

RIDING HONDA'S & KTM'S GRAND PRIX BIKES

By the DIRT BIKE Staff

Is the magic of works bikes fact or fluke?

What kind of human-operated machine can go the fastest around a rugged natural-terrain course? The answer to that question *should* be a world-championship works motocrosser. On the GP circuit, almost anything goes, machinery-wise, unlike American-championship motocross where the bikes must use many production components. Freedom to use exotic materials and technologies should make a grand prix motocross bike significantly better than a production motocrosser—but is it? Rick Johnson proved at the USGP that his production-based CR500 was competitive with Eric Geboers' European works bike. Kurt Nicoll showed that even the production-based KTMs weren't that far off the pace. We wanted to know just how close to production those two bikes really are, so we rode Kees Van der Ven's works KTM 500MX and Rick Johnson's production CR500-based, Pro-Circuit/HRC GP/National bike. We were shaken by what we found.

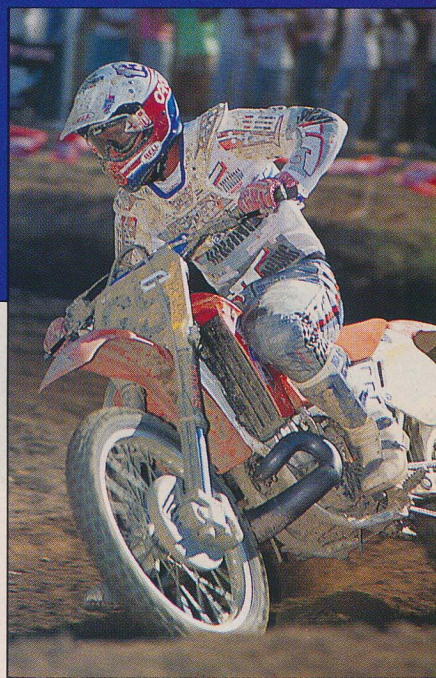
RICK JOHNSON'S PRO CIRCUIT/HRC GP/NATIONAL HONDA CR500

You don't even need a pit pass to spot some of the high-bucks hardware on Johnson's 500. A works fork, with its machined-from-billet axle clamps and triple clamps,

grabs your eye first. Titanium fasteners are everywhere. Out back there's a works shock sitting on a billet aluminum linkage. The hubs, brakes, chain adjusters and even the axle nut are works parts. Special, heavy-duty DID rims, the rear one wider than stock to enlarge the tire's footprint, complete the "factory-rider-only" parts list.

The bike sounds trick enough to psych the rider of a stock machine right off the starting line, but in terms of real, noticeable benefit the works parts don't make a great deal of difference. The works fork uses the same spring-over-cartridge design as the stock fork but is manufactured to Swiss watch tolerances from the best materials. It's heavier than stock forks. The works shock and spring and the rims are heavier than stock parts, too, but other titanium and billet aluminum parts are there to reduce the weight penalty of the works parts!

Riding Johnson's 500 shows you, in no time at all, that GP- and National-level motocross is unlike motocross as most riders know it. The works fork and shock have a high-quality, low-friction feel, but Johnson's valving and spring rate choices force you to hammer or be hammered. Our non-pros never really got the suspension work-



Please, Hammer, don't hurt 'em. Rick Johnson and the Pro Circuit/HRC CR500 almost made Eric Geboers' four-speed, full works HRC RC500 look bad at the 500 USGP. Pro Circuit will sell the RJ GP/National parts when the 500 season ends.

ing. The bike steers like a '91 CR500 because it has the same frame, but the feel is different because it never settles or pitches on its suspension. Tracking through bumpy corners, unless you're attacking, is scary because the bike skips off its line. The works Nissin brakes offer power and feel that make the excellent stock Honda binders feel numb. This isn't a machine for finessing your way around a track. Cruising is out of the question. Non-motocross use? Forget it.

Unlike the Johnson-spec works suspension, the heart of Rick's CR500, its Pro Circuit-modified engine, is available to anyone after the 500 Nationals are over. Only a handful of riders in the world could really benefit from Johnson's works suspension, but anyone with a craving for serious horsepower will like the engine. Pro Circuit's cylinder mods, head mods, pipe and silencer raised the CR500's power output but kept it controllable. We were surprised the engine is so strong off the bottom, a bit like an '89 CR500, but with a more even transition into the midrange. Pro Circuit's engine pulls hard from idle, where the stock CR is a bit soft, and it builds smoothly, but seriously, from there. The modified bike also has more mid and top than the stocker. Better riders



◀ Johnson's bike uses a stock CR500 frame, a Pro Circuit-modified engine and works suspension to do battle with full works GP bikes. Riding it showed that there really is GP-level performance potential in current motocross bikes.



◀ Kees Van der Ven showed that European riding and a European machine are still effective against American-style riding and Japanese machinery. Everyone on the DIRT BIKE staff rode Van Der Ven's works bike and all came away stunned at how soft his suspension was set up. Van Der Ven's light, fluid riding spares him the punishment of heavy spring rates.

Van der Ven kept his European sand track valving for the USGP because he had grown used to its feel. Apparently, the slender Dutchman's light weight and fluid riding technique let him get away with fairly plush settings. The guy must have hands like Frankenstein because the levers felt like they were a foot away from the handlebars.

Van der Ven's engine was like Johnson's Honda, with strong response right off the bottom and an even, controllable build to an arm-stretching top-end. We rode the bike on the GP course a day after the event, so the carb was perfectly dialed for the conditions. The stock 500MX didn't carburet nearly as well, but then it didn't have the benefit of two days of on-track testing with a factory mechanic on hand like Van der Ven's race bike.

Our works bike rides were disappointing and encouraging at the same time. It seems works bike magic is more a matter of tuning than hardware. Production bikes can be made as fast as the hand-built factory specials. Works suspension doesn't mean a thing when it's not valved to suit a rider's style. There just isn't a world of difference in the performance of a works bike and that of a production bike. What's encouraging is the fact that production bikes have so much potential. Spend some time sorting a modern bike's suspension and tuning its engine to your needs, and you could find works bike magic yourself. □

find Pro Circuit's engine easier to ride than a stock CR because its power builds more evenly, even though there's considerably more to manage. Sub-intermediates, who find they're going fast enough without getting into the real meat of the stock 500's power, might find the bike accelerates too instantly because it creates so much power *and* hooks up so well. Rick Johnson's bike had the power to run with any of the works bikes at the GP, even Eric Geboers' full works RC500 with its HRC cylinder, carb, pipe and crank.

KEES VAN DER VEN'S WORKS KTM 500MX

Riding Rick Johnson's bike was an experience to be remembered but we didn't get quite the experience we expected. It's hard not to approach riding a works bike with some degree of positive bias. After all, there's a better than average chance that it could be the best dirt bike in the world. Rick's bike wasn't. It's certainly among the fastest 500s we've ever ridden, but it wasn't very appealing as a total package. It's probably the best in the world for R.J., but for riders on a more human level, no.

We still had hopes of experiencing works bike magic when we got to ride Kees Van der Ven's KTM 500MX. There was still a chance that we'd all come away stunned at how incredibly good the bike was. Not just fast, or with the potential to be ridden fast, but really good, truly fun to ride.

Our dreams began to fizzle when the KTM guys started telling us how *stock* their works bike was. They were close to tears with pride and joy as they told us that, without serious alteration, their 500 could win GPs. The frame was stock, the fork was a re-valved

stock White Power. The shock was a works, remote-reservoir White Power unit, but it was on the bike only because of clearance problems with the stock shock. Normally, a stock shock is used, often with an over-the-counter Pro Circuit pipe. They even claimed the cylinder was a "cleaned-up" stocker. The only other non-stock parts were a cylinder head modified for more compression to boost low-end and midrange power, Takasago Excel rims, a 38mm Keihin carb (to replace the stock 39mm Dellorto) and a straight core silencer. Of these, only the silencer and head mod could be considered works items.

As you may have already guessed, we didn't find works bike magic riding Kees' KTM. It was good, extremely good, but not galaxies beyond production bikes we'd ridden. Some of our testers liked the stock '91 KTM500 we had on hand for comparison better! The answer lies, as with Rick Johnson's bike, in suspension tuning. Van der Ven is hideously fast but his suspension was too soft for our faster testers. KTM said that



KTM invited the DIRT BIKE staff out to the Glen Helen GP course the day after the 500 GP to ride Van der Ven's works bike. KTM's works 500 engines are stock with minor tuning changes to suit the specific needs of the team riders. Troy Welty, one of our pro testers, found the 500's power more than adequate for moving Glen Helen's heavy berms back a few feet at a time. ▶