same problem we've noticed with KTM's 250 MXer this year, but the MXC isn't quite as bad as the closed-course racer. The bike shifts well when the rider is fresh, but as soon as fatigue starts setting in, the missed shifts begin. The

lever throw is too long and upshifts demand a lot of concentration. Often, you'll have to lift your entire foot from the peg to get a clean shift, especially when you're sitting forward on the saddle or standing while negotiating a rough uphill. To make matters worse, the pull required on the clutch is enough to turn your left forearm into Silly Putty after about ten minutes on the trail. In addition, the copper-sintered clutch found on the MXC is impossible to completely disengage once it heats up—it's nothing terrible, but it does get annoying, and it makes finding neutral a difficult proposition. After a while, you get used to the proper shifting technique, but even then, there are always a few times when you miss the jump to the next higher gear.

### WHITE POWER WOES

In terms of quality, we can't knock KTM for their choice of White Power suspension components, but the suspension at both ends needs fine-tuning to be really effective. The main problem with the forks is a too-light spring rate—the stock coils are okay if you're not pushing through a lot of fast, rocky high-speed sections, but when the going gets rough, they're quickly pushed to their limits. Also, there's enough stiction from the fork seals to make the initial portion of the stroke unnecessarily harsh. We managed to blow one of the seals after a few hours of riding, and we replaced both with







## KTM 250MXC

updated units from KTM that allow more supple action. The action of the rear Pro-Lever suspension, as delivered from the factory, defies logic. The rear is harsh by any standards and hammers the rider unmercifully over choppy terrain and ledge-type whoops. Over smooth irregularities and under heavy braking, the overly stiff rear end pitches the bike into a serious headshake mode and causes the handlebar to twitch nervously when riding at higher speeds under partial throttle. The problem is too much compression damping, and setting the external adjustment knob on the lightest (number 1) position does little to alleviate the problem. The only solution is an internal revalving of the damping unit for less restriction during compression.

We delivered our 250 to Mark Zoller at Z Racing for a shock revalving and the installation of heavier fork springs before running the bike through the wringer at the Cal-Poly-sponsored Hi-Mountain Enduro. The Z mods (see sidebar) dramatically improved the riding comfort and the handling prowess of the machine. The bike's handling improved so much, in fact, that we'd have to say these mods are not only desirable, but essential for the rider who wants to exploit the machine's truly outstanding handling potential. Once the suspension is sorted out, the bike is capable of covering rough terrain at high speeds without a hint of the nervousness that plagues the machine in stock trim. It also becomes a remarkably good cornering machine, willing to clip through corners with surgical precision. The stock Metzeler rubber is no doubt helpful here.

The tires are above-average performers in dry, slick conditions, and their traction-delivering ability in mud and muck is nothing short of amazing.



**Plenty of power here:** The Digital Control engine pumps out mega ponies across a wide powerband. The 3.4 gallon tank only looks bulky—it never gets in the way when you're on the bike, and its massive capacity allows for a range of 80-plus off-road miles. One important note: Throw away the stock fuel line and replace it with a high-quality item before it falls off and leaves you stranded.

### PUTTING A STOP TO IT

We hate to say it, but once again, the biggest complaint we have about the KTM is the unpredictable performance of the brakes, particularly the rear disc unit. As anchors go, the front Brembo caliper is short on stopping power by any standard, though careful bleeding will help boost the unit's stoppability to an acceptable level. Without such close attention, a lot of pressure is needed at the lever to slow things down, and the feel is mushy. You can adapt to it, but you shouldn't have to on a bike of this caliber.

The performance of the rear brake is actually quite good, up to the point where heat buildup causes it to go away altogether. The KTM disc provides good stopping power and, more importantly, isn't as grabby or uncontrollable as the disc found on, say, Kawasaki's KX lineup. Strangely enough, we never encountered any sign of brake failure when riding the bike at high speeds over relatively open terrain. But long, grinding downhills will heat the unit enough to eliminate all stopping power until it cools down again. At least five minutes of high-



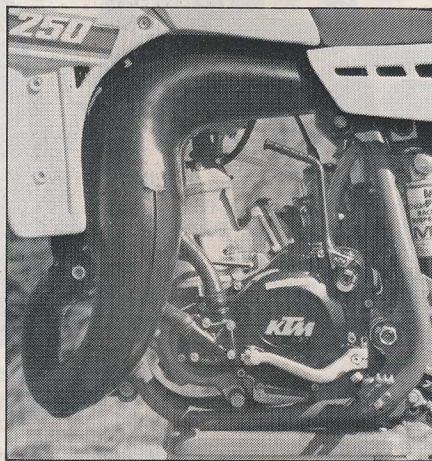
**After running the bike in stock trim for the first part of our test, we decided to see what Mark Zoller of Z Racing could do to improve the Katoom's performance (see KTM 250MX Hop-Up). The Z-Mods help in the motor department by boosting the 250's low-end punch, while the refined suspension action lets the machine tackle the ugliest terrain without a snivel.**

speed riding was usually required to bring pressure back to the pedal. Another problem is that the end of the engine mounting bolt just inside the tip of the brake pedal tends to catch the edge of the rider's boot when he is applying the binder. For safety we recommend that you replace the bolt with one that doesn't stick out as much.

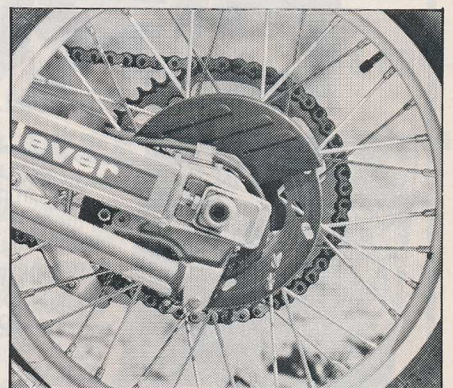
As for the cause of the rear brake dilemma, and the remedy for it, we talked to KTM factory rider Kevin Hines at the Hi-Mountain Event for the inside scoop. Kevin was running a new DCI 350MXC with a solid rear disc, and he had no problems with



**A too-soft spring rate and excessive compression damping hinder both straight-line stability and cornering. Once the White Power forks are dialed in, however, they're outstanding performers that allow the Austrian mount to corner with surgical precision.**

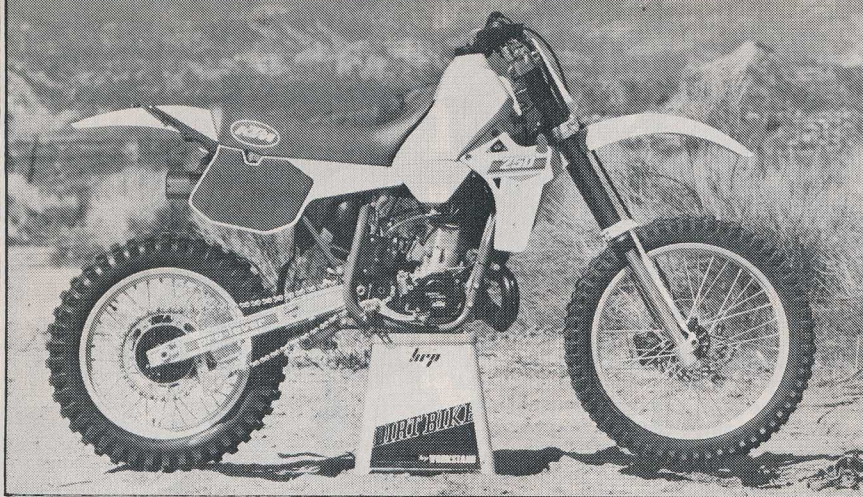


**While the MXC's exhaust system seems well tucked in, we managed to dent one and completely trash another in minor get-offs. The stock copper-sintered clutch is durable, but the unit needs lighter springs to reduce the mongo pull at the lever. Z Racing offers a replacement set that does the job, as well as a fiber clutch kit that eliminates the stock metal unit's grabbiness.**



**The big problem:** The KTM's rear disc brake is its weakest link. The unit works well when the bike is ridden fast across open terrain, but fails miserably when pushing through slow-speed sections that require heavy use of the binders. Heat buildup is the culprit, and full braking returns once the unit cools. KTM is currently testing a solid rear disc that's said to remedy the problem. They'll be offered to all 1986-model owners at no charge, once testing is completed.





# KTM 250MXC

brake fade for the entire run. According to K.H., the slotted rear saucer allows dirt to work its way between the caliper and disc, which in turn decreases stopping power. The solid disc helps prevent this problem, and it also dissipates heat more effectively. Word is, KTM will be supplying these solid discs and a new set of pads to all 1986 owners at no charge. Regardless, we'll be looking for considerable improvement on the '87 KTM's brakes—something this basic shouldn't be a problem when you're spending so much change for a motorcycle.

## WALKING THE FINE LINE

So what's the verdict on the 250MXC? In showroom stock condition the bike has some serious flaws, but it also has more raw winning potential than any other two bikes combined—so much, in fact, that it *demands* to be brought up to snuff. When the suspension is reworked, the incredible power and inherently good handling of the machine can be exploited to the fullest, and the overall package is nothing short of outstanding—provided the rear brake dilemma can be solved.

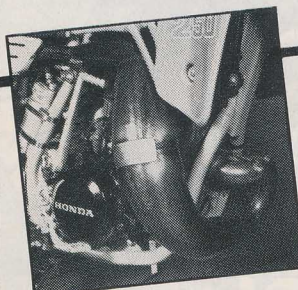
We'll be in touch with KTM about this and report any developments as soon as possible. In the meantime, it looks like the solid rear disc may provide the required 100-percent solution. If so, the KTM is an unadulterated off-road winner. □

## 1986 KTM 250MXC

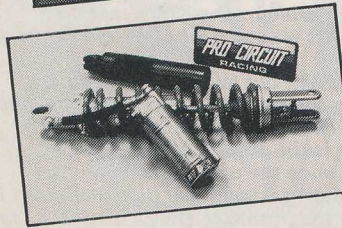
Engine type	Single-cylinder, liquid-cooled, 2-stroke	Silencer/spark arrester	Yes/no
Bore and stroke	67.5mm x 69mm	Wheelbase	1485mm (58.5 in.)
Displacement	247cc	Ground clearance	385mm (15.2 in.)
Carburetion	.38mm Dellorto	Seat height	960mm (37.8 in.)
Factory recommended jetting:		Rake/trail	28°/NA
Main jet	185	Wet weight, no fuel	220 lbs.
Needle jet	275	Tire size and type:	
Jet needle	U16	Front	3.00x21 Metzeler MXR
Pilot jet	58	Rear	4.60x18 Metzeler MXR
Slide number	3.0	Suspension, type and travel:	
Fuel tank capacity	12.86 L (3.4 gals.)	Front	White Power 4054, internally adj. comp./reb., 300mm (11.8 in.)
Lubrication	Pre-mix	Rear	White Power Pro-Lever, adj. comp./reb., 330mm (13.0 in.)
Gearbox ratios:		Intended use	Off-road competition
1	1235:1	Country of origin	Austria
2	1427:1	Retail price, approx.	\$3077
3	1724:1	Distributor/Manufacturer:	
4	2022:1	KTM America, Inc.	
5	2521:1	1906 Broadway	
Gearing, front/rear	13/50	Lorain, Ohio 44052	
Ignition	SEM Digital Control		
Recommended spark plug	Bosch W2CC		

# PRO CIRCUIT RACING

*Only The Best for Ricky*



**PRO CIRCUIT POWER PIPES.** The ultimate in performance. Now available for the following models. Honda CR80 & 125 84-86, CR250 83-86, Open bike 82-86. Yamaha YZ 80, 125, 250 84-86 Open Bike 86 only, Kawasaki KX80, 125 84-86, KX250, 500 85-86. Suzuki RM80 86, RM125, 250 84-86. Husky CR125 85-86, 250 84-85, 500 83-85. All Power pipes \$138.00



**SHOCK REVALVING.** Rebuild and revalve services for Showa, Yamaha, Kayaba and Ohlins from \$55.00. **HARD BODIES** to extend oil life and body wear. A must for any rider \$40.00.



**POWER PORTING AND HEAD MODS.** Power porting will make your bike a match for any factory bike \$150.00. Head mods \$35.00-\$50.00.



**(714) 993-5401**  
4212 E. LaPalma, Anaheim, CA 92807