

Stretching the Max

I've always thought a little stretch in a max made it all the sexier and it's not as difficult as one may think. It simply requires knowledge of any or all vendors who can help you get the job done and a little up front planning. Hopefully this article will give you insight as to what's involved so you can decide if this is right for you.

Reasons to stretch/notch/brace your swingarm:

1. Love the way it looks.
2. Regularly launch hard or drag race and need to keep the front down.
3. Want to run a bigger rear tire 180/190/200
4. Larger fuel tank option.
5. Unlimited budget.
6. Suffering from "Mine is longer than yours" syndrome.

Items to consider prior:

1. How much stretch (depends on how you ride)?
2. What size rear tire to run (modifying stock swingarm has limits).
3. What size rear rim do I have and do I plan to change rim sizes?
4. Will I ever run an underslung caliper?
5. If larger fuel tank is desired, what length shocks am I running or do I have plans to shorten shocks later?

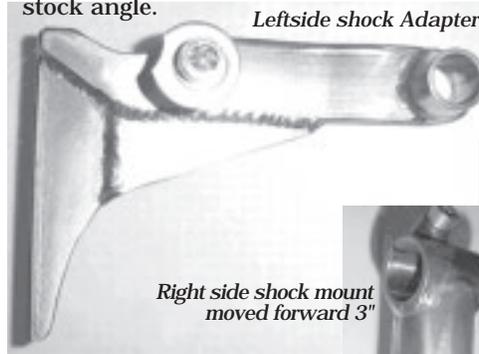
The decision to stretch my bike came after many hard launches resulting in a nice view of the sky. This is due in part to the double D clutch which makes smooth launches a thing of the past. The double-D clutch is "binary" either in or out, not much slip in between.

Asking around on the tech list a few years ago turned up PCW as the best place to stretch, notch and brace a factory swingarm. I looked at aftermarket arms such as Fischer but those are stock length and very pricey albeit beautiful and very strong. I called PCW and spoke with John Gainey. He said he could build a 3" over arm no problem. Three inches was exactly what I wanted so I sent a second hand swingarm to modify. John uses a jig for consistency. See pic below of the completed but unfinished arm. PCW can

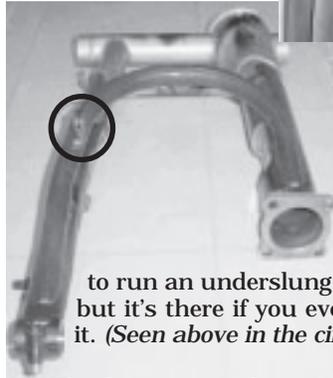


powdercoat but I chose a third party. For normal riding 3" is a good length and has no noticeable affect on handling in curves. Many say it slows the turning but I could never tell the difference.

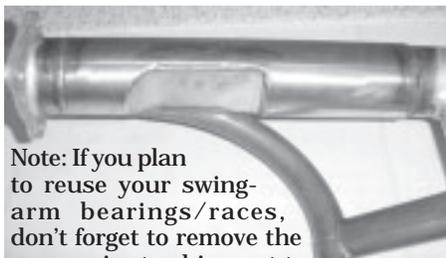
John suggested we keep the shocks at their correct (stock) angles so he built an adapter for the left and moved the right side shock mount up 3". I strongly suggest you keep your rear shocks at the stock angle.



I mentioned to John that I might someday want to run an underslung rear brake caliper so he added a tab underneath where the caliper brace will attach. It doesn't hurt to add this even if you currently have no plans



This brings us to the point where size matters, rim size that is. John needs to know what size your rear rim is because this dictates where the notch goes and how far it runs down the arm. If you have plans to change rims after your stretched arm is built, inform PCW of this so they can compensate the notch. This would also be a good time to let him know what size tire you plan to run as there are limits on what the modified swingarm can accept. I've had no problems running a 180 and most 190 tires on a 5.5x17 rim. Your results will vary depending on rim size and offset. See notch below.



Note: If you plan to reuse your swingarm bearings/races, don't forget to remove the races prior to shipment to PCW. If you plan to replace the bearings/races, leave the old ones in but you will want to remove them prior to powdercoat.

I had a race puller made which is just two pieces of metal, one fits in behind the race and one on the outer swingarm edge with a bolt to force the race out.



Once you've worked out details with PCW or whoever builds your swingarm it's time to think about the driveshaft. Since your new arm is 3" longer, your driveshaft will also have to be 3" longer. At the time of my build, John Furber of Blue Ridge Sportmax was supplying custom length driveshafts and still is but there may also be other suppliers although I am not aware of any at this time. The Sportmax piece is much beefier and unlike stock will probably not snap under load. This means something else will break so keep that in mind when twisting the grip. (See differences in photo).



After receiving the newly modified swingarm I highly recommend a test fit with the new driveshaft. Bolt everything up and check for any binding. Install the shocks and look the bike over well from all angles. This was one reason I chose not to have PCW powdercoat the arm. Once everything passed test fit, the arm went off to powdercoat.

