

XTRACYCLE

RFA Utility Assembly Guide

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This guide is designed to help you assemble an Xtracycle RFA in Utility mode as efficiently as possible. Please follow the assembly instructions in order. While thorough, this guide is not exhaustive—you should already be familiar with all component installation and adjustment procedures.

Your e-bike will have pre-installed all bicycle components other than those listed below, and all Bosch components including battery.

The following items will be included in the box and will not be installed on the e-bike: pedals, headset, headset spacers, seatpost, stem, handlebars (with brake levers, shifters already mounted), Bosch Purion display, front brake caliper, chain, handlebar stabilizer, fork, front wheel, front brake rotor, front and rear e-bike specific lights, reflectors, and any additional ordered accessories.

Unboxing the RFA



- Open box
- Cut zip ties holding the fork to the frame and remove
- Remove small parts box



- Open small parts box and set aside
- Remove seat post from fit kit
- Apply grease to seat post and install into seat tube



- Lift RFA out of the box and mount in bike stand
- Remove front wheel



- Unclip handlebars and use a zip tie to hang them out of the way
- Remove all protective packaging

STEP 2

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Installing the Fork



- Locate the headset in the small parts box
- Slide dust seal onto front fork crown race



- The larger of the two headset bearing retainers goes on the crown race, and the smaller goes on the top bearing cup
- Grease both bearing retainers



- Grease the steer tube and insert up through the head tube

Assembling Headset and Installing Stem, Handlebar & Headlight



- Stack top race, split race lock then FSA top cover



- Build up the headset stack using the spacers
- Install stem and top cap with M6 bolt and tighten until you've removed all end play in the headset



- Install handlebar faceplate with headlight mount facing down
- Torque all stem bolts and handlebar controls to 6Nm



- Install headlight with Allen key and 8mm open end wrench

Installing Purion Display and Handlebar Stabilizer



- Mount Purion display to the left side of the handlebars, right of the brake lever



- Be sure to position the display so it is visible from the seated position
- Secure with a 3mm allen wrench



- Locate the Handlebar Stabilizer spring in the small parts box
- Use pliers to assemble the stabilizer following the included instructions



- Install protective cover over stabilizer spring
- Be sure to tighten the fork bolt to prevent slippage when turning the wheel sharply.

Installing the Front Wheel, Brakes, Cranks and Pedals



- Remove thru-axle from fork dropouts, discard cardboard tube
- Position the wheel in the fork and reseat the axle
- Install brake rotor onto front wheel and torque to 40nM



- Install front brake assembly (refer to the Shimano brake owner's manual for proper setup and installation)
- Use a zip tie to secure brake hose to fork cable boss



- Locate crank arms and crank bolts in small parts box
- Use 8mm Allen wrench to fasten crank arms with crank arm bolts and tighten to 40Nm with a torque wrench



- Grease threads and install left and right pedals

Moving the Rear Wheel



- Remove rear wheel
- Remove three bolts holding the dynamic dropout insert and locking plate and be mindful of the bolt positions



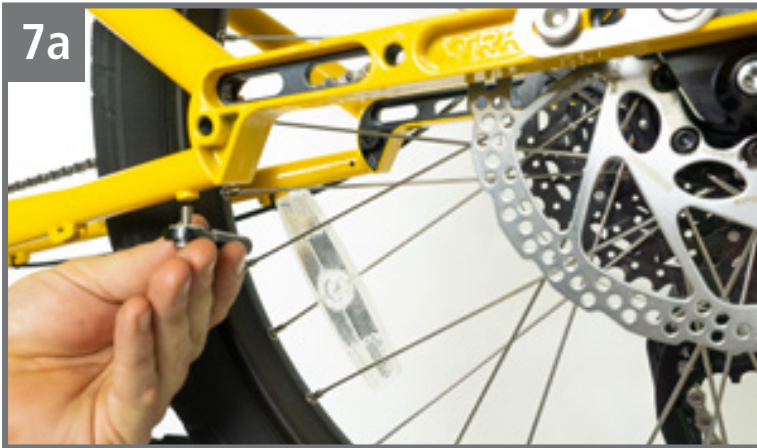
- Move the insert to the rear dropout position as far back as possible; draw any needed cable from forward on the frame
- Replace the three bolts and locking plate, torquing to 20Nm, and repeat for the other side



- Replace the rear wheel

Note: Be sure to seat the dynamic dropout insert as far back in the rear position as possible, as even a small shift forward will misalign the rear axle and result in issues aligning the rear brakes.

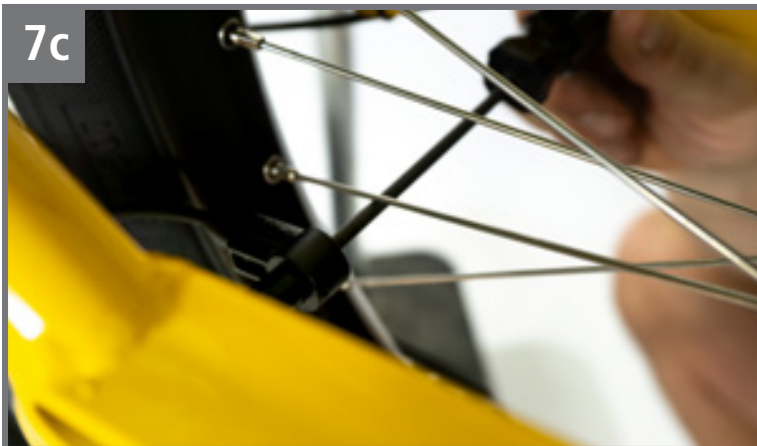
Mounting the Speed Sensor



- Locate the speed sensor post, washer and M5x20mm bolt in the small parts box and mount to frame in the rear position on the non-drive side with a 4mm Allen key
- Note: the rear mounting position is for Utility mode only



- Remove the cap to the speed sensor and position it on the speed sensor post



- Tighten the speed sensor bolt with a T-30 star bit through the wheel from opposite side
- Feed excess cabling into the drive housing and coil and zip tie as needed



- Position sensor magnet on spoke opposite air valve and align with the sensor
- Apply blue Loctite or comparable threadlocker and secure with a Phillips head screwdriver, tightening to 1nM

Installing the Rear Wheel Chain



- Locate the chain in the small parts box
- Feed chain through the derailleur



- Reconnect the chain with the quick link

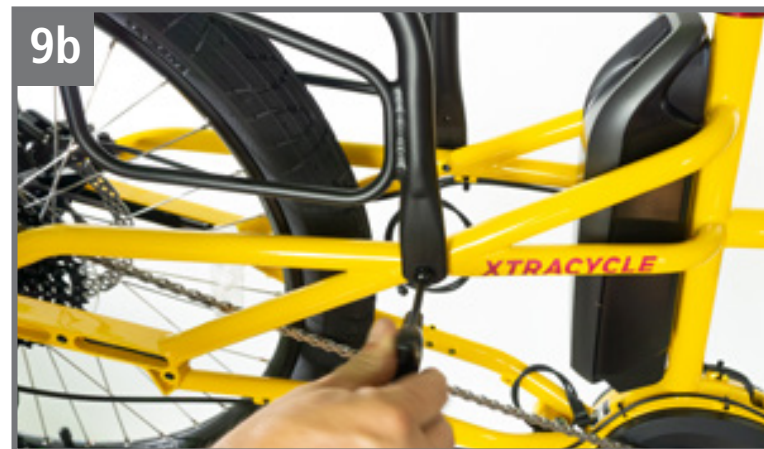


- Engage the clutch

Installing the Utility Rack



- The Utility Rack bolt pattern has very tight tolerances, so begin by dry fitting the rack over the frame mount points
- Note: the rear of the rack uses the lower slotted holes for mounting



- Where the alignment appears off start there and loosely thread a single bolt halfway
- Note: the following steps may be easier with a second set of hands helping to position the rack



- Go to the diagonally opposite mounting point and loosely thread that bolt
- Return to the first attachment point and thread the mated bolt directly opposite the first bolt



- Leverage the rack to initially thread the last bolt
- Note: the rear derailleur cable is routed over rear dropout
- Finally, torque all four bolts to 30Nm with a 5mm Allen key

Installing the Tail Light



- Feed the tail light cable along the inside of the non-drive side of the rack and use small zip ties to secure it in place



- Clip the end of the tail light cable into the tail light
- Align the two tail light mounting posts to the rear of the rack and secure them with the two M4 lock nuts using a 8mm wrench

Installing RFA WheelSkirts



- Locate the correct contoured WheelSkirt for the side of the rack you are installing it on
- Start by wrapping the upper hook-and-loop straps to the skinny rail directly below the top rail of the rack
- Wrap the lower straps around the lower rack and bike frame



- Wrap the left, right and diagonal hook-and-loop straps to the sides of the rack
- Repeat for the opposite side as needed
- **Note:** Either a WheelSkirt or CargoBay must be installed on each side of the bike while in Utility mode. Serious injury or damage could result without one.

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