



HUNTER V3

User Manual



This manual describes how to safely complete final assembly and includes tips for use and maintenance

English

THANK YOU

Thank you for purchasing your new Dillenger electric bike! We know you'll love it, and with some care it should last for a very long time. Please read through this manual carefully before beginning final assembly.

SAFETY

Mechanical Safety Check:

Routinely check the condition of your bike. Make sure no fasteners have come loose. Perform a visual inspection of the whole bicycle before every ride. Make sure tyres are correctly inflated within the range given on the tyre sidewall and the spokes are properly tightened. Check your brakes for proper operation.

Your First Ride:

Be sure to pick an area away from cars, other cyclists, obstacles or other hazards to become familiar with the controls, features and performance of your new electric bike.



PLEASE NOTE

We highly recommend the purchase of the Dillenger electric bike repair toolkit. It will make your setup and ongoing maintenance much easier. This can be purchased online.

ITEM CHECK LIST

Each electric bike is assembled under the most strict quality control standards. Upon completion, each electric bike is test ridden by a technician inside the assembly factory to check that every function and adjustment on the bike is perfect.

Item check list:

- Electric bike with front wheel and handlebars
- Charger box (this may container other important parts)
- Pedals (left and right) please note the left and right pedals are not identical
- Any loose boxes may container other parts, such as a light (if where a light is provided or purchase) so please check all packaging thoroughly
- Front mudguard
- Keys

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SUMMARY OF FINAL SETUP

To fit into an appropriately sized shipping carton to comply with the various courier networks, some basic parts of the bike are temporarily removed. This is so that the bike can fit into the shipping carton safely, and so that we can adequately package each part of the bike so that it is delivered in perfect condition.

These simple instruction will show you how to perform the final setup. Your bike may arrive in a more assembled state than what is shown here. These are the steps required for most customers (packaging and final assembly can vary by country).

In summary, these are the main steps:

Step 1. Unpacking/ Unboxing

Step 2. Identifying the pieces that require final assembly

Step 3. Handlebar alignment and fastening

Step 4. Front mudguard and front wheel fastening

Step 5. Left and right side pedals

Step 6. Seat and stand

Tools required:

Allen keys

Spanner (15mm)

Bike pump (or service station car tyre pump)

Please note, some of the pictures in this manual show a slightly different bike, but the installation instructions are the same.

UNBOXING

Unboxing your Dillenger bike will be very exciting, but it's important to take care when unboxing the bike, as it's possible to accidentally damage the bike or misplace crucial parts. It's also much easier to unbox the bike with someone there to help you.

Remove the protective packaging from the bike carefully with a pair of scissors or a box cutter. Make sure you don't misplace any components in the loose packaging (there can be quite a lot of protective packaging around the bike).



PLEASE NOTE

The keys will be securely fastened to the frame or handlebars of your bike. Make sure you do not lose these as they are coded and a replacement set would need to be special ordered.

MAIN PARTS

After you've taken your Dillenger bike out of its shipping carton, you should have these parts:

1. The complete bike



2. Front wheel with quick release axle



3. Handlebars (components already connected by the cabling)



4. Seat



Note: This can be in the shipping carton or fastened to the bike separately.

5. Pedals



Note: These can be in the same box as the charger, or fastened to the bike separately.

6. Front mudguard



Note: This can be in the shipping carton or fastened to the bike separately.

7. Lights (attached by the cabling)



8. Charger



ASSEMBLY

HANDLEBARS

The handlebar components are already connected by the cables and wires, all that's required for final setup is to secure the handlebar stem onto the headtube as shown below:



FRONT WHEEL AND MUDGUARD

Note: It may be easier to do this step with the bike flipped over, resting on its seat and handlebars. Just be careful that the display doesn't get damaged when the bike leans on the handlebars.

Firstly, secure the front mudguard by undoing the bolt that secures the light to the forks and then use that bolt to secure both the mudguard and the light to the forks.



Now the mudguard side-stays. You can adjust the length of the stay with the plastic holder. Once you have the correct length you can secure the side-stays to the forks with the supplied bolts. You may need to play around for a bit to find the correct length.



You can now put the front wheel in the forks. Make sure that you don't damage the brake pads inside the brake caliper in the process. You can also temporarily remove the brake caliper to make this easier.



Now secure the wheel into the forks with the quick release axle. Make sure this axle is tightened properly, so your front wheel doesn't come off.



After securing the front wheel you can put the brake caliper back (in case you removed it before the wheel installation).

Check to make sure that the wheel spins freely without rubbing on the brakes or mudguard. If the wheel is rubbing somewhere make the required adjustments to get it to spin freely.

PEDALS

All bicycles (electric bikes included) have left and right side pedals. Make sure you identify each one. This image shows how to identify each pedal. You can see the 'R' written on this pedal, denoting this is the right side pedal, to be used on the right side of the bike (if you were sitting on the bike).



The right side pedal mounts to the right side crank (if you were sitting on the bike) and left side pedal on the left crank. The right side pedal is a right hand thread, it will tighten by turning clockwise (normal). The left side pedal is a left hand thread and will tighten by turning anticlockwise (opposite to normal). It is essential not to confuse which pedal is used where and not to cross thread the pedals. If it feels too tight, you might have made a mistake.

The pedals are designed this way so that the act of pedaling (while riding) does not loosen the pedals over time.



Screw in the pedals as described above for both left and right. Depending on the type of pedal they can be tightened using an allen key on the inside as shown above or by tightening with a spanner inbetween the pedal and the crank.

SEAT AND STAND

This is the easy part. Simply insert your seat to the desired height (about hip height) and close the clamp to lock the seat in position. Take note of the maximum seat height, and don't put the seat up past that point.



With the stand, just make sure that the bolt that secures the plastic end cap to the stand is done up properly. If this bolt is too loose the end cap may fall off while riding or collapse when the bike is leaning on it.

BATTERY OPERATION

The battery for your Dillenger bike is the most expensive single component and one of the most crucial. The battery can be removed following these steps. Use the key provided to unlock the battery:



The key is placed in the key hole



Turn the key to pop out and remove the battery



You can remove the battery to charge it, or you can leave it in the bike. For transport by car, we recommend taking the battery out of the bike and storing inside the car, in a safe place. When mounting the battery back into the frame, insert it in the same fashion that it was removed. The base of the battery should be inserted first. It should be firmly against the bottom of the cavity. Then push the top of the battery into the battery cavity, until it clicks into place. You must be gentle with the battery.

It is very important that the battery is locked into place before you use the bike again. Push the battery into the frame until you hear it 'click' into place.



FINAL CHECKS

After you have finished these steps it's a good idea to go over the other fasteners on the bike as well, to make sure everything is secured properly.

These fasteners include:

- the bolt on top of the headset
- the bolts on the side of the handlebar stem
- the bolts that secure the handlebar components (display, throttle, grips, etc)
- the bolts that secure the rear rack to the frame
- the bolts that secure the brake callipers to the frame
- the bolts that secure the disk rotors to the wheels

There should be no vertical play in the headset after tightening the headset bolt, and prior to tightening the two bolts that secure the stem from rotation on the head tube (top of the forks).

After the initial check, it's recommended to periodically check these fasteners again and tighten them if they come loose. This will ensure that the fasteners on your bike are safe and secure, and the bike is safe to use.



LED DISPLAY OPERATION

We have an LED manual on the website, or you can follow this link:

https://cdn.shopify.com/s/files/1/0340/9251/5387/files/KEY-DISP_LED_Display.pdf?v=1597019143

IMPORTANT POINTS

Please consider these important points for best use:

Keys:

The keys for your bike are zip tied to your handlebars. You will have 2 keys, so please keep one as a spare separately.

Battery indicator:

The battery light indicator on the battery is not an indication of battery charge. The only approximation of battery charge level is on the LED display. The only accurate way to know that the bike is 100% charged is by charging it until the charger light shows it is fully charged (next page). Please make sure you charge the bike after every ride.

Maintenance:

Make sure you routinely check the tightness of key fasteners (nuts and bolts) such as the front wheel, rear wheel, seat, handlebars, forks, pedals, brakes, etc. Also regularly check your spokes, as the spokes in the motor wheel tend to loosen more quickly than on a 'normal' bike. Loose spokes can cause a buckled wheel and/or spoke breakage.

Battery charge:

Make sure you keep the battery topped up as often as practical. Charge the bike after every use, and use and charge it least once a month. Charge it before each ride if you have not charged it in a week. It is not necessary to run the battery down, as this may affect the battery negatively over time. Leaving the battery flat runs the risk of completely depleting the cells which could cause premature battery failure.

Tyre pressure:

Make sure your tyres are pumped up to the correct PSI, which is indicated on the tyre side wall.

Power switch:

Press and hold down the middle button on the display to turn the bike on.

CHARGING

1. Plug the charger into the wall socket/ outlet, just like you would a laptop or mobile phone charger.
2. Check that the indicator light on the charger glows green.
3. Plug the charger (battery end) into the battery carefully, making sure it is all the way in. Do not force it if there is an obstruction.
4. The indicator light on the charger will glow red whilst charging.
5. Once the indicator light on the charger changes from red to green, the battery is fully charged.

When the battery is full, the charger will stop charging the battery automatically. It is recommended to take the battery off the charger once the battery is fully charged, and not leave it on the charger for an extended period of time.

Charging time can vary from 1 to 5.5 hours if completely empty.

The battery should be charged and used once every month as a minimum to maintain healthy cells.

The best way to charge your battery is to plug it in after every use, and leave it on charge until the indicator light shows the battery is fully charged. It is not good practice to partially charge the battery.



MAINTENANCE

A little extra maintenance is required over and above a normal bicycle.

One of the main things you may come across is that your spokes need to be tightened more often than a non-electric wheel. Our wheels use 12G and 13G spokes which handle the load and torque of these motors very well, but are more susceptible to coming loose.

A spoke-tightening tool such as the one including in the Dillenger hub motor conversion toolkit, is ideal.

Check the tightness of each spoke ideally after the first 100km and then every 500km.

As well as caring for your spoke tension it's important to do a check on all of your fasteners every few months. It never hurts to go over your bike with tools, tightening and checking everything that can be checked. This will ensure you have a safe and well-serviced bike.

Keep your bike clean! There's nothing worse than having to work on a dirty bike.

Also keep in mind the usual bike maintenance like tyre pressures, brake pads, etc.

The motor is a sealed unit and requires no maintenance during the design life.

Lastly (just to reiterate) it's important that you charge the battery at least once every month to ensure the battery maintains a safe storage level.



PLEASE NOTE

Any modifications to any Dillenger product that isn't approved by Dillenger will void your warranty.

TROUBLESHOOTING

Dillenger's troubleshooting advice will take you through a logical way to diagnose any issues that may arise during installation and use.

Before commencing troubleshooting, disconnect all components. Do not short cut this process. There are countless times a loose plug has caused grief. By disconnecting all the plugs and then reconnecting just the crucial components, this will solve any loose plug issue.

Go through one by one plugging in the other components (such as the e-brake plugs or the motor cable) to see if any of these are the cause of the problem. In this basic state you may discover the culprit quickly.

Fault	Solution
Display turns on, but motor does not activate	Check the motor plug from the controller. This is a very stiff connection and will not work unless the plug is pushed all the way up to the indicator line. The twisting of the handlebars can sometimes cause the plug to pull out slightly if there is not enough slack in the motor cable.
A high pitched rattling noise can be heard when accelerating	The vibration of the motor is very small, but at this frequency it can do some odd things to the other components on the bike if they are loose. For example a loose spoke or even a bolt on your rear rack. If something is just a little bit loose, sometimes this can reverberate and make a harsh high pitch rattling sound. Nothing is broken or wrong, you just have to identify the loose part!
Rim has a buckle or spokes coming loose all the time	We would recommend a competent wheel builder to fix any major spoke tension issues, however there are some really good Youtube tutorials on how to adjust spoke tension.
Spokes has snapped or missing	Dillenger stocks spare spokes for very reasonable prices, just check out our spares section online and you can find the right type and length for your product.
Display won't turn on, unless the battery charger is plugged in	Check all the connections, make sure the battery is charged. If the display turns on only when the battery charger is plugged in, you will have to submit a service ticket with this information.

TROUBLESHOOTING CONTINUED...

Fault	Solution
Error message on the display	Please refer to display manual for error code definition and if needed, report the error code to Dillenger in a service ticket.
My kit loses power over bumps	Check all connections to make sure all the plugs are all the way connected. Check that the battery is locked to the cradle and not loose. A momentary discontinuity in power will turn the kit off.
My battery cuts out intermittently	If the battery is low on power, or you are going up a very steep hill with a load on the motor, you will likely experience a voltage cut-off if you have overloaded the controller, or dropped the voltage below the low voltage cut-off, which is more prevalent at low power. This isn't a fault with the kit, it's just physics.
I would like my battery capacity tested	Please contact Dillenger by submitting a support ticket to arrange the return of your battery for testing. If the battery tests above 85% capacity within the first year (from purchase date) you will be liable for return freight. If it is tested and is under capacity within the warranty period, your battery will be replaced.

TROUBLESHOOTING CONTINUED...

Range extension:

If you're not getting the approximate quoted range out of your e-bike system, take the following steps:

1. Battery indicator lights – full charge.

The LED battery level displays are a basic indication of battery charge, but they are based on voltage which is variable and not a true indication of battery capacity. The only accurate indication of a full charge, is having charged the battery and the battery charger lights glowing green to indicate that the battery is fully charged.

2. LED indicator light – running low

Some customers find that the LED charge indicator can lead them astray in terms of how far the bike will go on low power. You can keep riding until the last battery light starts blinking to indicate very low voltage.

3. Hills/riding style/other factors

The ranges quoted are from real world testing, with some hills and some flat areas. If your commute involves a lot of hills, that's going to impact on the range. High powered e-bikes are especially susceptible to being drained a lot more on hills. If you need to purchase a second charger to charge the battery at half way, or this can be a cost effective way of doubling your range.

4. General tips

- Make sure the wheels are running free (rubbing brakes can halve your range quite easily)
- Keep the battery topped up between uses (this is very important)
- Make sure the tyre pressures are at optimum (ideal pressures are written on the tyre side wall)
- Select the right gear for assisting up hills (the steeper the rise, the lower the gear needed)

If you would like to submit a Dillenger service ticket, please go to the contact page on the website.