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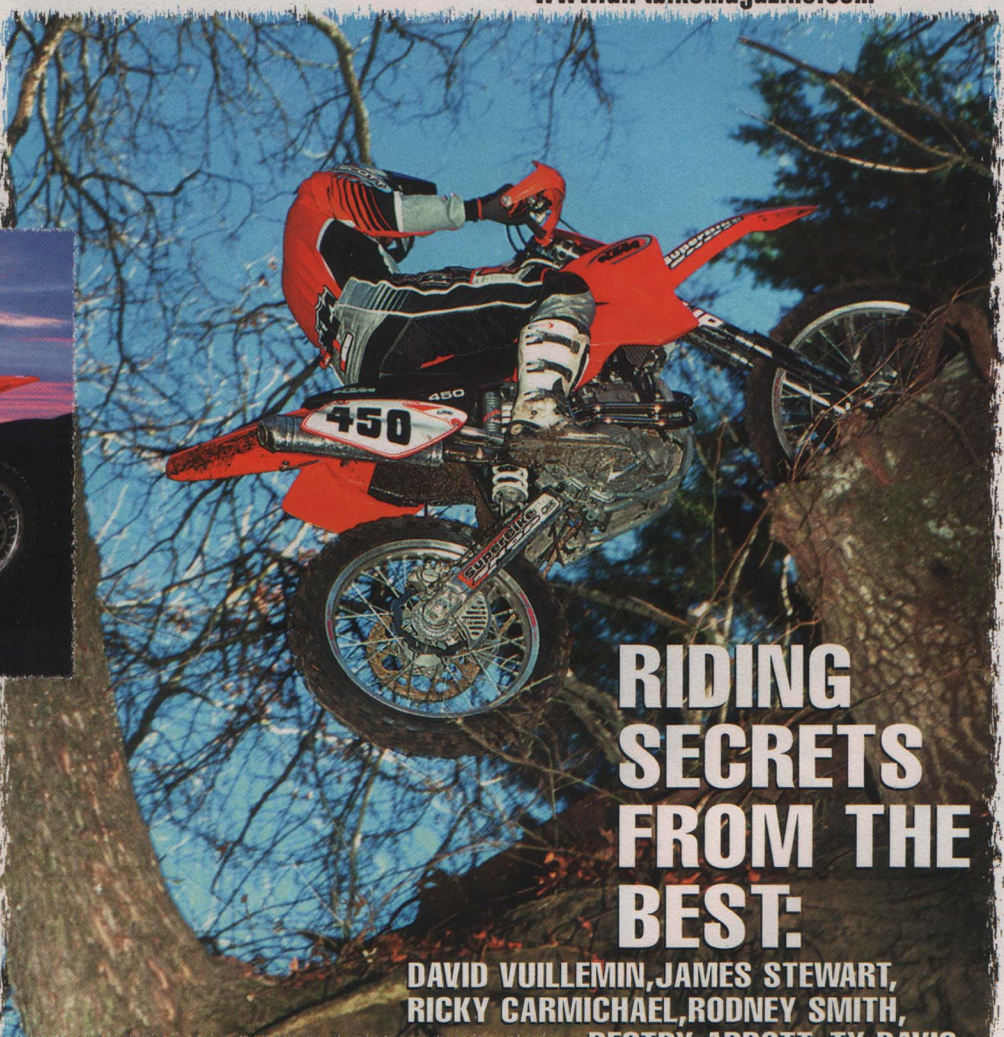
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Chuck Sun's Autoberg

What happens when you take a strange bike and make it stranger?

By the staff of DIRT BIKE



There's nothing ordinary about Chuck Sun. He's a former National Champion, Motocross des Nations champ, stock broker, pilot, motorcycle company rep and part-time party animal. These days he splits his time between his original home in Oregon and Las Vegas, where he conducts tours and does business for KTM and Husaberg.

Since the Husaberg 470 already has a super-wide powerband, the bike is as simple to ride as a one-speed fifty. Just 20 times as fast.

Yes, he still rides. He even races. But he can't decide if he's a motocrosser or a desert rider. As we said, not ordinary. It's only natural that he would have a bike that's not very ordinary. And that would be his Husaberg FC470 automatic. Don't look for one in any catalog or in any showroom. The Autoberg is one of a kind.

START OFF WITH A LITTLE SWEDEN

The bike is basically a Husaberg FC470. That's the standard Husaberg motocross model. Why the Swedes chose 470cc is a bit of a mystery; it won't qualify for the 450cc rule in AMA and FIM motocross. But in Europe, there's still a living, breathing 500 class and the 470 has enough power to run with the big guys. The motor was what got KTM started in the lightweight

four-stroke world. But even though KTM and Husaberg are owned by the same company, the two machines are evolving in different directions. The cylinder and cases of the FC470 are all one piece; the liner just drops into place. It also has a Swedish-made SEM ignition with a high and low setting and a titanium exhaust canister.

But other things are identical on the KTM and the Husaberg. They both have the same wheels, very similar WP suspension components and hydraulic clutches. And in most cases, they would have the same clutch. But not in this case.

ADD A LITTLE COLORADO

Doug Dressel is a mad scientist in Colorado who loves riding tough, nasty trails. He never quite understood why

automatic clutch dirt bikes disappeared with the old Husky Autos. So he built his own automatic clutch. Instead of using expanding shoes and springs like the old Husky design, Doug looked very closely at the ball-ramp devices that operate the power valves on most modern two-strokes. They are basically fool-proof. Ball bearings sling outward when centrifugal force reaches a certain point. As they travel up a ramp, they push open a cup, and that's what opens the power valve. The travel needed to operate a clutch actually is even less than that needed to work a power valve. There's no reason the same principal wouldn't work.

He dubbed it the Rev-Loc Clutch, assembled some of the first prototypes and sent one out to Chuck Sun for testing.

Depending on how badly you abuse your clutch, the Autoberg might require you to relearn how to turn. If you have good habits to start with, you'll adapt quickly and love it.



Since KTMs and Husabergs take the same clutch, it made sense to make the first application for something that would fit a lot of different bikes. Since then, he has made clutches for the KX500, the Honda XR400 and the Suzuki DRZ400. You can contact Doug at (303) 292-1366. The clutch will set your bike up for about \$995.

BACK TO VEGAS

Chuck installed the Rev-Loc and then started riding. At first it was just a durability test. He didn't really think it would have an application for motocross, but he took it on the track to torture test it. Surprise! It worked great for MX. The Rev-Loc is designed so that the clutch lever operates normally in addition to having the automatic feature. So you can pull in the lever, rev it to the limit on the start line and drop the clutch just like normal.

On the track, you never have to touch the clutch—unless you want to. You can still “clutch it” out of turns if that's how you like riding. The biggest difference that you will notice is that the lever pull is super light. There are no clutch springs in the Rev-Loc. Instead, it uses the balls to push the plates together, so the only resistance at the lever is just a tiny spring to keep it from flopping around. When the hand lever is pulled, it just keeps the ball bearings from being slung outward on the ramps. Once the bearings have moved out and engaged the clutch, however, the hand lever isn't very effective. You have to stop revving it before you can disengage the plates. That's fine, though. There's no reason you ever need to rev the engine and pull in the clutch at the same time.



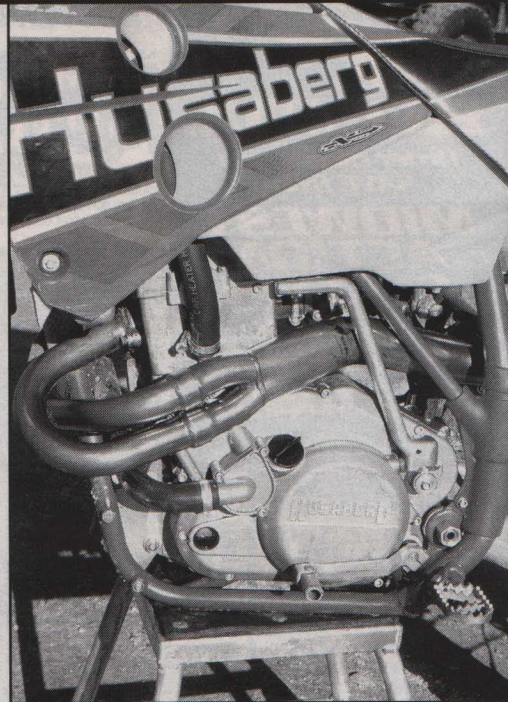
Chuck Sun is a motocross guy at heart. So why does he race a bike with an automatic clutch? Because it works.

AND ON TO GLEN HELEN

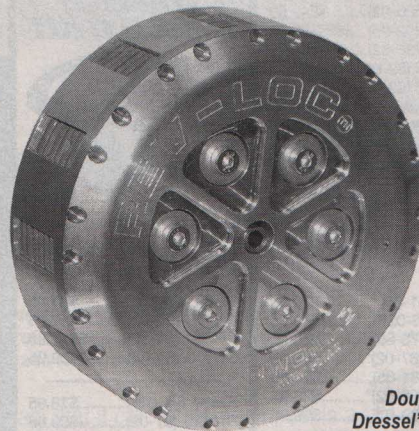
Chuck tested the Autoberg for a few months then brought it down for us to try at Glen Helen. We loved it. Some of us are old enough to remember Husky Autos. Riding Chuck's bike activated some dormant Husky genes and made us think we didn't have to shift, either. That's fine; the Husaberg has so much torque that you can ride around Glen Helen's REM course without leaving third gear. The best part is that you can brake as hard as you want without worrying about stalling the motor. With modern four-strokes, we have grown accustomed to braking with the clutch in for fear of killing the motor and spending the next four laps kicking. The Rev Loc does that for you. It's just one less thing you have to worry about on a motocross course.

The clutch engagement is pretty sharp just above idle, so we were worried that the bike wouldn't work well on a track where you never let the revs drop. But it turns out that you probably *should* let the revs drop a little more than your instincts tell you to, especially with a bike like the 'Berg. It launched out of the turns just as hard as any of the conventional bikes, but with less wheelspin. Chuck actually raced the bike at Glen Helen to show it off. At the start of moto one, he didn't use the clutch lever at all. His start wasn't that great; the other bikes seemed to jump out quickly while he was revving up from idle. In the second moto he used the clutch lever and nearly got a holeshot. Eventually, Chuck won the race.

But motocross isn't the primary mission of the Rev-Loc. We took the 470 out back



A Husaberg FC470 is odd enough in stock trim, with a cylinder casted into the engine cases.



Doug Dressel's brainchild: the Rev-Loc clutch. It has no springs, just a zillion little ball bearings. Retail price is \$995.

and played around on rocky hillsides and in nasty rain ruts. It worked amazingly well. It will freewheel backwards down a hill if you give it a chance, but the engagement is so predictable that you can actually hold the bike in place with throttle control. Interestingly enough, one of Doug's original goals with the Rev-Loc (303-292-1366) was to have a bike with two hand brakes. Chuck's bike wasn't set up that way, but it's an intriguing idea.

We're currently setting up a DRZ with a Rev-Loc for more extensive testing. But so far we're encouraged. If our bike works as well as Chuck's bike, we're going to have a lot of fun. □