

# 1995 KTM 250SX!

*Lemme  
get this straight:  
Which way is upside-down?*

Here are a few basic Philosophy 101 questions. If you were standing on the moon, and you looked up and saw the top of KTM Director Scot Harden's bald spot on earth, would you be above or below Scot? If you had feet growing out of the top of your head and you walked around like that, who would be upside-down, you or the rest of the world?

Okay, if you had a telescopic fork that had the big part on the bottom while everyone else had the big part on top, would your fork be rightside-up or upside-down? If a tree fell in the forest, would it be half empty or half . . . oh, never mind.

Regardless of your philosophy, the '95 KTM 250SX has been released, and the big news is that it has a rightside-up . . . no, upside-down . . . well, different fork. Earlier in the year, you might have read some gossip in *The Soap Opera Times* (or some magazine like that) about how a majority of '95 MXers would be coming with older-style (let's call them non-inverted for lack of something better) forks. It wasn't true. Only KTM will be offering a non-inverted fork on a full-sized MX bike. It's no secret that inverted forks have never lived up to expectations. In fact, they were a big setback in '88 and '89 when they first came out. It took years before any of the manufacturers had them working as well as earlier forks. In some cases, they never did.

It makes sense that KTM would be the first in the inevitable shift back to the non-inverted. KTM is a smaller company, so changes are easier to make. They don't have to have a two-thirds vote in a committee made up of engineers, test riders, marketing specialists and palm readers in order to get anything done. They just do it. If you remember, KTM was one of the first companies to change to inverted forks, as well as disc brakes, removable subframes and stuff like that. If you look back through motocross history, it's ap-

parent that most of the innovation comes from Europe, not Japan. The Japanese tend to take European ideas and make them work.

## TECH JUNK

Although there are a bunch of changes on the new KTM, suspension heads the list. The new non-inverted (we are going to tire of that word pretty quick) fork is the Marzocchi Magnum 45, so named because the tubes are 45mm in diameter. When non-inverted forks became obsolete, they had, for the most part, 43mm tubes. The Marzocchi is very similar to the aftermarket fork that PPS has been selling in the U.S. for over a year, although the valving and springing have changed to suit KTM. The fork has all the compression damping in the left leg and all the rebound damping in the right leg. It also has position-sensitive damping, which means compression damping increases as travel is used. All other forks have speed-sensitive damping. Actually, the Marzocchi is speed-sensitive, too; that's the nature of any hydraulic system.

In the initial inches of travel, compression damping is almost nonexistent. As a result, very stiff springs are required. The Marzocchi uses 0.45 kg/mm springs, while most Japanese forks come with 0.38 to 0.41 kg/mm springs.

In the rear, KTM made another big change. The White Power shock is gone, replaced by an Ohlins. We would have loved to have seen this done years ago. The Ohlins is a more expensive unit, but generally regarded as better (at least by us). The lever ratio is unchanged, but the swingarm is 10mm longer. Last year, KTM went to great lengths to move the center of gravity back. They apparently went too far. There is less offset in the triple clamp, to make up for the increased offset in the leading axle fork. Overall, the rider's weight should be farther forward now.

The engine got a bunch of new stuff. There are slight porting changes, the pis-

ton has a flat top and the combustion chamber is reshaped. We think the big goal here was to reduce detonation. Here is a weird little fact: The digital ignition that KTM developed has been replaced by a new unit that has parts made in Sweden, Germany and Italy. Way back about '87 or so, KTM was the first manufacturer to introduce digital ignitions. It seemed like a great idea in order to have more exact control over the ignition advance at various rpm levels. Now, all of the Japanese makers are doing the same thing, years later. KTM's new ignition set up is for a smoother power delivery.

The clutch has been reworked with a stronger pressure plate and a bigger throwout bearing. It also spins faster because of a change in the primary gearing. This doesn't affect overall gearing because of an offsetting change in final gearing. All this is a grand scheme to reduce clutch drag. The reeds are thicker and the pipe is new.

The remaining stuff is detailing. The spokes are no longer pencil-thick—now they look more normal. This might result in less hub breakage. The front brake is shorter for less mush, the discs are lighter and the rear caliper has less drag. The bars are new, the tires are new and the graphics are bold and new.

## LET'S RIDE!

Here's the bottom line: We are delighted with the suspension changes. This is the best-feeling Marzocchi we have tried to date. When we first tried the Magnum 45 about a year ago, we liked it in some respects, but it wasn't as good as a stock Honda CR125 fork in others. It worked especially good on those hard landings on flat ground, but it was only average in its ability to absorb little, square-edged stuff.

In both categories, this fork is awesome. On braking bumps and holes the fork does an excellent job. You would never guess that the springs are so stiff.

*The KTM fork works excellently on whoops and big landings, but is only average on braking bumps and chop. ►*











# 1995 KTM



## KTM 250SX

Engine type.....	Reed-valve, liquid-cooled two-stroke
Displacement.....	249cc
Bore and stroke.....	67.5mm x 69.5mm
Carburetion.....	38mm Keihin PJ
Fuel tank capacity.....	2.4 gal. (9.0 L)
Gearing.....	13/50
Lighting coil.....	No
Spark arrester.....	No
EPA-legal.....	No
Running weight w/no fuel.....	232 lb.
Wheelbase.....	58.4" (1483mm)
Rake/trail.....	27.0°/NA
Ground clearance.....	15.2" (385mm)
Seat height.....	37.8" (960mm)

Tire size and type:	
Front.....	80/100-21 Dunlop 701
Rear.....	110/90-19 Dunlop 701
Suspension:	
Front.....	Marzocchi conventional cartridge, adj. reb./comp., 11.8" (300) travel
Rear.....	Ohlins aluminum piggyback, adj. prel./ reb./comp., 13.6" (346mm) travel
Country of origin.....	Austria
Suggested retail price.....	\$4998
Distributor/manufacturer:	
	KTM Sportmotorcycle, USA
	1906 Broadway
	Lorain, OH 44052; (216) 246-1060

The ride is good and you don't get that sharp impact transmitted directly to your hands the way you would with White Power forks. Occasionally, on hard braking, you get the feeling that the front end is wandering around on sharp bumps, and the rest of the bike just follows. Maybe this is flex, maybe it has something to do with the unusual damping system. We don't know, we're just dumb motorcycle riders.

We found that the damping adjusters are actually useful. We started off with the compression knob (the one on the left) turned eight clicks counterclockwise from all the way in. We noticed some minor bottoming. It didn't happen when

we expected it; never in big whoops, but rather on nose-first landings. We turned the knob two clicks in and the bottoming went away without any negative side effects. With last year's fork, you would pay somewhere else. Usually the fork would become harsh everywhere. Of all our test riders, Roger DeCoster was the most enthusiastic about the fork. He thought it worked better in every category, from square-edged holes to big landings. He got the fork to bottom, but it was never with the harsh, metal-to-metal clunk that is common on Japanese forks.

We are happy with the shock, too. To tell you the truth, we weren't that unhappy with last year's White Power, but we need to admit that the Ohlins is an improvement. Imagine that: a year when all of the suspension changes on a particular model are improvements. We haven't seen that since '79. Tom Moen told us we would be happiest if we set up the sag to 105mm or so. We told him that we were born happy, but we welcomed the opportunity to be even happier. He was pretty much right. The true test of a good rear suspension system is when you can make 130-pound Shane Trittler and 220-pound Tim Tolleson happy without changing springs. We changed preload and that was all it took. Shane probably would have needed more compression and less rebound damping for a real-live supercross, but on his Castaic Lake (California) MX track, the stock settings were fine.

Is the new KTM as good as the high-water mark in suspension, the '94 Kawasaki KX250? We would have to say yes in the rear, but we would hesitate to call Marzocchi the best fork in the business

*There's no reason you shouldn't be able to beat Japanese bikes with the KTM. Actually, that's a lie. There are lots of reasons, but none of them have anything to do with the bike.*

just yet. Faster riders all say yes, but slower riders still like the softer KX in many areas.

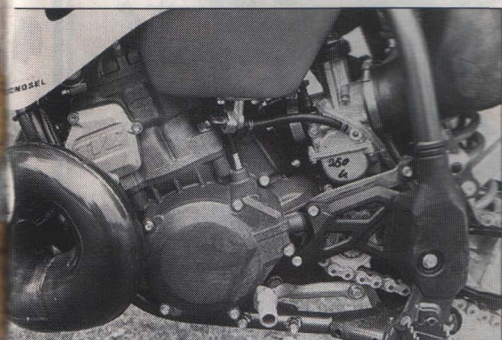
### THE REST OF THE BIKE

Last year, we had a bad headshake problem with the KTM. It shook so bad that it even scared old Honda owners. This year, that seems to be lessened, although it's still there. Maybe the old fork was the problem. Maybe the new fork is still the problem. All we know is that now the shake is less.

The bike still is pretty light-feeling in the turns. It's amazing how mainstream the KTM feels nowadays. It used to be that if you were used to a KTM, or, for that matter, any European bike, you wouldn't be able to ride a Japanese bike at all until you spent a month or so adjusting your riding style. The same was true going the other way. Today, you just spend a second or two adjusting the levers or whatever, then you are on your way. Supercross big-shot Cliff Palmer went from Suzuki to KTM last year and said that he had absolutely no difficulty in adjusting to the new machine.

The KTM is a middle-of-the-road bike. It isn't remarkably stable and it isn't the world's sharpest turner, but it is a good compromise. Some more sensitive riders report that the KTM's turning manners are "odd," but couldn't describe why. Others just got on the bike and felt at home.

Some of the odd feeling probably is due to the motor, which has a very linear powerband this year. It's almost hitless. Where most Japanese bikes have a sharp burst of power somewhere along the way, the KTM comes on tamely at rather low rpm, and gradually makes more and more



**Good news:** KTM has a flat-top piston, a different combustion chamber shape, a new pipe, a revamped ignition and stiffer reeds for '95. **Bad news:** We liked the '94 motor better.

◀ You will love the suspension; you might not love the power. If KTM ever got both parts right in the same year, the world would probably end the next day. It would be like having matter and antimatter on the same bike.







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# 1995 KTM

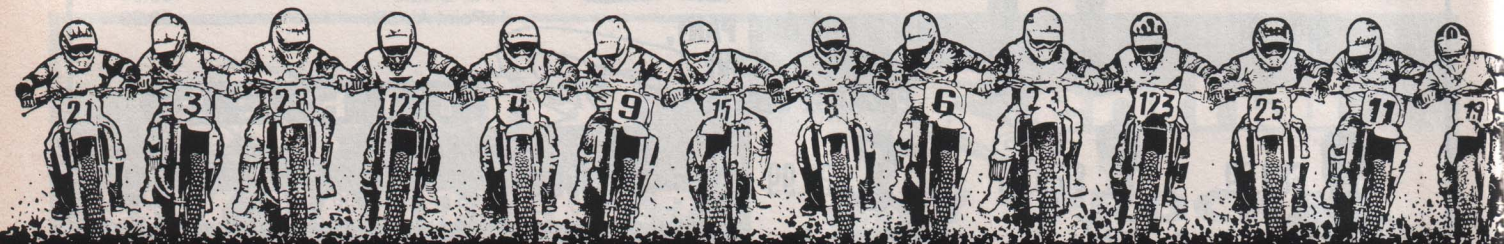
ed a miracle clutch. We wouldn't get too excited about it, either. The pull is light and the release is good, but it still drags.

More odds and ends: The brakes are great—strong and progressive. Maybe they aren't as strong as a Honda's, but they are better than a Kawasaki's. As for the seat, it has new dual-stage foam, but it's still a little too stiff. That makes the whole bike seem to be cruel, stiff and unforgiving at first.

## WILL THIS BE THE BIKE IN '95?

For years now, KTM has made a motocross bike that is just as good as Japanese stuff in most ways. The problem was that in no single area was the KTM better than the best from Japan.

The '95 KTM climbs one more rung up the ladder. Now it has a few areas where it's better than the very best from Japan. Rear suspension is one of those. Front suspension is very close to being one of those. Is that enough for it to win races? You bet it is! Is that enough for it to be the best overall 250 in the class? If we were talking about '94, it would be right there in the running; only its low-end response would be a stumbling block. It's still awesome and we can't wait to see how it stacks up against the rest of what '95 has to offer. □



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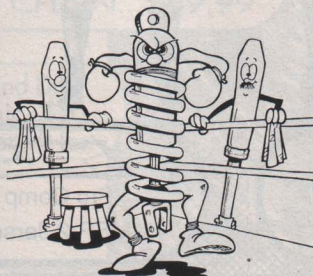
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