



DUALLY ASSEMBLY MANUAL

Before beginning assembly, review the owners manual at www.pwr.com/duallyownersmanual.

For additional information regarding assembly, check out the assembly video at www.pwr.com/duallyassemblyvideo.

If you are in need of assistance with assembly, please contact us at 1.888.PWR.BIKE or email us at info@pwrbike.com.

PWR DUALY TORQUE FORCE

PARTS	N/M
Front Wheel Dome Nut	35-45N
Stem Bolts	6N
Stem Top Cover bolt	5-7N
Brake lever bolt	5-7N
Crank bolt	35-45N
Rear Wheel Dome Nut	35-45N

COMPONENTS

- | | |
|------------------------|--|
| 1 STEM | 20 CONTROLLER HOUSING |
| 2 DISPLAY | 21 CHAIN |
| 3 STEM FACEPLATE | 22 CHAINSTAY |
| 4 HANDLEBAR | 23 REAR TIRE |
| 5 REAR BRAKE LEVER | 24 REAR RIM |
| 6 HEADTUBE | 25 REAR DERAILLEUR |
| 7 REAR SHIFTER | 26 REAR AXLE NUT |
| 8 WIRING HARNESS | 27 SECONDARY RETENTION CLIP REAR WHEEL |
| 9 FORK | 28 CASSETTE |
| 10 FRONT TIRE | 29 REAR BRAKE ROTOR |
| 11 FRONT RIM | 30 REAR HUB MOTOR |
| 12 FRONT BRAKE ROTOR | 31 REAR BRAKE CALIPER |
| 13 FRONT HUB MOTOR | 32 SEAT STAY |
| 14 FRONT AXLE NUT | 33 SEAT TUBE |
| 15 FRONT BRAKE CALIPER | 34 SEATPOST CLAMP |
| 16 BATTERY | 35 SEAT |
| 17 DOWNTUBE | 36 SEATPOST |
| 18 PEDAL | 37 TOP TUBE |
| 19 CRANK | |





ASSEMBLY INSTRUCTIONS

REVIEW AND FAMILIARIZE YOURSELF WITH THE PARTS OF YOUR BICYCLE WITH THE DIAGRAM SHOWN ON THE PREVIOUS PAGE.

1. Open box.
2. Remove spare parts box and battery box.
 - a. Remove tools from spare parts box.
 - b. Included tools:
 - 15mm pedal wrench
 - 4mm allen key
 - 5mm allen key
 - 19mm wrench for front wheel
 - T9 Torx driver for brake cable anchor
3. Remove bike from box.
 - a. It is recommended to have two people lift the bike out of the box.
4. Use cable clippers or scissors to remove all the zip ties from the bike.
5. Put fork over side of box to support bike. [See Figure 1]
6. Get the “L” shaped allen key and remove the faceplate of the stem to put the handlebar on.
7. Remove handlebar from foam packaging and place the handlebar in the stem and put the faceplate on.
 - a. Remember to put even pressure on all 4 bolts of the faceplate.
 - b. Once bolts are snug, roll the handlebar to the position you like.
 - You can adjust the shifter, brake lever, and display after you get the handlebar into a position you like.
 - c. Tighten stem faceplate to 6 N m.
8. Connect the wires on the handlebars:
 - a. Connect the **purple lead** to the **red lead** on the rear brake lever on the right side. [See Figure 2]
 - b. Connect the **red lead** to the **red lead** on the front brake lever on the left side. [See Figure 3]
 - c. Connect the **orange lead** to the **orange lead** coming from the throttle on the left side. [See Figure 4]
9. Remove the rest of the protective packaging from bike.
10. Install the pedals:
 - a. Make sure to put the appropriate pedal on the correct side of the bike.
 - “R” for right side [See Figure 5]
 - “L” for left side [See Figure 6]
 - b. Put a small amount of bicycle grease on the threads and screw the pedals onto the crank arm using the supplied pedal wrench.
 - Right pedal tightens by turning clockwise
 - Left pedal tightens by turning counter-clockwise
 - Pedals should thread in easily. If you feel any resistance you are cross threading and you should back out the pedal and try again
11. With your bicycle grease out, apply a liberal amount of grease to your seat post and insert into the seat tube.
 - a. Fold over the quick release lever of your seat post clamp to secure your seat post in the seat tube. You may need to use your allen key to get the proper tension on the initial set up of your quick release seat post clamp.
12. Install the battery.
 - a. Remove the battery from the battery box.
 - b. Slide the lower portion of the battery on to the battery terminals on the lower section of the battery mount on the frame.
 - c. Once the battery is aligned on the terminals, lower the top of the battery on to the receiver on the frame. You will hear and feel a click when the battery is secured.



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4



FIGURE 5



FIGURE 6



ASSEMBLY INSTRUCTIONS (CONTINUED)

13. Attach the front wheel:

- a. It is recommended you use two people with this step.
- b. Remove bike from resting on box.
- c. There are 4 washers (2 on each side of the axle):
 - 2 flat washers (1 on each side of the axle)
 - 2 notched washers (1 on each side of the axle) [See Figure 7]
 - The notched washers go on first with the notch facing the hub motor and pointing down.
 - Flat washers go on after notched washer,
 - Axle nuts for tightening go on after flat washer.
- d. Make sure the arch on the fork legs is facing out.
- e. Insert wheel into fork drop out aligning the disc brake rotor with the brake caliper and the notches on the washers aligning with the fork dropouts.
- f. Tighten the axle nuts to 35-45 N m to secure the front wheel.

14. Connect front hub motor to drive system:

- a. Cut the zip tie securing the hub motor connector to the spoke on the wheel
 - **Take extra caution to NOT cut the cable coming from the hub motor!!!**
- b. Remove the clear cap from the hub motor connector and plug it into the cable coming down from the frame aligning the two arrows on the connectors.
- c. Secure the hub motor cable to the fork leg using a zip tie.

15. Connect the front brake cable to the front brake lever:

- a. Insert the round end of the brake cable into brake lever handle by pulling the brake handle in and exposing the slot for the round end of the brake cable to sit. [See Figure 8]
- b. You'll need to align the barrel adjusters on the end of the brake lever so all the channels on the underside of the brake lever align.
- c. Insert the brake cable into the channel and pull the cable housing to seat the cable and ferrule into the end of the silver barrel adjuster.

- If there is too much tension and the brake cable and you cannot get it into the barrel adjuster, you will need to loosen the cable at the brake caliper.
- Slide down the rubber boot on the brake caliper exposing the silver barrel on the brake cable.
- Loosen the two small worm screws so the cable can slide through the barrel using the T9 Torx driver that came in your tool kit.
- At the brake lever, seat the ferrule and cable into the silver barrel adjuster
- At the brake caliper, tension the brake cable and secure by tightening the T9 Torx screws.
- You may have to do this a couple of times to get the proper tension for the brake feel you like.
- Slide the rubber boot back over the silver barrel.

16. Tighten stem on steerer tube:

- a. Tighten compression bolt on top of stem to 5-7 N m. [See Figure 9]
 - You want this so the fork moves freely in the headtube but not so loose that there is back and forth movement of the headset and the headtube.
- b. Straighten your handlebars so the stem is perfectly aligned over the front wheel.
- c. Once your compression bolt is tightened and your handlebars are straight you can tighten the stem bolts on the back of the stem to 6 N m to secure it to the steerer tube. [See Figure 10]

17. Your new Dually is fully assembled. Only thing left to do is air up the tires and enjoy the ride. Check out the user manual at pwrbike.com to run through the functions of the display on your Dually.



FIGURE 7



FIGURE 8



FIGURE 9



FIGURE 10