

retrospec®

Judd **REV**

Electric Bike - 350W



Assembly Instructions

Before your first ride

We strongly recommend taking your bike to a local bike shop after assembling so a professional, reputable bike mechanic can check your work and perform all necessary safety checks prior to the first ride. To find a Retrospec dealer near you, please visit <https://retrospec.com/pages/storelocator>. Please keep these instructions for future use and reference. Do not discard.

Congratulations on your purchase of this Retrospec electric bike! We make sure all our E-Bikes have been carefully designed and manufactured to the latest international quality standards.

Please read this instruction manual carefully and thoroughly before assembling your new E-Bike.

Proposition 65 Warning

 **WARNING!** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Assembly Instructions

Following is important information and instructions for assembling and maintaining your new electric bicycle.

Step 1: Unpacking Your Bike

1. Open the box. You may need a box knife to cut tape. Watch-out for staples and sharp edges as you lift the bike out of the box. A helper can make this easier. Do not lay the box out flat and cut the bike out as you may damage the bike. **HOT TIP:** Use needle nose pliers to remove the staples before pulling the bike out of the box. This will insure they do not scratch you or the bike.
2. Cut all packing zip ties. Detach all parts that are tied to the frame. Be careful not to cut/scratch the bike, particularly the tires and cables when removing the zip ties.
3. Do not attempt to rotate the handlebar/fork until all zip ties and packing have been removed, otherwise you may damage the bicycle. Carefully examine the carton for loose parts and make certain that no parts are remaining in the box. Keep the box and packing material for a short time in case the bike needs to be returned.
Examine your new bike for any visible damage which may have occurred during shipping. If any is found, please contact Retrospec immediately.

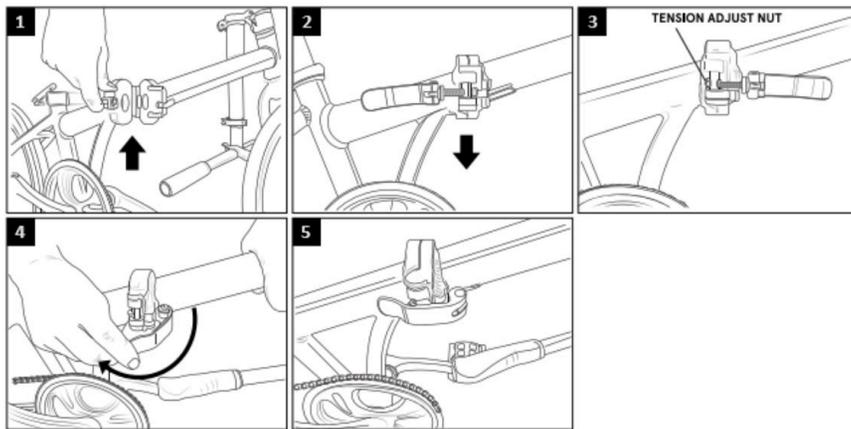
Step 2: Fender Headlight and Front Wheel Installation

Step 2: Unfolding the bike and connecting the frame

The bike is folding for shipping. Unfold the frame by swinging the two hinged halves until the two pieces are aligned in a straight line front to back. **NOTE:** You will need to pull up on the quick release lever to allow the frame to come together.

Once the two halves are together, release the quick release lever so it locks into place.

Swing the quick release lever around so it fits fully in the slot in the hinge on the front half of the frame. Make sure the steel and nylon washers are on the outside of the hinge and against the lever body. **NOTE:** You can make the final adjustment to the height of the seat as needed after the bike is assembled. Close the quick release lever to complete attaching the two halves of the frame together. The lever should require some effort to close. If the lever is too difficult to close or closes with little effort, loosen or tighten the nut on the end of the latch until the effort to close is firm, but not so much so that it is a struggle to close.

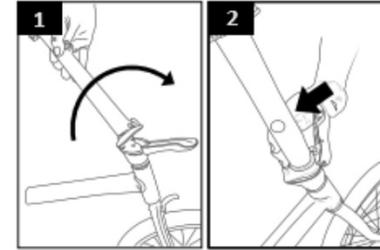


Step 3: Handlebar & Handlebar Stem Assembly

Flip the top of the handlebar/stem up until it is fully seated on the lower portion of the stem fitted into the frame.

Then lock it into place by bringing the locking-lever up until it clicks into place. Check that the fit is secure before your first ride.

To fold the stem back down, press the safety button up then pull back on the locking-lever. This will allow the stem to drop down to the folded position.



You may need to adjust the alignment of the bars. If this is the case, do the following.

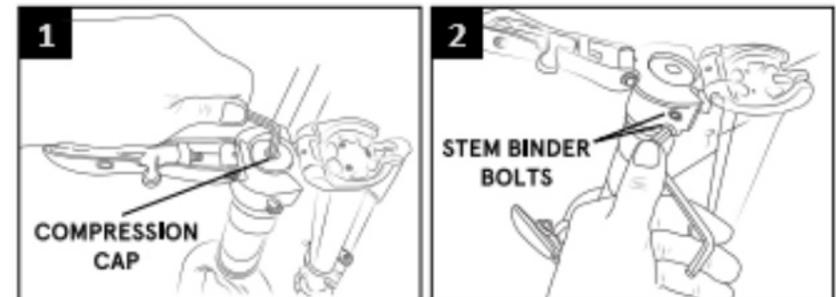
Unfold the handle bars as described above.

With a 5mm hex wrench, loosen the compression cap (top center bolt in the stem)

Loosen the two stem binding bolts just enough to allow rotation of the stem.

Line the stem/bars up with the front wheel.

Tighten the stem and then the compression cap.

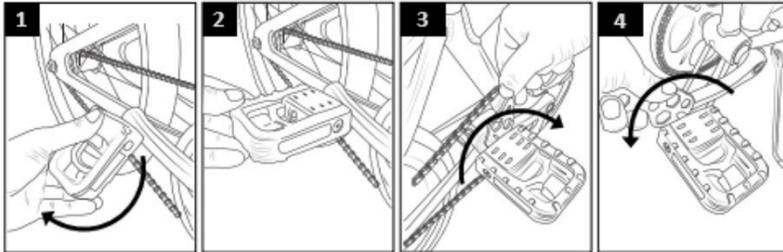


Step 4: Installing Pedals

The pedals come installed on the cranks already. They will need to be unfolded and locked into position for riding. There will be a click when they lock into place.

Before your first ride, please also check that the pedals are fully tightened to the cranks. The right pedal is a standard thread. Tighten securely with a 15mm open-end, 15mm pedal specific wrench, or adjustable wrench (tighten to torque: 34Nm).

The left pedal is a reverse thread. Be sure to tighten this pedal in a counterclockwise direction. Tighten securely with a 15mm open-end, 15mm pedal specific wrench, or adjustable wrench (tighten to torque: 34Nm).



NOTE: Be sure to tighten both pedals with an adjustable wrench or 15mm open end wrench to the recommended torque specification otherwise they will unscrew while riding causing an unsafe condition for the rider and damaging the threads in the crank.

Step 5: Seat Adjustment

To adjust the seat height, pull the quick release lever attached to the top of the seat tube outwards and adjust the seat to the desired height. Once you have the desired position, lock it in place by closing the quick release lever against the clamp. The lever should require some force to close. If it closes too easily and does not hold the post in place or if the effort to close the clamp is too great, adjust the clamping force by opening the lever and loosening or tightening the adjusting nut on the other opposite the lever

NOTE: Do not raise post above the minimum insertion mark noted on the post.



Step 5: Brake Adjustments

The brakes on your bicycle should be correctly adjusted from the factory. However, it's important to check the function of your brakes before your first ride. The following instructions are not exhaustive. We strongly suggest you take your bike to your place of purchase, professional bike shop, or certified E-bike mechanic for assembly, adjustment, and maintenance.

Basic Disc Brake Adjustment

The following instructions are not exhaustive. We strongly suggest you take your bike to your place of purchase, professional bike shop, or certified E-bike mechanic for assembly, adjustment, and maintenance.

Brake Lever and Brake Pad Travel Adjustment

You can adjust the amount of braking leverage by adjusting the brake lever travel and by the closeness of the brake pads to the brake disc

Brake Lever/Cable Adjustment

To adjust the travel of the brake lever, loosen the Locking Collar A1 (away from lever body), turn/unscrew the Adjusting Barrel A2 (what the cable enters) left/ counterclockwise which tightens cable tension and increase lever travel & leverage, this will bring the caliper brake pads closer to the disc (Fig. 6). If the pads are rubbing against the disc, reverse the process. If you have tuned the Adjusting Barrel to its maximum and the lever travel is still excessive you will have to adjust the space between the pads and the disc. Tighten the Locking Collar up to the lever body.

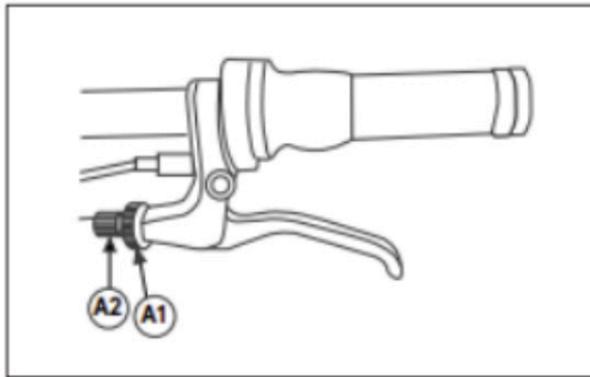


Fig. 6

Once the correct amount of travel has been reached, center the brake Caliper on the disc by adjusting screw C (Fig. 7). When the brake pads are centered on the disc the wheel should spin freely with no rubbing. Upon applying the brake(s), there may be a slight amount of noise until the pads “bed” in, this should stop after your first ride. Make sure there is no oil or grease on your hands or on the disc which can degrade brake performance.



Fig. 7

Checking Brake Pad Wear, Pad Replacement

Pads that are 1mm thick (or less) need immediate replacement (Fig. 8).

To install new pads, remove the brake caliper from the fork or frame by unscrewing hex bolts D (Fig. 9). Unscrew (left/counterclockwise), the smaller hex bolt inside hex bolt B (Fig. 10). Lift up and pull the inner pad downward, using the protruding tab. Slide a thin slot screwdriver under the outer pad and lift it up.

Hold the screwdriver in this position and remove the pad with a pair of long-nosed pliers.

Remove the springs from the worn-out pads and fit them onto the new pads.

Replace the new pads, keeping them slightly inclined into the seat of the Caliper.

Check that the spring hooks correctly onto the small piston. (When pulling downwards the pads should not come out). Refit the Caliper to the fork (or frame for rear brake).

Turn adjuster screw C (Fig. 8) until the pads are centered on the disc and the wheel spins freely. Again, there may be some noise from the brake until it "beds" in. You may have to adjust the cable tension and lever adjustment - follow previous. We strongly advise you have your brakes periodically checked and maintained by your dealer or a professional bicycle mechanic.

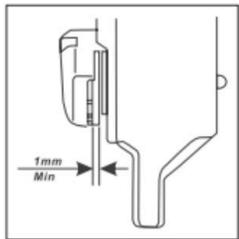


Fig. 8

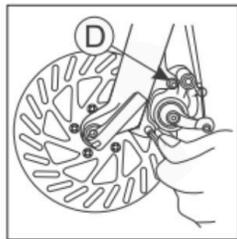


Fig. 9

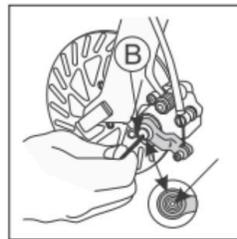


Fig. 10

Battery Installation & Usage.

Retrospec Judd Rev 36V E-bikes have the battery positioned on the back of the seat tube and ships with the battery installed. You can remove the battery by inserting the key and turning the key. Then pull up and back to releasing the battery. To reinstall press the battery into place in a revers fashion of how it came out. Make sure it clicks into place and that it is locked.

Procedure for Charging

Charge the bike battery according to the following procedure:

When charging the battery by AC (house/wall plug), make sure the bike is turned off. The button when quick pressed will also indicate the charge status of the battery via the LED lights.

Securely insert the charger output plug into the battery (fig. 12), then plug the main cable of the charger into a reachable AC (wall plug) outlet.

During charging, the LED on the charger pack will be RED showing charging is in process. When the light on the charging pack turns GREEN, charging is complete.

Upon full charge (GREEN light), FIRST disconnect the charger pack from the AC (wall plug); SECOND disconnect the charger output plug from the battery pack. FINALLY, close the charging socket cover on the battery - make sure it is securely closed.



Operating temperature for the battery charger is: 14F-104F (-10°C to +40°C). Do NOT disassemble the battery charger.

Use only the charger provided with your electric bike. Otherwise, damage could occur to your battery, battery charger, and void the warranty.

When charging, both battery and charger should be minimum 4 in (10cm) away from the wall, and in a cool, well-ventilated environment. Place nothing around or on the charger, while in use!

Warranty: Should any original component prove defective in terms of workmanship within its warranty period, we will replace it. Warranty period for Retrospec electric bikes is as follows:

Electrical Components excluding Battery: 2 years with proper maintenance

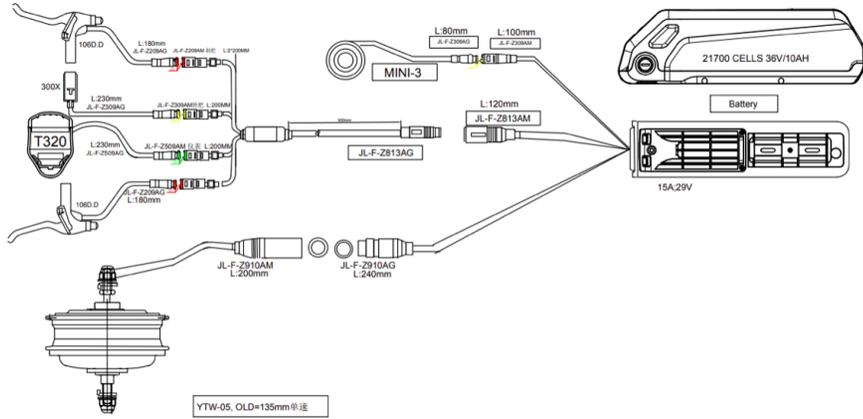
Battery: 1 year

Frame and Fork: 1 year

All other components: 6 months

This warranty does not include labor and transportation charges. The company cannot accept any responsibility for consequential or special damage. This warranty applies only to the original retail purchaser who must have a proof of purchase in order to validate any claim. This warranty applies only in the case of defective components and does not cover the effects of normal wear, nor damage caused by accident, abuse, excessive loads, neglect, improper assembly, improper maintenance, or the addition of any item inconsistent with the original intended use of the bicycle. No bicycle is indestructible and no claims can be accepted for damage caused by improper use, competition use, stunt riding, ramp jumping and leaping or similar activities. Claims must be submitted through your retailer. Your statutory rights are not affected. The company reserves the right to change any specification without notice. All information and specifications within this manual are correct at time of printing.

WIRING DIAGRAM





Making
nature
second
nature.