

Assembly Instructions for Dynamo Lighting System

General Overview

Installation of a dynamo lighting system requires a modicum of mechanical ability. Provided you're comfortable with a screwdriver and wrench, installation should take 20-30 minutes.

Tools Needed: Two 8 mm or adjustable wrenches, wire stripper.

Product List:

- HR Traction Power Control Dynamo
- Pilot Steady LED Headlamp
- Ray Steady LED Rear Lamp
- CS Mounting Bracket
- Seatpost Bracket
- 2.10 m Double Wire
- Optional: Seatpost mounting bracket for Ray Steady Rear Lamp



Affix the Dynamo

1. The HR Traction Control dynamo can be fitted to either the left fork blade or the left seat stay. The following directions show mounting on the left fork blade, but you can as easily mount the dynamo on your seat stay if you prefer.



Position of left fork blade



Position of left seat stay

2. Hold inside half of the CS bracket on the inside of the left fork blade (or seat stay).



Hold inside half of CS Bracket on inside fork blade.

3. Connect the outer half on the outside of the fork blade and bolt the two pieces together. Do not fully tighten (yet). You're going to want to be able to adjust the position of the dynamo before you completely tighten the CS Bracket.

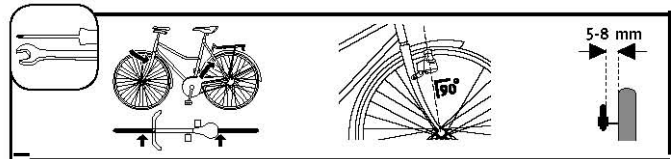


Connect outer half of CS Bracket to inner half.

4. Align the bolt hole on the HR Traction Control Dynamo with the remaining threaded hole on the arm of the CS Bracket. Use the bolts and washers provided with the dynamo to attach the dynamo to the bracket. For best efficiency, ensure that the centerline of the dynamo is in line with the centerline of the wheel. The dynamo's driving wheel should be positioned 5-8 mm away from the wheel when it's snapped out. When everything is aligned, finally tighten all bolts.

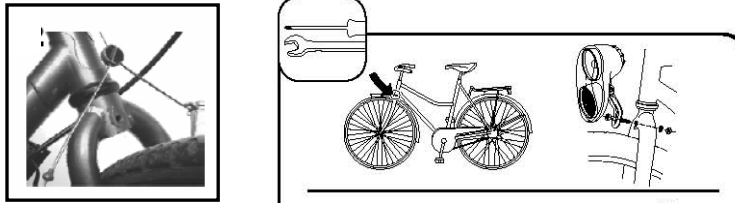


Position dynamo centerline parallel to wheel centerline.



Attach the Headlamp

5. Use the long or short mounting bracket to affix the light into the fork crown. A mounting bolt is not provided. Depending on the fork crown and style of bicycle you're using, you may or may not be able to mount the lamp on your brake bolt. If your bike doesn't use a fork-crown brake, use a 6 x 40-60 mm bolt. If you're unsure about how to proceed, check with a professional bicycle mechanic.



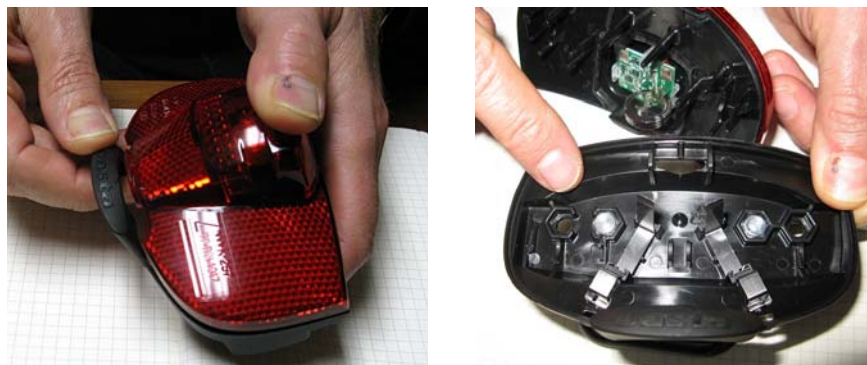
Attach the Rear Lamp

6. You can attach the rear lamp to the back of your rack or to your seatpost. For rear rack attachment, there are mounting bolt holes for 50 mm and 80 mm spacing (these are the most common rack hole spacings). The Ray Steady Rear Lamp comes with the bolt pins pre-assembled in the 50 mm spacing holes.



Bolts in 50 mm spacing holes.
(Also note positive and ground connection points)

If you need the bolts to be spaced at 80 mm, you can open the Ray Steady by pressing on the closing tab at the bottom of the lamp. Once open, move the bolts to the wider 80 mm position.



(Left) Press closing tab to open the Ray Steady Rear Lamp.
(Right) The interior of the Ray Steady showing 50mm and 80 mm spacing bolt holes.

7. Mount the Ray Steady to your rack using the bolts, lock washers, and nuts provided.

Optional Seat Post Mounting (Alternative to Rack Mounting)

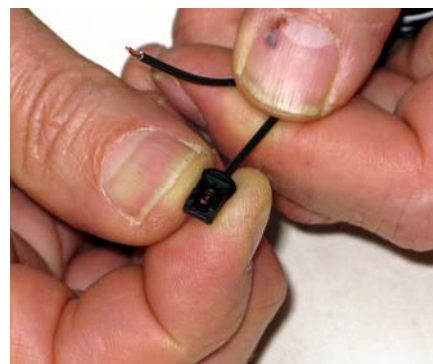
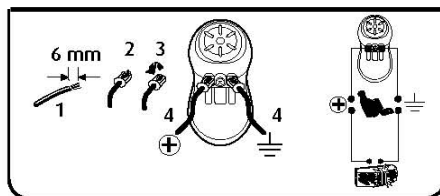
If you're not using a rear rack, you can also attach the rear lamp to your seatpost using the optional seat post mounting bracket.



Wiring

8. Split the first two inches of the double connection wire and strip 6 mm off each end. Note one strand of the double wire is entirely black and the other has a white stripe. Use the black strand for all positive connections; use the white-striped strand for all negative connections.

Insert the exposed end of the black wire into one of the connector plugs supplied with the headlamp, fold it back on the connector, and push the plug onto the positive connector. Repeat the process for the white-striped wire and plug it into the negative connector. Cut any excess wire not needed to reach the dynamo and use it to connect the rear lamp.



Insert stripped wire into headlamp plug.



(Left) Fold back exposed wire.



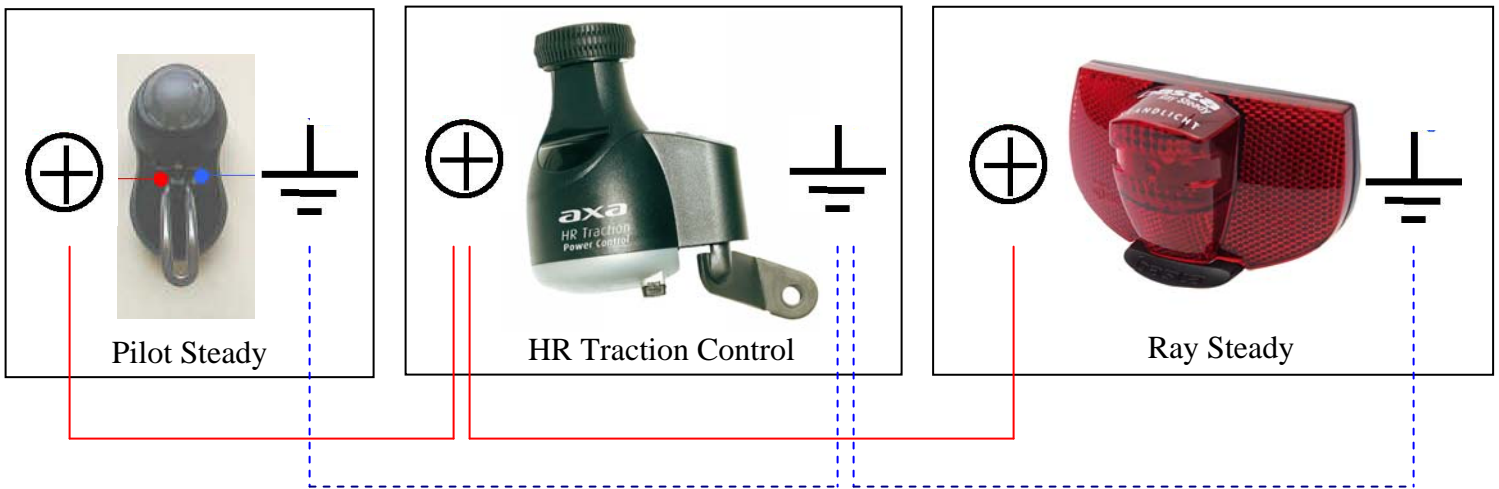
(Right) Press connectors into the back of the headlamp.

- Use the excess wire cut off in the headlamp assembly step to connect the rear lamp to the dynamo. Split about 2 inches of wire and strip about 6 mm off the end of each strand. Depress the receiving connector on the side marked “+” and plug the black wire into this positive connector. Releasing the connector traps the wire securely. Do the same for the white-striped wire but plug it into the negative connection.



Depress the receiving connector.

- Refer to the figures below. You need to connect the positive and negative wires from the headlamp and the tail lamp to the dynamo. Strip about 10 mm from the ends of each strand of wire (total four strands: two from the head lamp; two from the tail lamp). Examine the dynamo connector. Note that it has four funnel-shaped holes on one side (to receive the wires) and smaller diameter exit holes on the other side. It'll be easier to push wires through the funnel-shaped holes than it will be if you try from the other side. Two adjacent holes are marked positive; two are marked negative.



Note that the arrangement on the connector plug is: positive, positive, negative, negative. If you put the positive wire from the headlamp into the first positive position, make sure that you put the negative wire from the headlamp into the first negative position. Likewise, wires from the rear lamp should be plugged into the second positive and second negative position. If you fail to do this properly, the lamps will not light.



The dynamo and dynamo plug with attached wires. Note: First and third positions are from the wire attached to the headlamp; second and fourth positions are from the wire attached to the rear lamp.



(Left) Press dynamo plug into dynamo. Be sure to match positive-positive and negative-negative.
(Right) Trim any excess wire with sharp blade.

11. Zip-tie or tape wires to the frame to ensure they're out of the way...and you're ready to ride.

Thank you for buying an Axa-Basta dynamo light set. If you have any questions or problems, please call Cantitoe Road at +1.800.422.2104 or write: info@CantitoeRoad.com.

