

Modifying front suspension fork to fit MATE X

by Alex

As announced I took some pictures when changing the front fork of my MATE X. It took me less than an hour including figuring out which tools to use and taking pictures. I would rate the difficulty 3/10 for anyone without two left hands and ten thumbs ;)

Fork: PASAK P35 Snow Bike Air Pressure Fork, 20x4-inch wheel, width 135mm, disc brake, matt black, 1.8kg - <https://www.aliexpress.com/item/33024545404.html>

Start by removing the front wheel and front brake, not pictured.

1. Fold the handlebar stem to reveal the headset



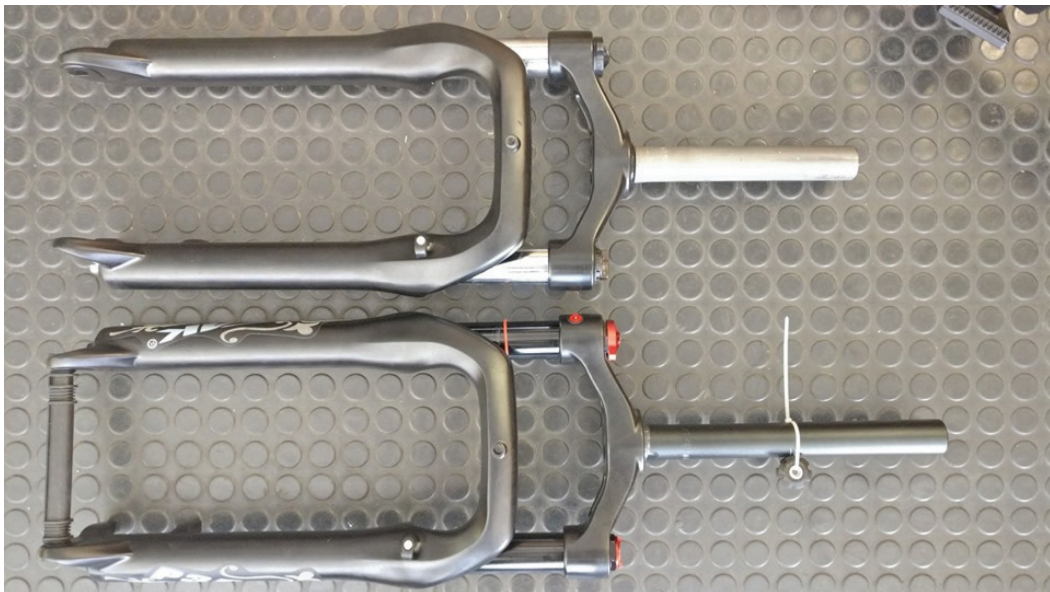
2. Remove the screw (the fork is still held in place as the handlebar-stem clamps to the tube).



3. Remove the stem by loosening the two bolts. You can now remove the fork. Keep the rest of the headset untouched, you will reuse it with the new fork.



4. As you can see the new fork has a longer steering tube (in this case 220 mm) and a slightly longer travel (15 mm).



5. You now have to remove the lower bearing shell from the old fork. There is a small notch on one side to ease the removal. Be careful not to damage the bearing shell and use a knife or small screwdriver if needed.



6. Put the bearing shell on the new fork.



7. Here you can see that the new fork needs to be cut in order to fit.



8. The length of the steerer tube of the stock fork is 182 mm (+- 1 mm).



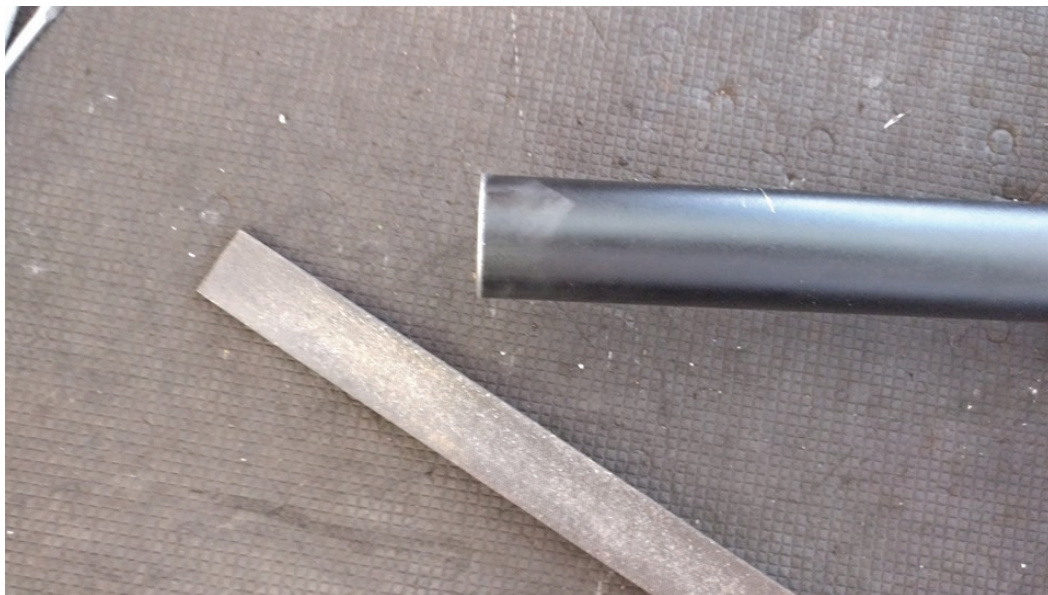
9. Use an appropriate tool to cut the tube (pipe cutter, metal saw, angle grinder...)



10. The new fork now has the correct length



11. Deburr and file a light chamfer into the tube for easier mounting



12. Result



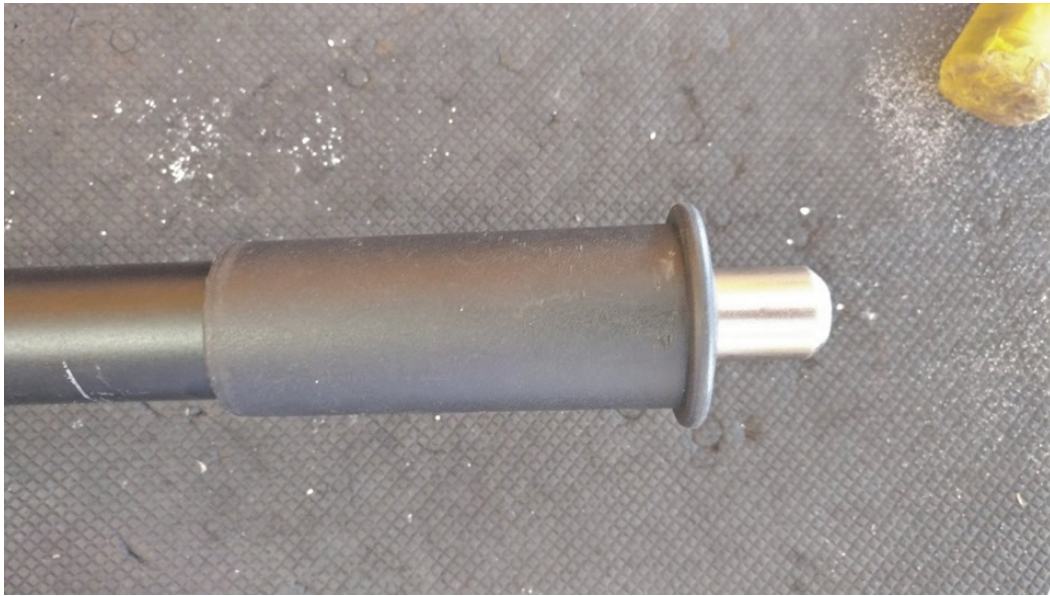
13. The new fork came with a star nut that needs to be driven into the steering tube.



14. Use a star nut driver to put the nut in place



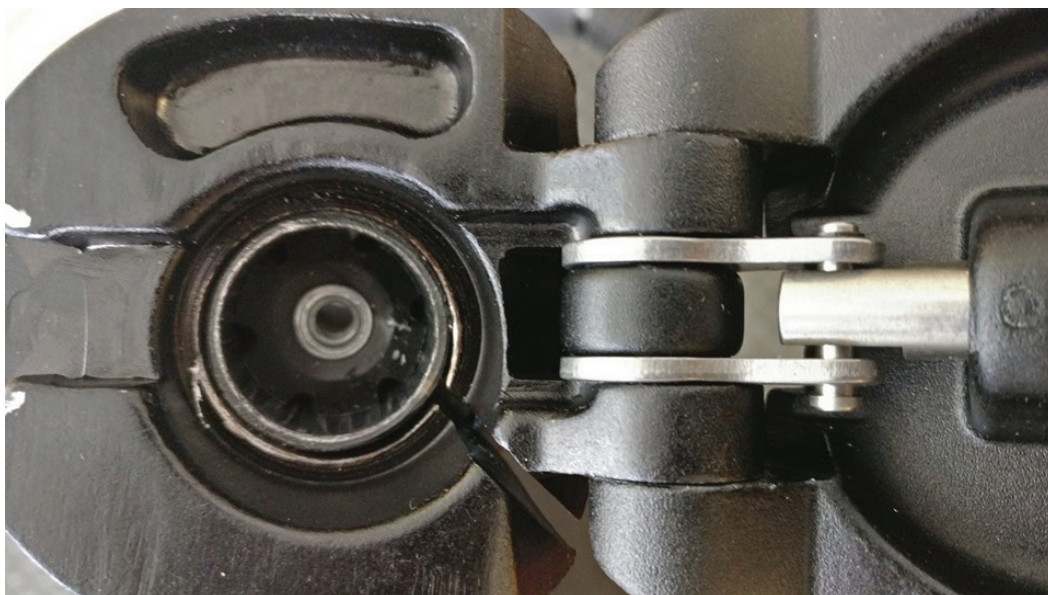
15. Hit the driver with a hammer until the star nut is in place



16. The steerer tube now has a thread for mounting



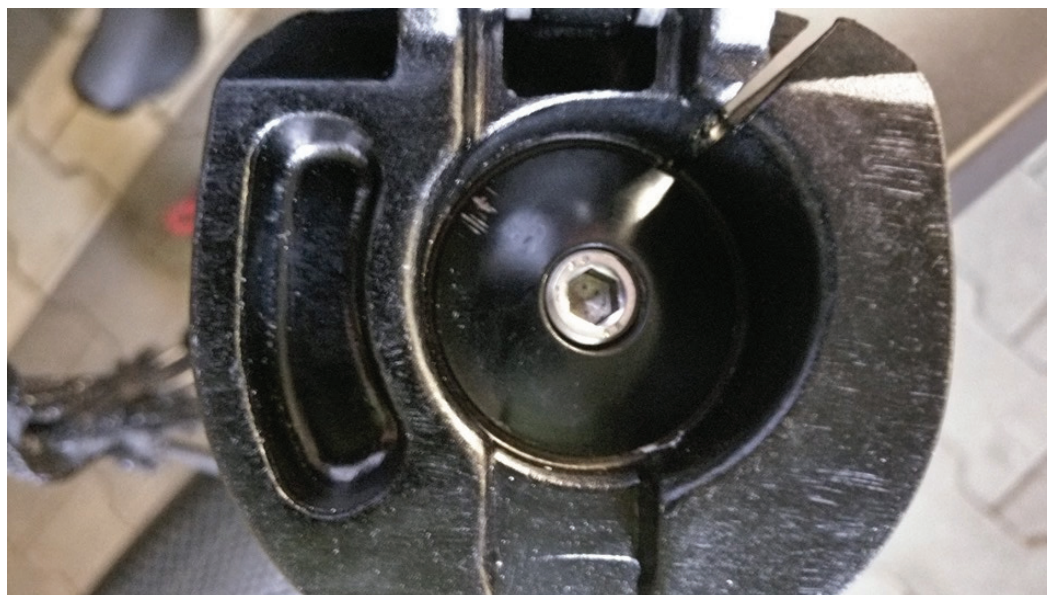
17. Put the fork back into the headset



18. You will need an ahead bolt (they are sold as a set with a star nut, if not already delivered with the fork, or as separate items)



19. Screw the ahead bolt into the star nut



20. Enjoy your new fork :)



Remount brake and wheel (not pictured)

Hopefully this will help some of you.

Cheers,
Alex