



ALLYGN

FRAMEBUILDER OWNED COMPONENT COMPANY

ALLYGN

Thank you for purchasing the ALLYGN M.U.D. Fork.

ALLYGN is a true framebuilder owned component company - aiming to make high end bicycle components more accessible to more cyclists.

This fork was brewed and born right here in the Fern Bicycles workshop in Berlin. The goal was to design a carbon fork for framebuilders, providing all the features and mounts you need for a high end custom bicycle. This fork provides anything cage and rack mounts, light mounting and a under fork crown eyelet for easy fender installation. The fork also features our unique design for a clean dynamo cable routing inside the fork leg, up to the headlight and back on the underside of the fork crown to the tail light. You can run a cable up inside the fork steerer for stem mounted charging devices and the brake cable is also routed internally. The fork has a super wide tire clearance, up to 700c x 55mm or 650B X 64mm tires, while maintaining the standard 395 mm axle-to-crown measurement, keeping the bike nice and compact without changing the normal front end geometry of most gravel bikes. 55mm fork rake for additional toe overlap clearance when riding big tires and fenders. The slick and elegant design blends in perfectly with the slender looks of modern custom made metal bikes.

Literally, this fork has it all in one, a true **Multi Utility Design**, just like a Swiss Army Knife!

PARTS INSIDE THE BOX:

- 1x ALLYGN M.U.D. carbon fork
- 1x Allygn X Asssavers Mudder Mini
- 1x 12mm through axle
- 1x Fork steerer expander
- 1x Headset cap including black M6 bolt
- 1x 25mm diameter under fork crown cable washer
- 1x M6 flat cap bolt
- 1x Plastic spacer for Asssaver direct mounting
- 1x Dynamo rubber plug
- 8x M5 bolts
- 1x M6 bolt

!WARNING!

THE INSTALLATION OF CARBON FORKS SHOULD ONLY BE PERFORMED BY PROFESSIONAL BIKE MECHANICS!

You can seriously harm yourself while installing the fork, so always wear safety equipment!
If the installation is done wrong, serious damage to your bike and your health or death may occur!

Please check with the manufacturer of your bike frame that this fork is suitable for installation.

Check the fork regular before you go riding. If there are any visible cracks, surface irregularities, paint chips, gaps between parts, delaminations or other damages visible, the fork should not be ridden and must be inspected by us. Also unusual noises like rattling or creaking or a strange or softish feeling while riding the fork can indicate a structural damage and the fork must be inspected immediately!

After a crash or other heavy impact the fork must be replaced. The fork is intended to be used for on road and normal gravel riding only. Avoid heavy impacts like jumping or riding through potholes. Maximum rider / bike weight 125 kg
Not suitable for the use with lowrider racks.

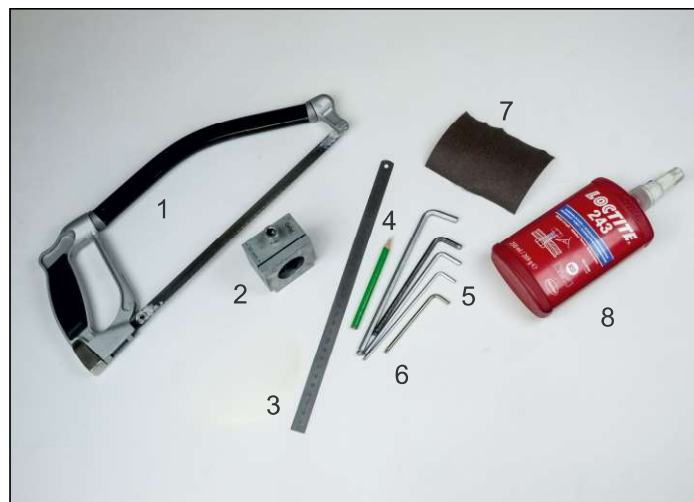
Maximum load and torque values for the eyelets:

- M6 front fork crown mount max load 3 kg, 6 Nm
- M6 under fork crown mount, just for cables / fenders, 5 Nm
- M5 fork leg mounts, max load 2 kg each, 5 Nm
- All three anything cage mounts each side, max load 6 kg
- M5 brake caliper mounts 6 Nm



TOOLS YOU NEED:

- | | |
|-------------|-------------------------------|
| 1 Hacksaw | 5 Allen keys |
| 2 Saw guide | 6 Torx keys |
| 3 Ruler | 7 Sandpaper |
| 4 Pencil | 8 Loctite 243 medium strength |



1 INSTALL THE FORK CROWN RACE



We recommend to **use slotted crown races only** because they are easy to remove and put less stress on the carbon fibers. If your crown race is not slotted you can cut it with a hacksaw, de-burr all sharp edges. The crown race diameter is 1.5" / 39,8 mm.

2 INSTALL THE FORK IN YOUR FRAME



Install the fork in your frame, with the actual headset, all spacers and the stem, just the way as you want to ride your bike later. Maximum spacer height is 40 mm under the stem. If you are unsure about the final stem / handlebar height, use one or two spacer more and maybe put 1-2 cm spacers on top of the the stem. You can always cut the steerer shorter later.

3 MARK THE STEERER



Make sure the fork is all the way inserted in the frame and the headset / stem / spacers are all compressed nicely. Use a sharp pencil to mark the steerer at the top spacer (refer to picture 2). Take the fork out of the frame and mark the final cut 4-5 mm lower then your top pencil marking (this picture).

4 CUT THE STEERER



Use a saw guide to make a straight cut. Never freestyle cut just by hand! Cut all the way through and make sure not to damage the fibers. Use sandpaper to smooth the cutting edge / outstanding fibers. Use a face mask to prevent you from breathing in saw dust and fibers!

5 INSTALL THE EXPANDER, CHECK HEADSET PLAY AND TIGHTEN DOWN THE STEM



Install the included fork steerer expander. Tighten down the center bolt with max 9.5 Nm. Put the stem (do not tighten the stem clamping yet!) and spacers back on, make sure you still have some space (minimum 2 mm) between the expander top and under the top cap, allowing you to tighten

down and preload the headset following your headset manufacturers specifications. Check that the headset is tight but still moves freely, adjust again if necessary. **DO NOT FORGET** to finally tightening down the stem to the fork steerer. The use of carbon mousing compound is recommended.

6 INSTALL THE BRAKES



Route the brake hose through the inner brake cable routing. Install the brake flat mount adapter to the lower left fork leg brake mount. Tighten down the bolts with 6 Nm. Use Loctite, check regular if bolts are still tight.



Punch a hole or cut a slot into the rubber grommet and pull the cable through the seal. Make sure you have at least 10 cm extra cable length sticking out the bottom cable port before soldering the connectors. Excess cable can easily be stuffed back inside the fork leg and will be very helpful to prevent ripped off dynamo cables.

7 CABLE ROUTING



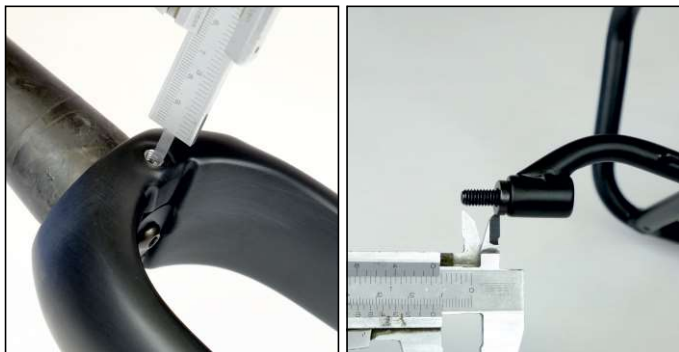
Install your front light to the fork crown. Fasten your light-to-dynamo cable to the pull string and pull the cable through the right fork leg. (Pro Tip: you can easily re-thread the pull string through the fork leg again using a vacuum cleaner)



Route the tail light cable underneath the fork crown through the left cable groove. Fix the cable with the 25 mm washer and the flat top cap torx bolt. Use Loctite.

A second cable can be routed inside the fork leg and out of the fork crown or up all the way through the steerer for additional lights or charging devices.

8 FORK CROWN MOUNTING



The fork crown mount is a 12 mm deep blind hole so it's very important not to use too long bolts, as this can result in damaging the threads and/or the fork itself. Measure how far the thread goes inside and select the right length of bolt accordingly! Max load for the fork crown bolt is 3 kg, maximum torque is 6 Nm. Always use Loctite and check regular if the bolt is still tight!

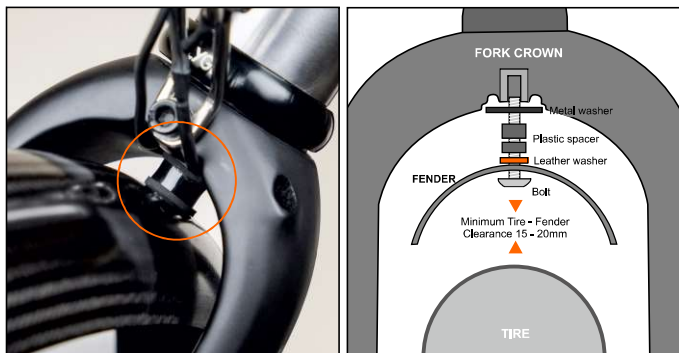
9 RACK MOUNTING



You can install anything cages or racks to the 3 fork leg mounts. Maximum load per bolt is 2 kg, resulting in a maximum load of 6 kg per side if you use all three bolts. Maximum torque is 5 Nm, use Loctite and check regular if the bolts are tight. Do not overtorque, don't screw in at an angle, the fork leg threads can easily be damaged!

This fork is not suitable for low-rider rack installation!

10 FENDER INSTALLATION



You can use rubber washers and / or plastic spacers to fixate the fender with a bolt from the inside fender, through the 25 mm cable washer and the under fork crown mount. Please double check and use correct length M6 bolts (not included) for the 12 mm deep blind hole. The usage of too long bolts will damage the fork and the fender can fall off. Tighten down the M6 bolt with 6 Nm and frequently check if the bolt is still tight. Always use Loctite!

Insufficient fender mounting is extremely dangerous and can lead to serious bike damage, injuries and or death.



The fender stays can be attached to the lower fork leg M5 eyelets (5 Nm). Always use Loctite on all fender bolts and frequently check that all bolts are tight! **Fender to tire minimum internal distance must be at least 15 mm!** Don't forget to tighten down the fork wheel axle with 9-13 Nm before you go on your first ride!

Install the Assaver Mini Mudder and you are ready for your next big adventure,...all the best and happy riding! Flo :)