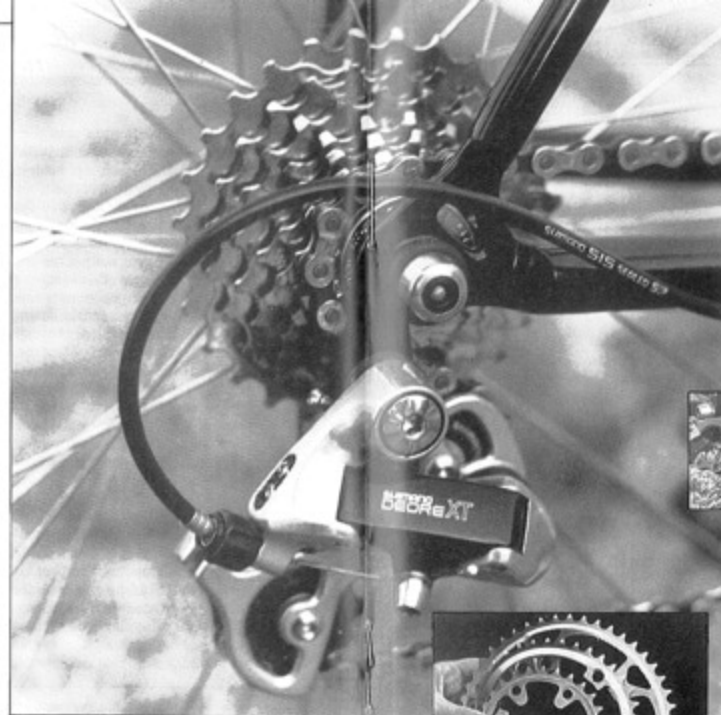


FIRST LOOK! SHIMANO'S 1989 7-SPEED DEORE XT-GROUP

If 6 was good, then 7 must be magnificent



Wide body: Rear hub spacing for the new Shimano group is 135mm. Compared to the 126mm spacing of a road bike hub or the 130mm spacing of last year's Deore unit, the new hub provides a broader base to work from for off-road frame builders.

← **Shorty levers:** New for 1989 will be Shimano's new shorty brake levers. Dia-Compe has made good headway in the racing market with the Tech-5 version and Shimano will join the fray in '89 with an abbreviated lever for racers.

When Shimano released its Deore XT SIS group in 1987 it signaled bad news for the competition. SunTour had dominated the off-road market leading into 1987 because they were the only top-notch component manufacturer to fully address the off-road bicycle (and its special uses). Yet it was obvious before 1987 that cycling components were on the verge of a great breakthrough (and mountain biking was beginning to bulge at the seams with the groundswell explosion of new enthusiasts). The writing was on the wall for the component manufacturers, but only Shimano was able to read it. SIS (click-shifting) was the coming thing. Shimano had carefully and successfully dominated the upper-end American road and triathlon equipment field with the magical click-shifting Dura-Ace group. What SIS

had done to road bikes it was bound to do to mountain bikes. The first guy into the off-road market with the best stuff was going to grab an incredible percentage of market share. Shimano was first, and they were immediately the best as the panicky scramblings of their competition proved.

A QUICK AND DIRTY HISTORY

Let's not waste too much time with ancient history. Prior to 1987 SunTour's XC gruppo was the best thing since knobby tires to hit mountain biking. Unfortunately for SunTour, after 1987, if a bike didn't have Shimano SIS (Shimano Index System) it wasn't worth doodly-squat. Some bicycle companies tried to ignore the click-shifting trend by sticking with the cheaper friction shifting parts—they got burned. Some component companies tried to rush their own click-

shifting systems into production before they were perfected—they got burned, too. Shimano reveled in their own glory. Click-shifting was new! It was hot! It was better than anything that ever came before! For the first year of its life it was above reproach, criticism, or a bad review.

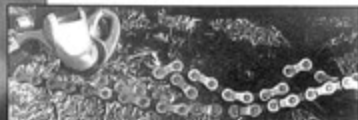
In 1988 Shimano's veneer of invincibility started to crack a little around the edges. While Deore XT continued to be the premier derailleur system the lower-priced groups came under serious assault. Deore was overshadowed by SunTour's newly released XCD 6000 system and Shimano Exage began to exhibit serious flaws in Shimano's previous faultless mountain bike planning. As SunTour got better (and Exage proved that Shimano could get worse) the marketplace was competitive again. SunTour bought the rights



Hand-cut chainrings: Biopace chainrings have been undergoing a slow evolution, and one of the new species is a rounder, milder and less elliptical set of rings for racing. The initial units are hand-made on a mill for testing, but expect expensive '89 bikes to come with production units.



Seven deadly sins: Shimano's new seven-speed shifters have the same quality feel of all the Deore XT components. Shifting is quicker, slicker and smoother than the six-speed gear grinders thanks to narrower spacing and new rear-cog shapes.



Deore chain: A new chain is designed to work in the rugged off-road world and still squeeze into the tight confines of the Deore XT 7's rear cog system. The Uni-Glide-style chain is required for the 1989 seven-speed kit.



Rear cluster: Hyper-Glide is Shimano's name for a new set of rear cogs that have milled faces on each gear. The milling is designed to aid the chain in making its way from cog to cog under a load.

to the Browning Automatic transmission, and even though Shimano had no plans to build their own electric shifter, they didn't like the idea that the most expensive and trickiest front shifting system wasn't one of their products. The U-brake, which was incredibly successful on its initial introduction (pushing the SunTour Power-Cam off the face of the earth), was suddenly being criticized, and bike manufacturers started to order more cantilevers. SunTour scored another minor coup when they procured the rights to sell the powerful Peterson/SE brake. The battle, so one-sided in 1987, was now heating up into a SunTour and Shimano components war.

BRING OUT THE BIG GUNS

What was Shimano going to do? How could they fight back against SunTour? What

of component failures points to the reliability of the new Deore XT7's parts.

The actual workings of the seven-speed Deore XT7's mechanism is not all that complex. The rear derailleur is the same basic derailleur that it has been over the last two years. In fact, you could use any Deore XT rear derailleur with the other seven-speed components and get good shifting. If the derailleur isn't different, then what is? That's easy! The rear cluster has seven cogs, the chain is a new ultra-narrow Deore XT unit and the shift levers have been re-gear to pull the proper amount of cable to actuate seven shifts.

It's no secret that last year's Deore XT system had a seventh click hidden at the far end of the lever throw, and more than a few hot-shot riders modified their bikes to have seven-speed rears. So seven-speed Deore shifting isn't all that new, but it is new to the masses. Thus, don't be surprised to find that the new seven-speed shifter has the faint feel of an eighth click at the far end!

To get seven cogs wedged into the rear wheel required some gymnastics on the part of Shimano and the frame builder. For those who haven't memorized the international bicycle wheel width chart—road bikes' hubs are 126mm wide and mountain bikes' are 130mm wide. Shimano's new seven-speed rear cluster requires that the rear hub have a width of 135mm. That means lots of trouble for upgrade kits and backyard mechanics. However, it can be done. After all, the rear triangle can be sprung out the less than one-quarter-inch required to make up the 5mm difference (but, to quote Richard Nixon, "It wouldn't be right").

The wider hub isn't a negative as far as the dynamics of off-road riding go, and as each builder begins to gear up for the seven-speed kit, the frames will quickly be designed to accommodate the width.

Why the special chain (Deore XT Narrow)? Because everything is so tight between the seven closely spaced gears that if you tried to use a normal-width chain it would quickly overstep the boundaries between the seven-speed cluster. By the same token, Shimano has built a special set of rear cogs that remind most people who see them of Biopace II chainrings. No, they aren't oval, but they have special cut-outs and rills designed to help the Deore XT chain make its way from one gear to the next.

WHAT ELSE IS IN THE WORKS?

Obviously, Deore XT is going to go seven-speed, and with it will come a new seatpost, headset (thicker rubber cover), chain, rear hub, shorty brake levers and slicker cables. Additionally, the middle-priced Deore II group will appear with seven-speed Hyper-Glide gearing. What's especially interesting is a new group called Shimano Mountain LX. Exage Mountain and Exage Trail will be moved down a notch. The '89 Shimano off-road lineup is Deore XT-II, Deore II, Mountain LX, Exage Mountain, Exage Trail and Exage Country. □