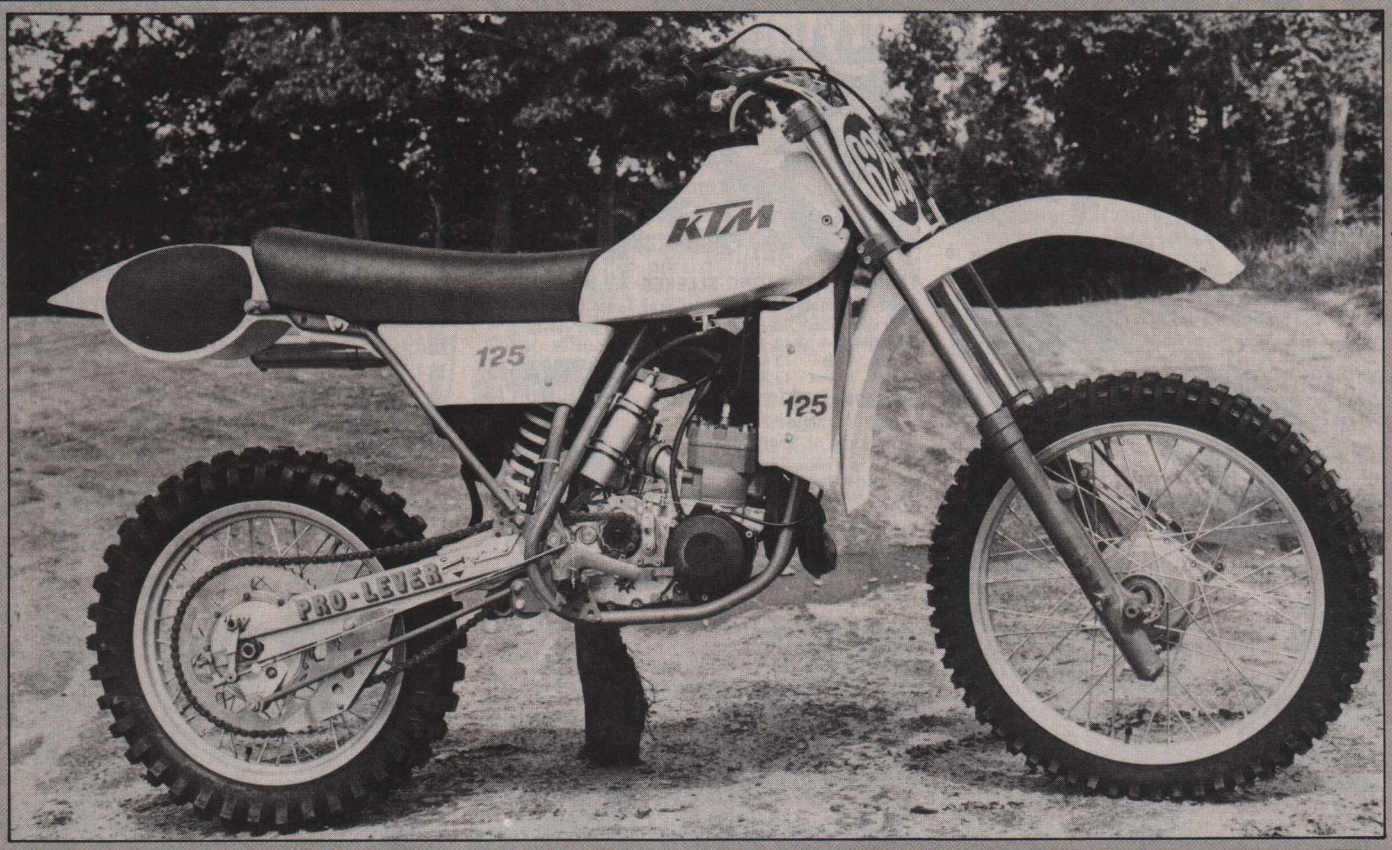


MUD-RUNNING A WATER-PUMPER

KTM's new 125 gets the acid test

By Paul Clipper

For 1982, KTM will be introducing a brand-new 125LC, which will be available with either a CR or WR transmission. That's right, this is the first liquid-cooled woods bike.

Water-cooled bikes are common on the motocross scene, and in the past two years liquid-cooling has proven to be reliable and beneficial on a closed track. Before we took this introductory ride, however, one question remained to be answered: How will a water-cooled bike hold up under the unpredictable rigors of enduro or hare scrambles use? Would the extra plumbing involved be a liability in tight brush? How about the radiator—would it plug up with mud and weeds and become useless?

To answer all these questions, I became a guinea pig of sorts, and was given the task of entering the LC/WR in the Blackwater 100, definitely the acid test of any off-road machine. The bike was basically pre-production, but contained all the parts that will be stock on the soon-available '83 bike.

In the course of our testing, we (KTM America and I) tried a number of different tricks on the machine, just to see how it would react. One of the obvious changes we tried was installing a 34mm Mikuni oval-bore carb; *obvious* because it shows up on the overall photos of the bike in this story. Let me say right off that the bike *will not* be coming with a Mikuni carb. We tried it and lost almost all of the low-end power the stock machine was capable of. The Mikuni gave us an increase in top end but made the bike unrideable anywhere else. We chalked the effort up as a failed experiment with intake modification.

Heavy brush had no effect on the radiator or plastic shrouds, convincing us that a water pumper can be a woods bike, too.

So much for major fiddling. Let's see what the stock machine looks like.

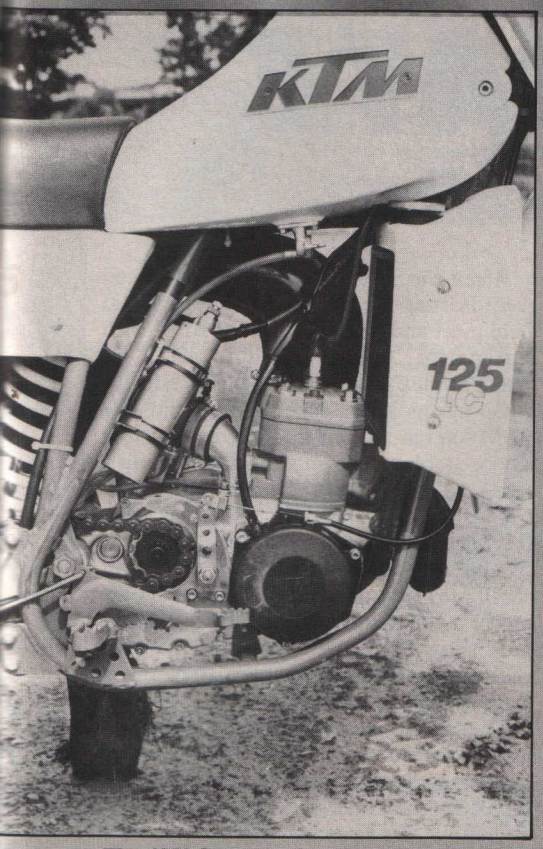
POWERPLANT

Gone are the embryonic fins of the past two years, and now the KTM uses a contemporary-looking case-reed and piston port, water-cooled cylinder and head. Porting has been changed as well, and maximum horsepower is reported to have been upped from 28.5 to 31.0. The water pump is basically the same design as that found on the old bike, although the radiator has been moved down to the front frame tubes into a better airflow position. Carburetion is handled by a 34mm Bing.

Although the gearbox still holds six speeds, the ratios have been changed to make the bike more suitable to a variety of uses. Sixth gear is taller and first is lower than the CR, making the bike much easier to handle in tight woods and more useful on a fast fire road. Primary kick is one of the better features we're still getting used to on a KTM—it's great to be able to start it in gear!

NEW SUSPENSION

For 1983, Pro-Lever has found its way onto the 125. The rear-end linkage system is a scaled-down copy of the big bikes, and the 125 we rode was fitted with a White Power single shock. This shock uses a single compression damping adjustment, which we never felt the need to change, although fast motocross racing may make upping the compression damping a necessity. There are no rebound



The 125LC uses a new frame-mounted radiator and a true water-cooled cylinder. We jammed a lot of mud through the radiator without causing the bike to overheat.

adjustments available, but the stock rebound damping felt fine. Spring preload is, of course, adjustable, and the rear frame section unbolts to make servicing the rear suspension easier.

The front end uses a pair of the new forged aluminum 40mm Marzocchi forks, much the same as the forks found on the rest of the Pro-Lever bikes. The last model's 38mm forks may have been the best forks Marzocchi's ever made; however, we still have reservations about the new 40s.

On our first shakedown test of the bike, we weren't using full travel no matter how hard we slammed it through the whoops, and the action was stiff and harsh. We took the bike back to the shop and changed the oil level from six inches from the top to six and a half inches, used Kal-Gard 5W oil rather than the stock 10W, and switched to shorter preload spacers. This made an immense difference in the way the front end reacted, and we were much happier with the overall feel. Six and one half inches is a good level for these forks, but for tight woods and casual trailriding we would suggest that the rider start with seven inches from the top and work up from there. Naturally, we used zero air pressure in the forks.

RIDING IMPRESSION

The new 125LC is definitely faster than last year's bike. It's still not explosive

Rod Bush wheelies the LC through the West Virginia woods. Horsepower is up for '83—this 125 may just be competitive in the 175 class.

power—a la Japanese motocrosser—but that isn't the kind of power you need on an all-around bike. With the Bing properly jetted (and in West Virginia we had to change all of the stock brass except the needle), there was enough low-end grunt to allow us to poke around trees without the bike gagging and loading up. A lot of this low end can be attributed to the new reed-valve system; said reeds also make it easier to jet the bike for the altitude we were running.

Mid-range power is very strong—nearly as hard hitting as a good-running 175—and then a very healthy top end takes over, making power up to a 10,000 rpm limit. A very rideable powerband; I had no problem controlling it in the West Virginia bogs. We're hoping to get one of the CR-transmission bikes out to California later on in the year, to find out how the bike responds to motocross treatment.

The rear suspension was the best we'd felt on a KTM. It seems that the people over in Austria keep changing little things here and there—shock valving, spring rates, rise rates, etc.—without telling anyone about it. Every time a new KTM comes over it's closer to perfection. It soaked up hard trail scattered with rocks and big whoops alike, with nary a harsh spot in the stroke. In the rough, high-speed whoops, the rear end would just bottom at maximum speed (that's *my* maximum speed . . .) and do so lightly enough that I had to concentrate to feel it.

I wish the same thing could be said for the forks. Earlier I described how we went about dialing them in, and after we were all finished they felt much better, but I doubt if they could ever be made plush. Every set of Marzocchi forks (with the possible exception of certain shipments of the Piffero 38s) has harsh spots in the damping stroke that'll drive you crazy trying to iron them out. To be honest, the forks on this 125 felt much better than the

The Pro-Lever rear end will be a standard item on the '83 KTM, along with the removable rear frame section. Rear wheel travel is 11.8 inches, and damping quality is excellent with the stock White Power shock. Front forks are 40mm Marzocchis and are plenty strong for the 125 chassis, but the damping is still a little harsh.

ones we had on our 250 MX bike earlier in this year; evidence that the folks back home are working on them. But they're still not up to the same level as Yamaha forks.

Careful tuning of the oil type and level will do much to improve their feel, but it all boils down to one simple problem: They are valved to work best at warp speeds. You can slam them into the biggest bumps and surprise yourself by living through it. If only someone could build a fork that'd do this *plus* roll over the small stuff without shaking teeth out—well, then we'd have something worthy of praise.

The ability of the suspension and chassis to soak up big bumps saved me quite a few times, though, and I did find that the best way to cope with the front forks was to keep going faster. KTMs have never enjoyed a reputation as a cruiser's bike, and maybe, *just maybe,* the bike can go faster than I can. The more I gassed it, the better it felt; leaving me to believe that a more skilled rider than myself may have a completely different opinion.

On the subject of watercooling a cross-country bike: None of the problems we'd dreamed up ever occurred. Part of the radiator did plug up with mud, but not enough to slow down the cooling effect and overheat the engine. The fender does a good job of keeping most goo out of the radiator, and when water hits it, most of the mud washes away, bringing it back to full operation. One interesting thing about water-crossings, with the water-cooled cylinder, the bike had less of a tendency to go cold from the soaking and stall out. The hot water in the jacket created an insulating layer, and the bike ran at an even temperature all day.

All in all, I liked the bike, and after I rode it to a fourth I was ready to buy one. It hasn't *quite* got the torque of a strong 175, but it has enough, and the top end will pull you out of anything the lack of torque gets you into. The rear suspension is excellent, the front is okay, and the handling is typically KTM: rock-steady and precise. It seems like a winner. Look for a full test on it soon. □