TORQUE ARM

Installation Manual

English

Front Wheel Install

With your bike upside down, your wheel should be pushed all the way down into the dropouts to make sure it's a nice and tight fit. This is very important. If the dropouts are not embeded firmly in the bottom of the drop out slots this could cause failure of the forks or cause the electric hub axle to become unsecure.

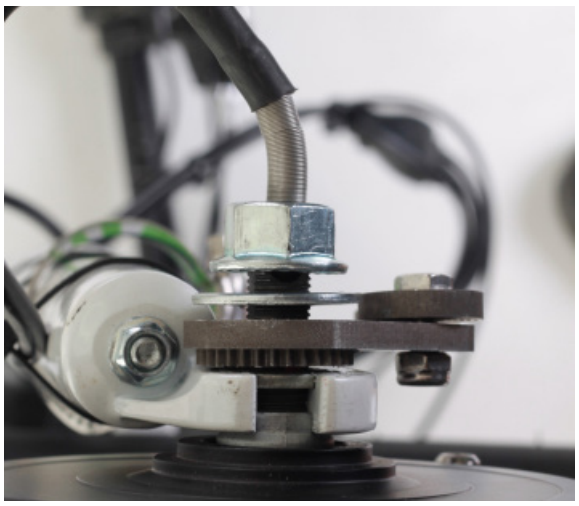
One torque washer should be fitted against the hub, on the inside of the forks (on each side) and then one flat washer on the outside. With these in place you can then tighten the axle nuts using a spanner or adjustable wrench. Make sure you have the right size as to protect the nuts from being stripped. Tighten to approx. 30-40Nm (250 - 350 in lbs).

ARC Universal Torque arm

The first step in installing the torque arm is to assemble the splinned pieces over the motor axle. If you've already tightened the wheel nuts it's just a simple case of loosening off one of these and assembing as shown. We chose to install on the motor cable side. You can install it on either side. If you install the torque arm on the motor cable side, you can slide the components over the motor plug easily.

The next step is to bolt on the longest part of the torque arm to the outside splinned part with the bolt and nut supplied. This will usually be installed similar to the 3rd photos on this page, with the long piece on the outside of the splinned parts, to leave enough clearance between the motor hub and the torque arm components.

The next step is to position the torque levers and the splinned parts so that the two main levers are perpendicular to each other (at a right angle, 90 degrees) just like on the previous page.



Torque is force multiplied by perpendicular distance. To get the most out of the torque arm, the lever needs to be at max distance, which is when both arms are at an approximate right angle (90 degrees). This will efficiently transmit the torque away from your dropouts.

The hoseclamp supplied then anchors the arm to the fork which is the final step. For added safety, install a second torque arm on the opposite side (purcahsed separately and available online).

Rear Wheel Install

Once you have installed the disk brake, loosen the axle nuts on the electric wheel. This will allow the axle to slot into your dropouts. We are showing the most common way that the fasteners can be arranged, but it is possible you will discover a more suitable way to arrange them, depending on your bike and gear set layout. If you need to space the rear forks out further, you can use the washers and spacers provided. If the you need more room on the gear set side, space the hub over with the washers provided, or if you need to space the hub evenly over to the disk brake side, you can rearrange the fasteners to achieve this.

The distance between your dropouts should be around approx. 135mm. Your rear forks/ chain stays will flex in and out a certain amount without causing any structural issues.

The dropout axle slots should be approx. 10mm however you may need to file off a thin layer of paint for the axle to slot in all the way. The axles are designed to be a very tight fit, so don't stress if you need to remove a small amount of material, this is normal.

So long as the hub is orientated so that the freewheel thread side is on the chainwheel side of the bike, it will rotate in the correct direction.

With your bike upside down, your wheel should be pushed all the way down into the dropouts to make sure it's a nice and tight fit. This is very important. If the dropouts are not embedded firmly in the bottom of the drop out slots this could cause failure of the forks or cause the electric hub axle to become unsecured.

Tighten to approx. 30-40Nm (250 - 350 in lbs). If you would like to install the torque arm on the rear wheel, please see the page over.

ARC Universal Torque Arm

There are several ways you can orientate the torque arm, depending on your bike. The first step in installing the torque arm is to assemble the splined pieces over the motor axle. If you've already tightened the wheel nuts it's just a simple case of loosening off one of these and assembling as shown.

We chose to install on the gear set side. You can install it on either side. If you install the torque arm on the motor cable side, you can slide the components over the motor plug easily.

The next step is to position the torque levers and the splined parts so that the two main levers are perpendicular to each other (at a right angle, 90 degrees).

Torque is force multiplied by perpendicular distance. To get the most out of the torque arm, the lever needs to be at max distance, which is when both arms are at an approximate right angle (90 degrees). This will efficiently transmit the torque away from your dropouts.

The hoseclamp supplied then anchors the arm to the fork which is the final step. For added safety, install a second torque arm on the opposite side (purchased separately and available online).

Make sure your wheel is still aligned correctly after this step. The 'C' shaped washers are used mostly on front wheel conversion kits, where the dropouts have a recessed area that required the use of the 'C' washers.

CONTACT US

Dillenger

3/13 Olympic Circuit
Southport QLD 4215
AUSTRALIA

www.dillengerelectricbikes.com.au
support@dillenger.zendesk.com