

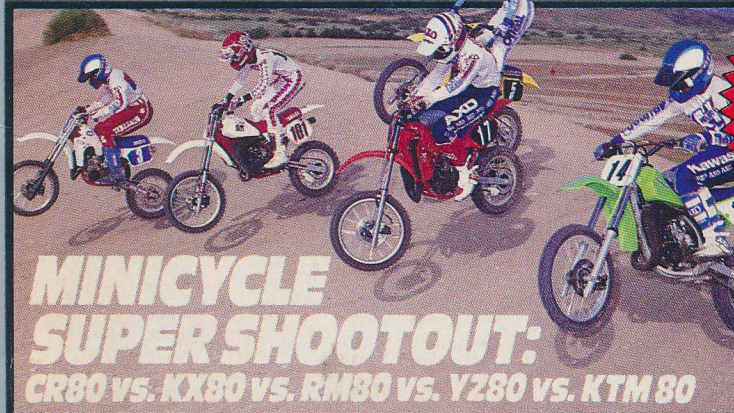
**RADICAL DIRT BIKE FREESTYLE SHOOTOUT:
THE 20 WILDEST PHOTOS EVER PUBLISHED!**

FIRST TEST! KAWASAKI'S '87 MOJAVE 250!

DIRT BIKE

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**MINICYCLE
SUPER SHOOTOUT:**
CR80 vs. KX80 vs. RM80 vs. YZ80 vs. KTM 80

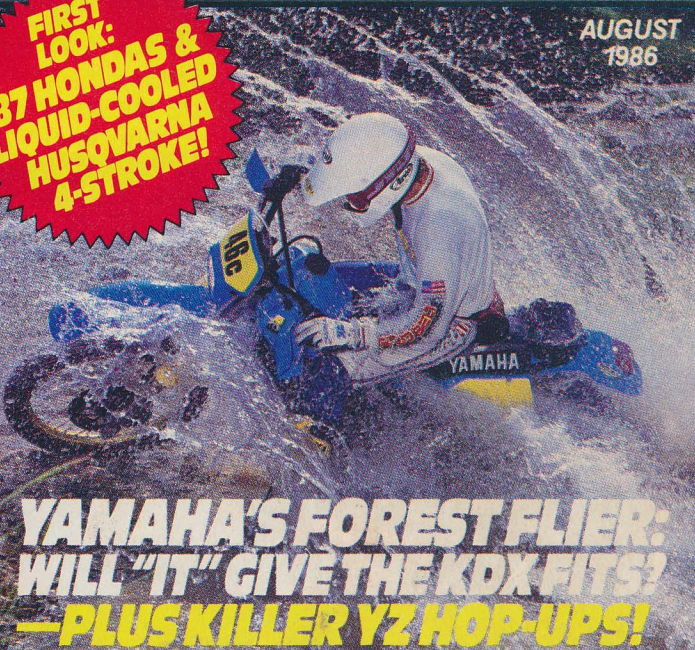
**FIRST
TEST!**

**HONDA'S ALL-NEW
STREET-LEGAL 200:
WHO NEEDS A
SCOOTER?!**



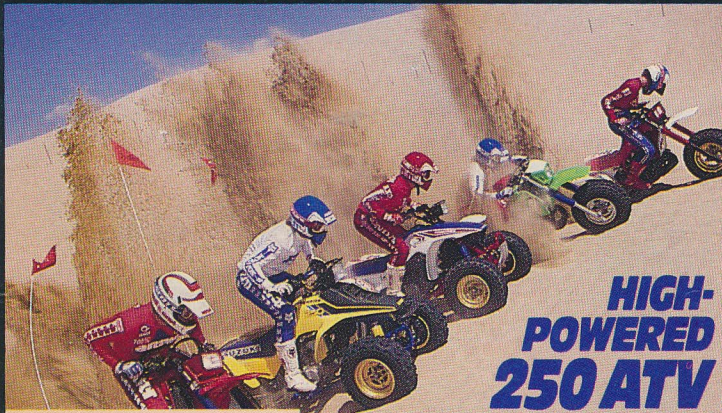
**FIRST
LOOK:
'87 HONDAS &
LIQUID-COOLED
HUSQVARNA
4-STROKE!**

AUGUST
1986



**YAMAHA'S FOREST FLIER:
WILL "IT" GIVE THE KDX FITS?
—PLUS KILLER YZ HOP-UPS!**

**NATIONAL ENDURO STARS
FIGHT IT OUT IN OHIO'S
MUD WRESTLING ARENA!**



**HIGH-
POWERED
250 ATV
SHOOTOUT:**
ATC250R vs. TRI-Z250 vs.
4-TRAX 250 vs. KXT250
vs. QUADRACER!!

**HOW TO SHAVE SECONDS
FROM YOUR LAP TIMES: BAILEY'S
BERM-DESTRUCTION GUIDE!**

ISSN 0364-1546



DIRT BIKE

AUGUST 1986 • VOLUME 16, NO. 8



CRAZY PHOTOS



NATIONAL ENDURO



YAMAHA HOP-UP



HUSKY'S LIQUID-COOLED 4-STROKE PREVIEW



KTM 350MX TEST



HI-PERFORMANCE ATV SHOOTOUT



80cc MINICYCLE SHOOTOUT

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.

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Number 756 in a regular series of gonzo photos

ON THE COVER:—Steve Schmitz and Micky Dymond aviate for our first "Rad Gallery" feature; down below, the *Dirt Bike* Brat Packers launch a quintet of mini motocrossers. Tip Webb volunteered to spray wash the '86 Yamaha IT200, and the Athens Motorcycle Club volunteered to spray wash a few hundred riders at their annual National enduro. Our five-machine ATV shootout and Honda Reflex action wrap up things. Photos by Fran Kuhn; cover design by DeWest; and Valley Film did the color separations.

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HONDA CR80 vs. KAWASAKI KX80 vs.
KTM 80MX vs. SUZUKI RM80 vs. YAMAHA YZ80

MINI SHOOTOUT

Which one of the mini quintet comes out on top?

By the DIRT BIKE Staff



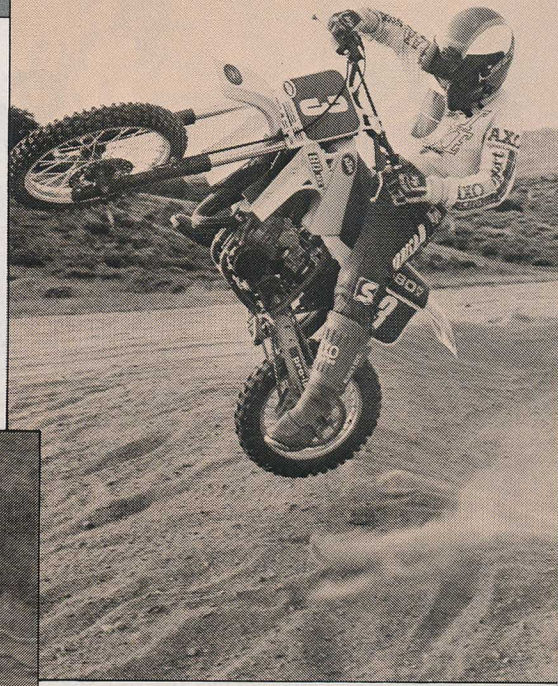
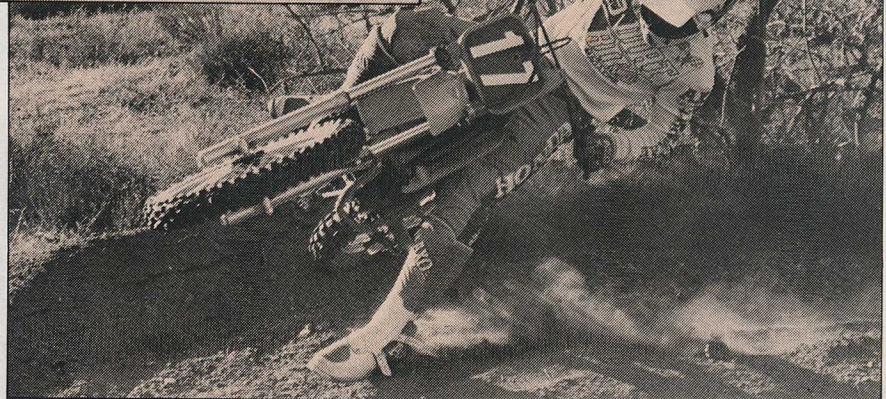
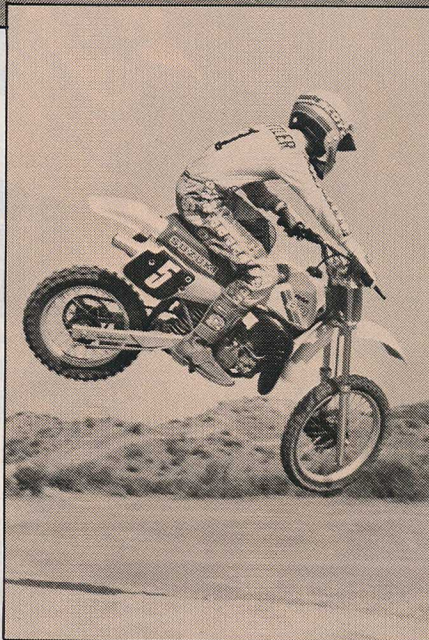
Yamaha managed to come up with an ergonomic package that's best suited for smaller riders. The YZ's frame dimensions are virtually the same as last year's, although the tubing has been beefed up in critical areas.

If nothing else, 1986 will go down in the record books as a year of choices for mini riders. In '85, only Kawasaki, Honda and Yamaha offered young pilots a serious motocross machine. Suzuki continued to serve up a rehashed 1983 model that was essentially uncompetitive at anything above the novice level. And, while Honda's CR80 and Yamaha's YZ80 were both improved over previous efforts, there was still little doubt that the bike to beat was Kawasaki's brilliant KX80. The green mini continued its domination on tracks everywhere and, quite honestly, was expected to do the same in '86.

COMPETITION!

Surprisingly, Team Green now finds itself faced with several serious challengers for the Mini MX title—not only from the Honda-Suzuki-Yamaha triumvirate, but from KTM, as well. After many hours of riding, and many more spent soliciting opinions from our most reliable sources, we've decided to crown a new winner in the mini class for '86: Honda's outstanding CR80.

The red rocket gets the laurels for delivering a two-fisted combination of power and handling that manages to eclipse anything ever seen in the realm of production mini motocrossers. And though we think the CR is the best all-around package currently



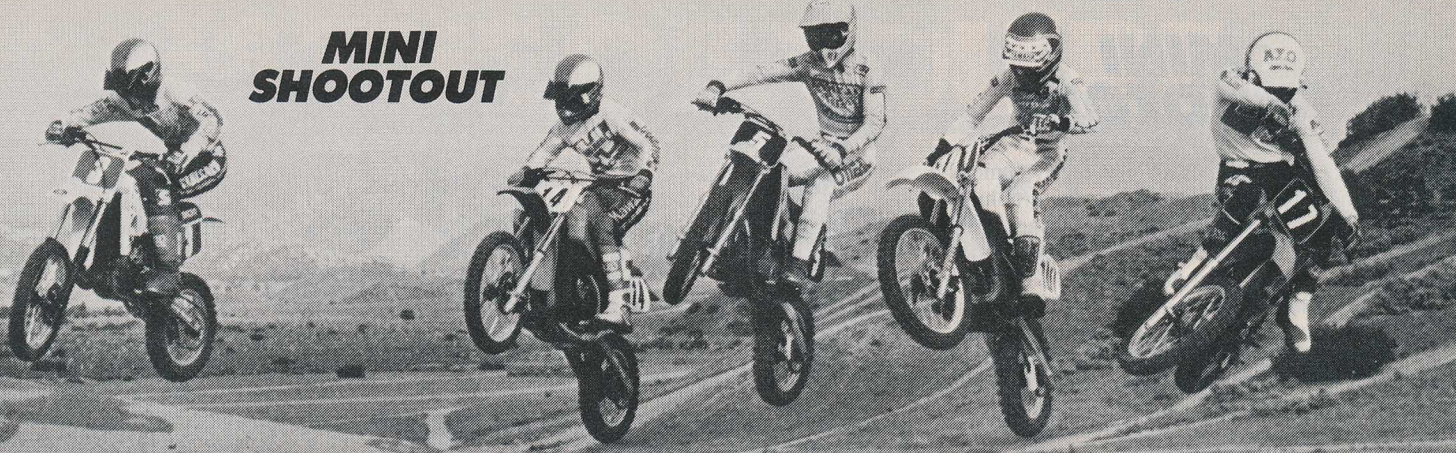
▲ Handling is the mini KTM's strong point. The bike flings and twists with ease and, with the right tires, will handle any corner the rider is willing to try. The front forks are hindered by marginal damping and spring rates.

► Once the KX hits stride, it's competitively fast. The big problem most riders have is getting the bike into the heart of the powerband, especially when fighting out of tight corners.

◀ Most improved: Suzuki's RM80 is the surprise of the year. The bike is designed to fit larger riders; however, even our smallest testers also thought it was comfortable.

Point it and shoot: Honda's CR gets the cornering job done with nary a snivel. Pick a line, go, and the bike will lead the way. ▼

MINI SHOOTOUT



Decisions, decisions: 1986 offers the mini racer five competitive 80cc weapons from which to choose. Although each is a contender in the hands of the right pilot, the final choice is strictly a matter of the rider's power, handling and ergonomic preferences.

available, it's important that potential mini-cycle buyers consider the composite elements of each of these five machines before running out to buy one. The bike that's best for *you* depends on what *you* like. Do you want low-end grunt with a scaled-down frame? Or strato-power hooked to a warp-drive chassis? Dissect the information provided here, *then* decide. Here's a closer look at the five contenders.

HONDA CR80R

The 1985 Honda CR80 was the best red mini machine ever produced, but it still came up short of Kawasaki's KX80 in the power department. This is no longer a problem: The 1986 CR80 has the best all-around powerband of any mini ever built. The little buzzbomb has an all-new nikasil cylinder and a revised porting scheme, changes that deliver a potent low-end jolt. The engine builds steam quickly, rocketing through an ultrasonic mid-range burst, and though the voltage subsides a bit once on top, the bike is still capable of revving if the rider so desires. Add a flawless clutch and tranny to the package and you'll begin to understand why this machine is winning so many races.

The CR's handling and suspension are first-rate, though not quite on a par with the stellar performance of the engine. Sus-

pension chores are handled at both ends by Showa componentry that rates above average, but not great. The forks deliver a smooth, predictable ride, along with rail-and-nail cornering accuracy; the rear Pro-Link is a shade on the soft side for the fast guys, though beginner through intermediate riders hardly ever complain. Overall ergonomics are the best money can buy—the bike fits like a coat of paint. It's comfortable for most normal-to-large-sized kids and keeps its taut, crisp feel for many months of hard riding. The overall package rates an "excellent."

KAWASAKI KX80

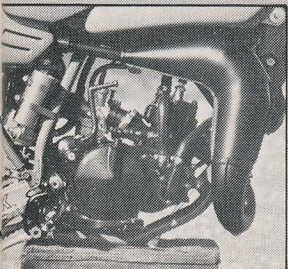
This is a confusing machine, even though it is no doubt a product of the same forward thinking that produced the incredibly strong KX efforts of the past few years. Basically, Kawasaki built the machine that top Team Green riders asked for. The '86 KX has an expert-only powerplant tucked into the best KX mini chassis ever. The result is predictable: Most Novice through Intermediate riders can't handle the razor-thin top-end powerband, which all but negates the '86's substantial gains in the handling and suspension department. The KX's moon-drive power output is competitive; it's getting and keeping the engine in the stratosphere that's

the biggest problem. For riders used to the tractors Kawasaki has built in the past, the transition to warp power hasn't been easy.

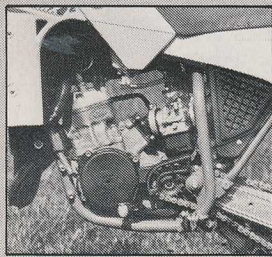
Fortunately, the bike is more than capable once it hits its stride—the new front and rear suspenders let riders (especially faster ones) make time through the rough stuff. The action of the beefed-up KYB forks (they're now 35mm models, up from last season's 33mm) is about on a par with the Honda and Yamaha entries, though still a shade soft; the firmed-up rear is fine for experts but a bit harsh for lighter or less-experienced kids. All things considered, the KX is a serious effort that's also very demanding of the rider; it's a competitive machine recommended only for those with frenzied throttle hands and spastic left feet.

KTM 80MX SENIOR

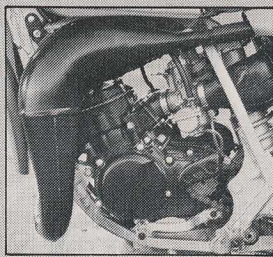
The first KTM 80 was a good example of a bike that was built on the dyno—proof that impressive horsepower charts are not enough when it comes to getting on-track results. When we first stole a glance at KTM's prototype/pre-production 80 at Unadilla last year, we had high hopes for the machine. The bike looked like a winner, offering the prospective owner a scaled-down set of White Power suspension components, a chassis sprinkled with a healthy



Here's the heart of the machine. The CR80's powerplant appeals to all riders—novices love its tractability, intermediates like the wide powerspread and experts enjoy the upper strato-hook.



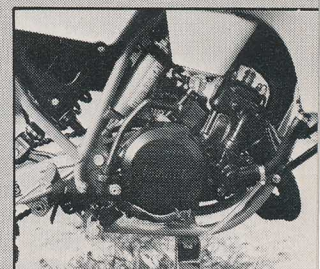
KTM's revised 80MX mill dishes out all of its power on top, where it's competitive with the rest of the *brat-pack* bikes. A wider powerband would help make the machine suitable for beginners and intermediates, and still help the experts deal more easily with slick track conditions.



Past KX80 efforts had plenty of low-end and mid-range boost, but the 1986 motor makes most of its power on top. Experts can deal with the new powerband, but less experienced riders usually go faster with a wider powerband. Kawasaki loses points here.



A strong low-end snap coupled with a high-voltage mid-to-upper hook gets the Suzuki out the gate in a hurry. The wide powerspread enables the RM's rider to clutch and sail out of the twisties.



With a bottom-to-mid-range powerband, the Yamaha rockets off berms with the greatest of ease. Altered ignition timing and a new long-rod design help keep the YZ competitive.

MINI SHOOTOUT

dose of techno-trickery, and the aforementioned horsepower-heavy dyno graphics. What actually emerged from the blue-smoke-and-mirrors environment was a machine that fell painfully short of KTM's goal of Mini class domination. The bike had a number of problems, from poor carburetion to fragile wheels, and the Austrian firm made the only logical move. They went right back to the drawing board—this time with their hard-learned real-world lessons in mind—and totally revised the 80MX.

The machine we tested is the "Senior Mini," and the bike incorporates most of the changes KTM felt were needed to make the original a winner. The Senior Mini's engine is a full 83cc (up from the previous mini's 79cc), and, more importantly, it comes fitted with a 28mm carb in place of the overly optimistic 35mm pumper found on the first batch of White Screammers. Even so, the Katoom still spits out the majority of thrust up on top, and the power falls short of most of the machines in the class. On the plus side, the bike is an excellent handler through corners, though poor spring rates hinder performance through the whoops. All things considered, the KTM is a noble first effort and an indication of better things to come.

SUZUKI RM80G

And now for something completely different...and we do mean *completely*. Suzuki totally scrapped the old 80cc design, starting from square one, to produce its first competitive mini in three years. The new Yellow Screamer is an outstanding effort. From its high-powered, blue-on-blue, liquid-cooled mill to the all-new framework, fork and Full Floater suspension system, the Suzook is ready to take a pilot right to the top.

One of the problems past RMs have suffered from was their relatively small size. The bikes simply didn't fit most large riders, and as a result, many older Experts were forced to move on to a competitor's model. For '86, Suzuki scaled the new 80 to fit larger riders and thus was rated highly in the ergonomics category by most of our testers. The new bike remains slim and maneuverable.

The machine also sports a new-wave, strutless Full Floater rear that favors faster or heavier riders. The stock damping is too restrictive for the lightest guys, though smaller Experts did little complaining. The 33mm Showa tubes are also slightly harsh, but this trait is easily corrected by experimentation with different oil and spring combos.

Rounding out the package is a totally competitive powerplant that hits hard from the mid-range on up. The total power spread is highly usable, with the upper two-thirds getting ground support from a medium-caliber low end that keeps corner-crawling clutch abuse to a minimum. An outstanding all-around package.



80 MX SHOOTOUT RATINGS CHART

RATING SCALE	EXCELLENT	GOOD	AVERAGE	POOR	
	HONDA CR80R	KTM 80MX	KAWASAKI KX80G1	SUZUKI RM80G1	YAMAHA YZ80S
OVERALL POWER					
LOW END					
MID-RANGE					
UPPER HOOK					
TRACTABILITY					
HANDLING					
CORNERING					
STABILITY					
ERGONOMICS					
FORKS					
SHOCK					
FRONT BRAKE					
REAR BRAKE					
TIRES					
SHIFTING					
CLUTCH					
RELIABILITY					
BEST MACHINE FOR NOVICE					
BEST MACHINE FOR INTERMEDIATE/EXPERT					
OVERALL RATING	96	86	87	93	89

IS THE OIL YOU'RE STICKING TO, STICKING IT TO YOU?



SEIZE CONTROL

If your piston looks like this one, it's trying to tell you something — your oil is sticking it to you. You'd better take control.

HOW TO AVOID THE HEAT OF THE BATTLE

Try PJ1 Goldfire Pro Two-Cycle Racing Oil. It's specially designed for today's high horsepower 2-strokes. It reduces engine friction, burns cleaner and cuts down combustion chamber deposits.

IT KNOWS WHERE THE HOT SPOTS ARE

Special additives in PJ1 Goldfire Pro seek out the hot spots in your engine to eliminate piston seizure, ring sticking and cylinder scoring. Your bike runs cooler, gets a better ring seal, and your piston and rings last longer.

And it's specially designed for lean ratio gasoline mixtures.

THEY'RE GOING TO HOSE YOU AT THE PUMPS

Bad news. High octane leaded gas is disappearing fast. The last few sources of "good gas" have gone away — unless you want to spend \$3.50 a gallon for exotic racing fuel.



BOOST YOUR HORSEPOWER

There's a better way. Give your bike a boost with PJ1 Octane Plus, a custom-blended additive that safely increases the octane rating of your fuel, while lowering engine temperatures. And if you use an oil with so-called "built-in" octane boosters you're years behind. The new gas laws make Octane Plus a must. For less than 50 cents a gallon, you can have potent racing fuel that greatly increases your bike's horsepower, lowers operating temps, and snaps-up throttle response.

PJ1 Octane Plus raises engine compression and stabilizes the gas to prevent varnish and gum build-up in the carb and fuel system. Your bike runs better — and cleaner.

MAKE THE SWITCH IN '86

Join Kenny Roberts, Broc Glover and Scott Head. Use PJ1 Goldfire Pro two-stroke oil and PJ1 Octane Plus. We guarantee you'll love it — but you won't get stuck on it!



MINI SHOOTOUT



	HONDA CR80R	KTM 80MX SENIOR	KAWASAKI KX80G1	SUZUKI RM80G1	YAMAHA YZ80S
Engine type	Single-cylinder, liquid-cooled, 2-stroke	Single-cylinder, liquid-cooled, 2-stroke	Single-cylinder, liquid-cooled, 2-stroke	Single-cylinder, liquid-cooled, 2-stroke	Single-cylinder, liquid-cooled, 2-stroke
Displacement	82.9cc	83cc	82cc	82cc	82.5cc
Bore and stroke	47mm x 48.8mm	47.8mm x 46mm	48mm x 45.8mm	47.5mm x 46.8mm	48.0mm x 45.6mm
Carburetion	28mm Keihin	27mm Dellorto	29mm Mikuni	28mm flat-slide Mikuni	26mm Mikuni
Factory recommended jetting:					
Main jet	128	150	200	180	270
Needle jet	F134 3H24 NACC	T-270	P2	PO	Q2
Jet needle	N/A	X24-2nd	6DK2-3rd	5DP39-3rd	SH22-3rd
Pilot jet	52	55	30	35	35
Slide number	N/A	4.0	2.0	4.0	3.0
Fuel tank capacity	5.0 L (1.3 gals.)	5.0 L (1.3 gals.)	4.1 L (1.1 gals.)	4.5 L (1.2 gals.)	5.0 L (1.3 gals.)
Lubrication	Pre-mix	Pre-mix	Pre-mix	Pre-mix	Pre-mix
Gearbox ratios:					
1	2.333:1	2.846:1	2.538:1	2.545:1	2.769:1
2	1.722:1	2.125:1	1.875:1	1.933:1	2.062:1
3	1.400:1	1.722:1	1.500:1	1.571:1	1.631:1
4	1.174:1	1.428:1	1.250:1	1.333:1	1.375:1
5	1.000:1	1.217:1	1.090:1	1.166:1	1.227:1
6	0.885:1	1.083:1	0.956:1	1.045:1	1.130:1
Gearing, front/rear	15/49	14/52	13/49	14/50	14/46
Ignition	CDI	CDI	CDI	PEI	CDI
Recommended spark plug	NGK BR10EG	Bosch W07CS	NGK B9EG or B9REG	NGK B9ES	Champion N84
Silencer/spark arrester	Yes/no	Yes/no	Yes/no	Yes/no	Yes/no
Wheelbase	1355mm (53.3 in.)	1245mm (49.0 in.)	1225mm (49.4 in.)	1240mm (48.8 in.)	1235mm (48.6 in.)
Ground clearance	305mm (12.0 in.)	345mm (13.6 in.)	335mm (13.2 in.)	310mm (12.2 in.)	290mm (11.4 in.)
Seat height	890mm (35.0 in.)	840mm (33.0 in.)	840mm (33.1 in.)	820mm (32.3 in.)	800mm (31.5 in.)
Rake/trail	26.5°/73mm	N/A/N/A	29°/90mm	26°/N/A	26°/80mm
Wet weight, no fuel	137 lbs.	133 lbs.	133 lbs.	137 lbs.	132 lbs.
Tire size and type:					
Front	IRC 70/100-17	Pirelli 2.75x17 Sandcross	Dunlop 70/100-17 K-490	IRC 70/100-17 40M	Bridgestone 70/100-17
Rear	IRC 90/100-14	Pirelli 4.10x14 Sandcross	Dunlop 90/100-14 K-490	IRC 90/100-14 49M	Bridgestone 90/100-14
Suspension, type and travel:					
Front	33mm Showa, 260mm (10.3 in.)	35mm Marzocchi, 280mm (11.0 in.)	35mm KYB, 275mm (10.8 in.)	33mm Showa, 262mm (10.4 in.)	33mm KYB, 255mm (10.0 in.)
Rear	Pro-Link, single Showa, adj. comp./reb., 260mm (10.3 in.)	Pro-Lever, single White Power, adj. comp./reb., 295mm (11.5 in.)	Uni-Trak, single KYB, adj. comp./reb., 275mm (10.8 in.)	Full Floater, single Showa, 262mm (10.4 in.)	Monocross, single KYB, adj. comp./reb., 260mm (10.2 in.)
Intended use	Motocross	Motocross	Motocross	Motocross	Motocross
Country of origin	Japan	Austria	Japan	Japan	Japan
Suggested retail price	\$1198	\$1449	\$1099	\$1149	\$1049
Distributor/Manufacturer	American Honda Motor Corp. 100 W. Alondra Blvd. Gardena, CA 90247	KTM America, Inc. 1906 Broadway Lorain, OH 44052	Kawasaki Motor Corp., USA P.O. Box 25252 Santa Ana, CA 92799-5252	U.S. Suzuki Motor Corp. 3251 E. Imperial Hwy. Brea, CA 92621	Yamaha Motor Corp. 6555 Katella Ave. Cypress, CA 90630

YAMAHA YZ80S

This is the bike voted "Most likely to appeal to the masses." Yamaha took a conservative approach to improving the YZ80 for '86, and the strategy paid off handsomely. Its' newest mini is really a highly refined '85 model that offers something for all riders, from beginners to experts. So, what's new for '86?

Starting with the chassis, we found that the frame is essentially the same as last year's, but it's been strengthened in several critically stressed areas for greater reliability.

Likewise, the 33mm KYB forks are the same as those on the "S" model's predecessor. New spring and damping rates, however, offer a substantial improvement over the '85 silverware. The YZ's Monocross rear suspension is at the head of the mini class. It was good last year, but shock refinements in '86 have significantly improved the bike's handling and stability. Good stuff, regardless of the rider's ability.

The overall feel of the machine favors a smaller pilot, though our largest testers were able to adapt without much discomfort. The

seat/tank/footpeg and handlebar relationship is top-notch.

While the total power output of the Yamaha falls short of both the Suzuki and the Honda, it's one of the easiest to live with on the track. Sheer horsepower does, of course, have its advantages, but the YZ's kind of bow-to-mid-range power helps keep the rider's mistake factor to a minimum, cutting valuable seconds off lap times. As such, the YZ gets high marks for offering an exceptionally well-balanced package of usable power and good handling. □