

M O D Hack

ASSEMBLY GUIDE





WARNING! SERIOUS INJURY OR DAMAGE CAN OCCUR WITH USING THIS PRODUCT. DO NOT ATTEMPT TO ASSEMBLE AND USE THIS PRODUCT WITHOUT READING AND UNDERSTANDING THE ASSEMBLY GUIDE AND THIS USER MANUAL FIRST!

CONTENTS

WELCOME TO THE MOD SQUAD!	1
BEFORE YOU BEGIN	2
UNBOXING AND PREPARATIONS	3
Open the box	3
Pull components out of the box	3
Unpack components	3
Box contents	4
Tools	5
ASSEMBLY STEPS	6
Attaching the handlebar	6
Remove the stem clamp	6
Place handlebar	6
Install stem clamp	6
Attaching the quick release	7
Install quick-release	7
Remove the Fork Protector Bolt	7
Remove the Fork Protector	7
Attaching the front wheel	8
Remove brake pad spacer	8
Tire direction	8
Attach wheel	9
Align wheel	9
Securing the quick release	10
Secure quick-release	10
Quick release adjustment	10
Front Headlight Installation	11
Remove headlight bolt	11
Install the headlight	11
Straighten the headlight	11
Adjusting suspension	12
Adjusting suspension	12
Attaching and tighten the pedals	13
Pedal direction	13
Install pedals	13
Tighten pedals	13
ADJUSTING FOR COMFORT AND SAFETY	14
Adjust display	14
Bell position adjustment	14
Seat angle adjustment	15

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Adjusting the seat height	16
Seat height adjustment	16
Lock quick-release	16
Adjusting the rotation of the stem	17
Loosen pinch bolts	17
Adjust cap bolt	17
Align handlebar	17
Tighten pinch bolts	18
Cockpit Setup and Adjustment	19
Adjust grips	19
Remove cable wraps	19
Tidy wiring	19
Loosen brake, shifter & throttle	20
Adjust brake, shifter & throttle	20
Re-tighten	20
Final Safety Steps	21
Inflate tires	21
Ride performance	21
Personal safety	21
USER GUIDE	22
Review user guide	22
FINAL NOTES	23
NEED HELP?	24

WELCOME TO THE MOD SQUAD!

This guide was created to show you how to unpack and assemble your new ride. We included links (like this) to make sure you have quick access to information.

You can also use our MOD Black Video Assembly Guide for a step-by-step of how to unpack and assemble your new MOD Black.



This guide contains the basic necessary steps to assemble your bike. We highly recommend that you get your bike assembled and tuned by a professional mechanic, such as Velofix or your local E-bike shop. If you would like to do the work yourself, the following guide will go through all of the necessary steps to get you riding! Since we package the bike in a specific way to ensure safety, it's recommended to **read this guide before unboxing** to ensure you are prepared for the process from the start.

BEFORE YOU BEGIN

To make things easy, we labeled the information in this guide as follows:



Notice: A "notice" is important information that can help you to avoid bike/property damage or extend the life of your bike and parts.



Caution: A "caution" statement indicates a hazardous situation that, if not avoided, could result in minor or moderate injury or property damages.



Warning: A "warning" statement indicates that a hazardous situation exists that, if not avoided, could result in death, serious injury, or property damage.



Danger: A "danger" statement indicates a hazardous situation that, if not avoided, has a very high risk of death, serious injury, or property damages.



WARNING: We highly recommend getting your E-bikes assembled by a professional E-bike mechanic. MOD BIKES is not liable for accidents, injuries, damage, or product malfunctions of products not assembled by a professional.



WARNING: If the E-bike is assembled incorrectly, maintained, or used incorrectly, the E-bike can cause component or performance failure, loss of control, serious injuries, or death. All riders including experienced riders, must read and understand the entire assembly guide and any other documentation that accompanies the E-bike and accessories before riding the E-bike. If you do not understand this manual or feel uncomfortable with your experience, skills, or tools please see the assembly videos on mod-bikes.com, and consult a local professional or certified and reputable E-bike store/dealership.

UNBOXING AND PREPARATIONS

Open the box

The first step will be to remove the plastic straps on the box and cut the tape. Next, open the top of the box which is stapled/taped shut.

*Be careful not to damage the box or packing materials in case you need them in the future.



Pull components out of the box

The E-bike is heavier than a regular bike, weighing 65-80 pounds. Start by removing the accessory box, and the wheel, and then with the help of another person, pull the bike out of the box.

Place the bike on the floor. Be careful not to drag the fork or other metal parts on the ground as this could cause serious damage to the bike. We have placed a plastic protector in the dropouts at the bottom of the fork to mitigate this kind of damage, but you should still be careful.



Unpack components

Ideally, a lift or stand should be used to raise and secure your bike while you are assembling it, but if you do not have a rack, stand, or lift you will have to work at ground level.

From here, start to remove all packing materials from the bike and organize all other parts to prepare for the assembly process. We recommend saving all packing material.

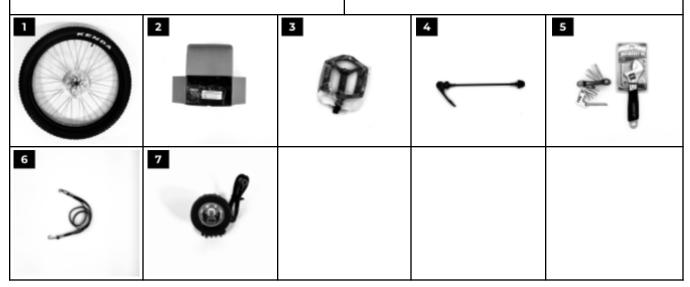


Box contents

Most of your bike will already be preassembled, but you should also find the following parts separate for assembly:

- 1. Front wheel
- 2. A box with your charger
- 3. Pedals
- 4. Quick release skewer

- 5. Multitool & Wrench
- 6. Bungee
- 7. Headlamp



NOTE: You may receive an additional package if you've ordered any accessories, such as locks, bags, helmets, child seats, or baskets.

Tools

Inside your tool pouch, you will find an adjustable wrench and a multi-tool that will be used through the assembly process.

Your multi-tool contains:

- 1. A flat-head and a Phillips head screwdriver
- 2. A tire-lever for changing tires
- 3. A chain-link tool for lengthening and shortening your
- 4. A T-25 size torque wrench
- 5. A set of Allen wrenches

We will go over these tools in more detail as you build the bike, but for now, unpack your tools and have them on your side.

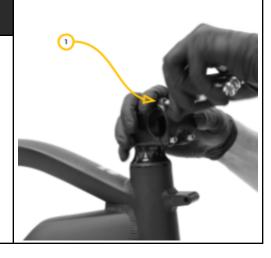


ASSEMBLY STEPS

Attaching the handlebar

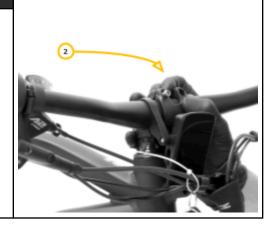
Remove the stem clamp

Remove the 4 screws from the **stem clamp** (1) using a 4mm allen key. Set the stem clamp and screws nearby.



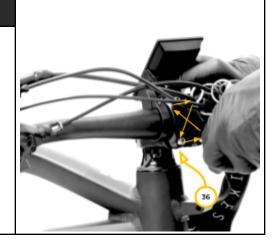
Place handlebar

Now that the stem is angled up, place the **handlebars** (2) in the stem and let them hang down.



Install stem clamp

Install the **stem clamp** () loosely using the 4 bolts removed earlier in this step. Once you have centered your handlebars and adjusted the rotation to your preferences, Tighten down all four bolts in a criss-cross pattern to ensure you do not put too much tension on a particular side of the faceplate, as shown.

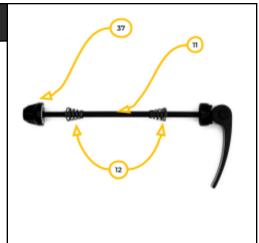


Attaching the quick-release

Before you can attach the front wheel to your bike, you will need to attach the wheel's quick-release skewer to the wheel.

Install quick release

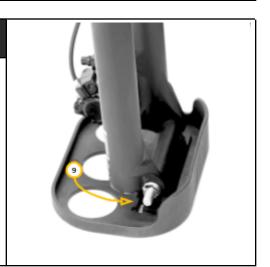
Insert the wheel's quick-release **skewer rod** (11) through the one **spring** (12), then through the front wheel on the opposite side of the rotor. Place the second spring back onto the wheel quick-release skewer rod on the exposed end, ensuring that the smaller end is touching the front wheel's axle, followed by screwing back the threaded cap (37), but not tightening it down yet.



Remove the Fork Protector Bolt

The fork protector can be found on the fork dropouts (9) held in by a bolt, Use the adjustable wrench to loosen and remove the bolt.

*Please note that the bike will be unstable in this process and you may want a second hand to hold the bike from tipping over.



Remove the Fork Protector

After removing the bolt, lift the fork, pull the fork protector, and place the bike back on the ground.



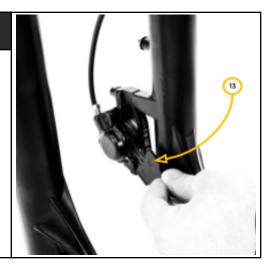
Attaching the front wheel



WARNING: The brake rotor does have sharp edges and can cause injury or damage to items that get in the way of the rotor or make contact with it. Touching either the brake rotors or the brake pads with your bare hands can also apply a layer of oil to these parts, which will decrease the braking capacity and could result in injury or property damage. When putting on the front wheel make sure to not touch these parts, if you must touch the brake rotor or pads make sure to wear clean gloves. After riding and using the brakes, the brake rotors will get hot and should not be touched as it can be a burn danger as well.

Remove the brake pad spacer

Remove the **brake pad spacer** (13) in front of the front brake caliper.



Tire direction

To attach the front wheel, start by ensuring that the wheel's treads are aligned to roll in the correct position. We have already done this step for you before shipping the bike, but you must understand this in case you need to change the tire in the future. If you are standing in front of the bike, the treads should be pointing down towards the ground. You can also use the directional arrows on the side of the wheel's rotor to find the correct direction.

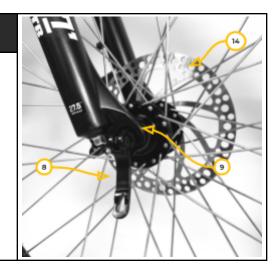




NOTICE: Once the brake pad spacer is removed and the front brake rotor is not in place, DO NOT SQUEEZE THE BRAKE LEVER. Squeezing the brake lever without the brake pad spacer or rotor between the brake caliper pistons will result in the brake pads engaging too far and can result in the brake caliper piston needing to be reset. If this does happen, you may be able to open up the pads by placing the brake pad spacer back in between the subject brake pads. If this does not solve the problem, you will need to consult a local professional, certified, and reputable E-bike store/dealership as they will need to bleed the brake.

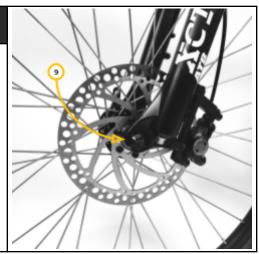
Attach wheel

Next, attach the wheel while aligning the front wheel's rotor (14) between the brake caliper (15) pads. The wheel quick release (8) needs to be inserted into the fork dropouts (9) when you move the front wheel up between the fork dropouts.



Align wheel

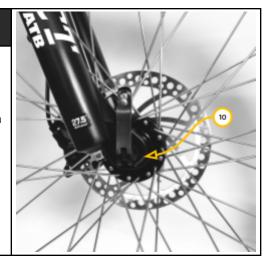
Now that the wheel's quick release is through the **fork** dropouts (9), you need to rest the bike on the ground (with the fork dropouts resting on the wheel's quick-release skewer rod ends. This will ensure that the front wheel is properly seated and aligned with the E-bike. The wheel should be fully encased in the fork's dropout and should be centered. A way to check that the wheel is fully in the fork is to make sure the centerline of the tire is in line with the centerline of the fork or fender.



Securing the quick-release

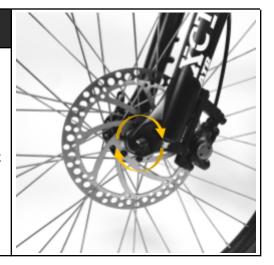
Secure quick release

Secure the front wheel to the fork dropouts by turning the threaded cap on the wheel's quick-release until you get tension. Next, flip the wheel quick-release lever (10) to the closed position (so that it creates more tension) until it is flush with the side of the fork. Do not place the lever on or against the fork, but point either towards the rear wheel or vertically towards the handlebars.



Quick release adjustment

The wheel's quick-release lever should take some effort to close, so if it is closing too easily, open the lever, tighten the threaded cap a little more to fine tune the tension, and then try to close the wheel quick-release lever again. If you cannot get the lever to close, then you will need to loosen the threaded cap a little by unscrewing it. You may have to repeat this process a few times to get proper tension, but this step is crucial to ensure that your front wheel remains safely attached to your bike while you are riding.



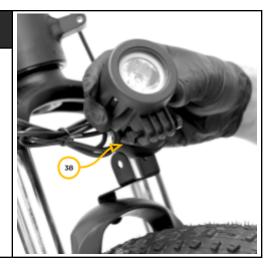


WARNING: An improperly secured quick release can cause a loss of control, accidents, property damage, serious injury, or even death. Check that the quick-release levers on the wheels and seat post are properly secured during assembly and before each ride.

Front Headlight installation

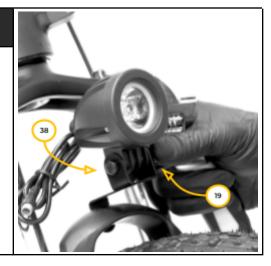
Remove headlight bolt

Your next step will be to attach the front headlight (17) and the **headlight**. Remove the nut and bolt from the headlamp.



Install the headlight

Place the headlamp in the mounting bracket then slide the bolt in, threading on the nut.



Straighten the headlight

Now ensure the **headlight** (17) is pointing straight ahead and tighten the **nut and bolt** (19). Be careful not to bend the light mount.



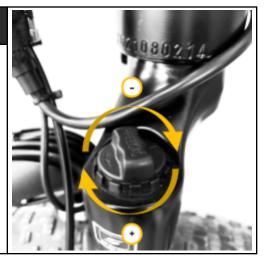
Adjusting suspension

The fork of your MOD Black comes with a built-in suspension. Setting the dial to "open" will allow you to utilize your suspension whereas setting it to "lock" will bypass this function, giving you a rigid fork.



Adjusting suspension

The fork of your MOD Black also comes with a preload setting. Twisting the dial in the direction of the "+" symbol will increase the amount of firmness in the suspension whereas twisting the dial towards the "-" symbol will loosen the suspension.

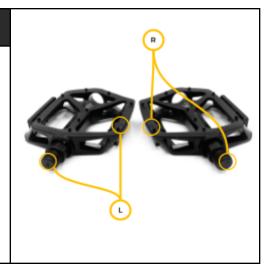


Attaching and tighten the pedals

Although your pedals might be already attached it is important to ensure both pedals are properly tightened.

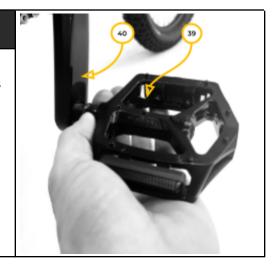
Pedal direction

The ends of your **pedals** (18) will each be marked with an "L" or an "R", or with a "WL" or a "WR". The "L" or "WL" pedal will go on the rider's left side of the bike, and the "R" or "WR" pedal will go on the rider's right side.



Install pedals

Be careful when initially threading the **pedals** (39) into the crank arms (40). Unlike most threaded parts, the left Pedal is tightened by turning counter-clockwise, and the right, clockwise. Use your hands to screw the pedals into the crank arms.



Tighten pedals

Tighten both pedals into place with your adjustable wrench (35Nm). The left pedal tightens when you turn it counterclockwise.

NOTE: The base rule for tightening pedals; tighten in the direction of the front wheel, and loosen in the direction of the back wheel.

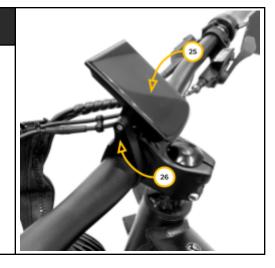


ADJUSTING FOR COMFORT AND SAFETY

Your MOD BIKE can be adjusted in multiple areas for a perfect comfortable riding position, the following steps will cover all available adjustments.

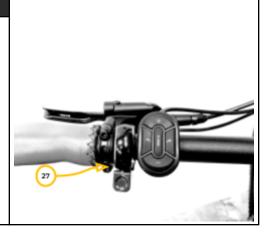
Adjust display

If the display (25) is not adjusted at the correct angle, the display should be loose enough to adjust without a tool, but you may need to use your 2.5mm Allen wrench to loosen the mounting screws (26).



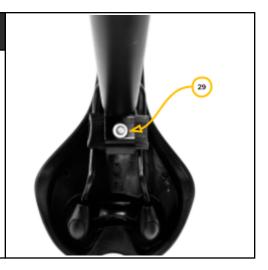
Bell position adjustment

To adjust the **bell** (27) position use a Phillips head screwdriver to slightly loosen the bell, then adjust it to the correct position and lock it back in place.



Seat angle adjustment

To adjust the **seat** (28) angle you will need to loosen the **bolt** (29) under the Seat with a 6mm Allen wrench. This bolt will only need to be loosened about one full turn counter-clockwise to allow for the seat to be adjusted. Once loosened, the seat post should be able to tilt and there will be notches in the clamp to indicate the tilt has moved. There are notches in the clamp, each notch is about 5° of tilt. Once the seat has reached a comfortable position, tighten the bolt again.





WARNING: A loose seat clamp or seat adjustment bolt can cause a loss of control, accidents, property damage, serious injury, or even death. Before the first use of the E-bike, make sure to tighten the seat clamp adjustment bolt under the seat. In addition, this bolt should be checked every 500 miles or 4 months, to make sure that the clamp and seat rail are securely fastened.

Adjusting the seat height

The ideal riding position is to have a slight bend in the knee while one pedal is at the lowest point of the pedal stroke. Additionally, you want to be able to have both feet touch the ground when at a standstill. You should also make sure you can comfortably reach and control (steer) the handlebar with your hands. Newer riders may prefer that the seat is set lower to get comfortable with how the E-bike performs. This is okay for a beginner rider, though as riders become more comfortable they should adjust their seat height to reach a more comfortable and efficient ride.

Seat height adjustment

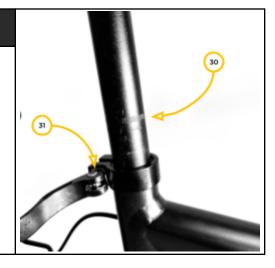
To adjust the seat height, open the **seat quick release** (31) mechanism found where the seat post goes into the frame of the E-bike. Then you will slide the Seat Post up or down to the required height.



Lock quick release

Now you will want to close the **seat quick-release** (31) mechanism and try the height. This step may require repeating to find the best position for each rider.

Note that the maximum height of the seat is marked on the seatpost. (30)



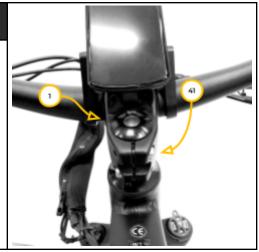


WARNING: Make sure that you do not pass up the minimum insertion point on the seat post. This is marked with a line on the seat post and if passed, it could cause damage to the E-bike and injury to the rider.

Adjusting the rotation of the stem

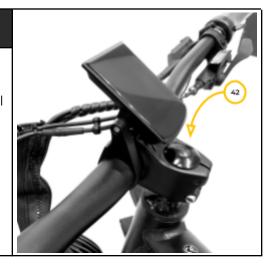
Loosen pinch bolts

To adjust the **stem** (1) alignment with the front wheel, the two pinch bolts (41) on the stem will need to be loosened slightly.



Adjust cap bolt

Ensure that the cap bolt (42) is secured, but not too tight (8Nm max). If the cap bolt is too tight, you will have a difficult time steering the bike. If the cap bolt is too loose your fork will not be secured and you will be in for a wobbly ride.



Align handlebar

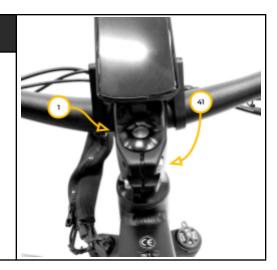
Stand in front of the E-bike and place the front wheel between your legs. You will now be able to pivot the handlebar (2) side to side, lining up the center of the stem with the center of the front tire.



Tighten pinch bolts

Once the **stem** (1) is in line with the centerline of the tire, tighten the **pinch bolts** (41). To check that the bolts are secure, try rotating the handlebar with your legs on either side of the tire (10Nm).

There should be no movement of the stem when you are testing or riding. If movement occurs, recenter the stem and repeat the process to make sure the referenced bolts are properly tightened.





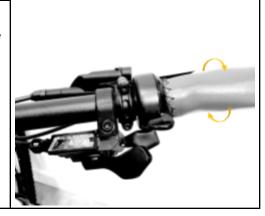
WARNING: If your cap bolt is too loose or there is stem movement, it could further come apart or otherwise cause you to lose control, resulting in damage, serious injury, or even death.

Cockpit Setup and Adjustment

Adjust grips

If the palm pads of your ergonomic grips are not lined up, or the angle of them is too low, each grip can be twisted into the correct position with some applied force.

NOTE: You might need to use both hands on a single grip to allow enough force to facilitate twisting.



Remove cable wraps

Remove the cable wrap to ease the arrangement of the cables, ensuring that you have enough slack when turning your wheel 90° left and right.



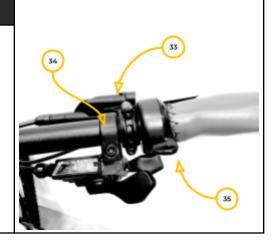
Tidy wiring

Use this picture as an example of tidy cable routing. Check for binding by turning the handlebars back and forth before finalizing your cable arrangement.



Loosen brake, shifter & throttle

Use your 4mm Allen wrench to slightly loosen the brake levers (33), the 5mm Allen wrench to slightly loosen the shifter (34) and the 3mm allen wrench to slightly loosen the throttle (35).



Adjust brake, shifter & throttle

Adjust the angle of the brake levers and shifter so that your wrists rest comfortably in a straight line with your arms while sitting on the bike in a riding position and using the brake levers.



Re-tighten

Once the brake levers have been adjusted and tightened, you can easily move the shifter into proper alignment by pressing the top of the shifter to the bottom of the brake lever; this will also align your throttle in the correct orientation.

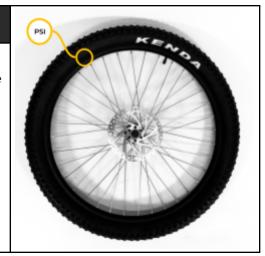
They should be in a comfortable position for your hands to reach the brake levers on the handlebar. Then tighten it into place with your 5mm Allen wrench (7 Nm).



Final Safety Steps

Inflate tires

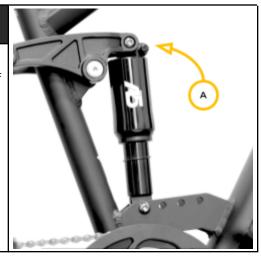
Please note that your bicycle is not delivered with inflated tires. To ensure proper inflation, refer to the sidewall of the tire to determine the correct PSI. It is crucial to fill the tires accordingly for optimal performance and safety. Users are responsible for inflating the tires before riding.



Ride performance

To ensure proper performance and longevity of your bike, make sure that the rear suspension has the correct amount of air in it. Your bike should come with anywhere between 100-200 psi. To check this or fill the suspension, remove the valve cap located at the top (A) and attach a suspension pump that goes up to at least 300 psi.

NOTE: The lower end of the psi range will give you a softer, bouncier ride, while the higher end of the range will give a stiffer, more responsive ride feel. 65 psi is the minimum.



Personal safety

Your safety is paramount. It is essential to wear a helmet at all times while riding your MOD Bike. Please ensure the helmet fits snugly on your head(A). Secure the chin strap tightly for optimal protection(B). Prioritize your safety with a properly fitted helmet.

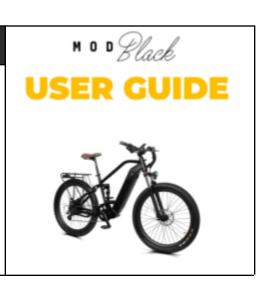


USER GUIDE

Review user guide

Now that your bike is fully assembled, please review the user guide in the link below to learn how to operate your bike.

User Guide Link



FINAL NOTES

Now that your new bike is fully assembled, you are ready to take it out for a ride!

Your bike was fully tuned at our shop before we shipped it to you, but it's possible that some of the components have shifted during shipment, or that some parts were not fully aligned during the assembly process. You need to look over the bike in detail to make sure all parts are tightened and in good working condition. Once you look over the bike and everything appears to be in order, then you should plan a short and slow test ride to make sure all components and parts are functioning correctly. You should perform your test ride in a safe area with space to operate your bike without danger of traffic, vehicles, and/or other people, and avoid any potential contact with such things. During the test ride, you should first check the brakes and braking power. You will need to make sure there are no loose parts to make sure the bike and brakes are functioning properly, and then test steering, gear changes, riding position, and general use. Should any parts not be secure or loose, you should stop and tighten them accordingly. Should you be unsure of the bike, or any components working condition or have other questions, including those not covered in this manual, please submit a ticket here and we will be happy to help you out.

Also, the gears and brakes might make some noise during the first few weeks of operation, as it takes about 60 miles to break in some of the bike's components. We highly recommend that you get your bike tuned every 500 miles or 4 months by a professional mechanic to keep your bike safe and tuned and to prevent future problems.

This concludes our assembly guide. We hope that you found this guide helpful. With that said, we hope you enjoy your new bike. Stay safe, and welcome to the MOD BIKES family!

NEED HELP?

Help Center Contact Us

If you find any mistakes or have any suggestions for improving this document, please report to the MOD Support team here