# COMMENCAL MEA-POWER



#### **WELCOME**

We thank you for your confidence in us and we wish you many good times to come with your new COMMENCAL bike.

This manual will help you to get to know your bike and includes some useful information and detail.

We recommend that you read it with care.

#### MANUAL CONTENT

In this manual, you will find all the necessary information to assemble, set up and maintain your bike correctly. You will also find the different security warnings and the warranty terms and conditions.

#### IN CASE OF PROBLEM

If you encounter any problems during the assembly of your bike or have any other questions, don't hesitate to contact us:

- by e-mail: customerservice@commencal.com
- by phone: + 376 73 74 75





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#### **USEFUL INFO**

#### Parts designation

#### FULL BIKE

**01** - Frame 11 - Shifter **02** - Fork **12** - Tire 03 - Wheel 13 - Rear shock **04** - Disc **14** - Crank 05 - Brake caliper 15 - Chain guide 06 - Brake lever 16 - Chainring 07 - Handlebar **17** - Chain **08** - Stem 18 - Derailleur 09 - Seat clamp 19 - Saddle 10 - Seatpost **20** - Grip

#### FRAME

Front triangle
a1 - Toptube
a2 - Down tube
a3 - Seat tube

Rear triangle
a4 - Rocker/Clevis
a5 - Seatstay
a6 - Chainstay

#### FORK AND WHEELS

 b - Crown
 f - Hub

 c - Stanchion
 g - Spoke

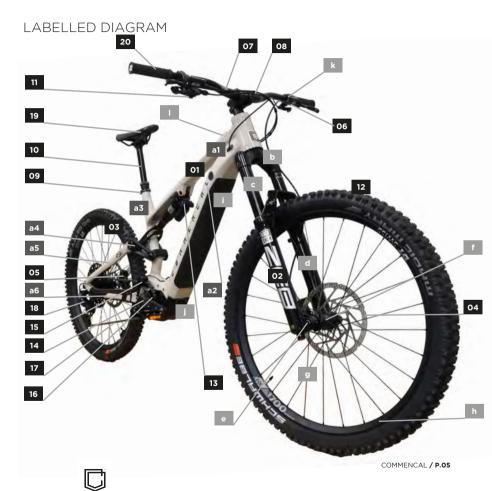
 d - Lowers
 h - Rim

e - Axle

#### SPECIFIC ELECTRIC PARTS

i - Batteryj - Motork - Shifterl - Display

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#### **USEFUL INFO**

#### **ABOUT E-BIKES**

#### **ELECTRIC BIKES (E-BIKES)**

A pedal assisted e-bike enables you to reach a higher speed than a standard bike. The speed is dependant on the import country of your product specifically.

Please be aware that the motor will only provide assistance when you are pedalling. The system provides you with 3 modes of assistance and a walk mode. (See BOSCH user manual for more detail)

The Meta Power is a bike designed to ride on gravel roads, moderate tracks and uneven tracks, some steep or technical tracks will require a higher level of bike handeling skill

If you don't respect these instructions, you risk to damage your bike or to hurt yourself.

#### RECOMMENDATIONS

You must remove the battery in case of :

- Performing maintenance/ changing components
- Transport

Use your e-bike only in the range of temperatures: -10°C to 50°C.

Check there is no water on the battery mount electrical connections before installing the battery.

Don't charge your battery in a wet environment. You should charge your battery in an environment which is in the following temperature range 0°C to 40°C.

Keep away from heat sources and direct sun light. For example inside a vehicle on a hot day, etc. Although the system is supposed to be waterproof, you should not submerge the system or bike in water. Don't submerge the battery in cold water or sea water, make sure the battery electrical connections stay dry.

Don't submit your battery to violent impacts, if your battery is damaged or scratched from impact, we recommend that you do not use it anymore and seek replacement.

If you are to charge your battery when installed on the bike, take care not to move the bike or try to disconnect the battery during the charging process. Avoid subjecting the battery charging port or the charger plug to any moisture. Check that your battery is always firmly held in the battery mounts by the lock.

Beware of finger entrapment hazards when performing maintenance operation on the chain and sprockets



- The BOSCH User Manual will be provided in the accessory box with your bike. It is necessary to read this for more detail.
  - Warning, all inapropriate use (including maintanace) of the electrical system can cause irreversable consequences.
- We strongly suggest that you keep your battery key and key serial number safe.



#### **USEFUL INFO**

#### **ABOUT E-BIKES**

## WEIGHT AND CAPACITY OF THE BIKE

The Meta Power is an e-bike, which is understandably heavier than a regular bike. The weight of the bike is between 20 and 25Kg. The difference is due to the different sizes and models available in the range.

To use this bike, your riding weight should not exceed (inc. helmet, bag, proteciton...) the weight of 120Kg.

## MODIFYING THE ASSISTANCE SETTINGS

We remind you that every modification to the system, or other modification which modifies the speed of the bike, is strictly prohibited.

Any change to the speed can change the legal categorisation of the bike. This can result in your bike not being categorised as an e-bike anymore.

This will void the warranty quarantee of your bike.

#### ONLINE INSTRUCTIONS

This manual provides you with all the necessary and concise information to assemble and maintain your bike. You can find this manual on the COMMENCAL Bicycles website. You can also find more information about your bike, some tutorials, videos and much more on the COMMENCAL Bicycles website!

#### WEBSITE

www.commencal-store.com

#### MANUAL

www.commencal-store.com/owners\_manual

#### **TUTORIAL VIDEOS**

tech.commencal.com/tech/

COMMENCAL decline all responsibility in the event of unclamping or any changes to components if they do not meet the original specifications. It is completely illegal to modify the maximum speed by any means, like for example, software and/or components, etc.)

Indication that the bicycle is suitable for mounting a luggage rack and/or a child seat.

We also invite you to read the component manufacturer's manuals to find out about the various settings and safety instructions. COMMENCAL Bicycles are not necessarily designed for use with a luggage rack and/or child seat and/or a trailer. If you want to use or adapt one of the aforementioned, please refer to the corresponding manufacturer's website for all the details, compatibility and maintenance. Please check the precautions to be taken when riding.



The A-weighted emission sound pressure level at the driver ears is less than 70 dB(A)



We suggest that you read all the relevant manufacturer manuals for the other components provided on the bike to know the relevant security warnings and set-up.



## ACCESSORIES PROVIDED

#### CONTENTS OF THE ACCESSORY BOX

- security kit (lights, reflectors, bell)
- Accessories specific to the BOSCH Performance Line CX system (User manual and charger).
- Component accessories (manuals and spare parts ..etc...).
- Pedals, Seatstay protector





Keep your battery box for the event of storage or logistics. The box has all the necessary information related to the transport of lithium batteries



#### TOOLS AND TORQUE TABLE

#### **TOOL LIST**

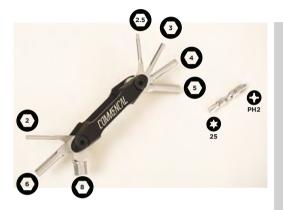
Find below the contents of the optional tool kit. The different logos on the diagram will help you to understand what tools are needed for every assembly step.

• 1x MULTI-TOOL Allen keys T.2/2,5/3/4/5/6/8mm Torx key T.25 Cross head screwdriver PH2

Torque tightening values indicated in the instructions for fitting the saddle onto the seat post.

• 1x HIGH PRESSURE PUMP for your fork and rear shock, if air sprung.

Torque tightening indicated for fixing the handlebar and stem.



#### TORQUE TO RESPECT

Stem - Steerer Tube 5.5N.m Stem - Handlebar Cap 5.5N.m. Brake Caliper 8-10N m 2.5-4N.m Speed Sensor Derailleur 8-10N.m Brake Lever 2.5-4N.m Cassette 40N.m Seat Clamp 5-6N.m Headset 3N m Chainring 9N.m 2,5-4N.m Grip Pedals 38N.m Disc 6N.m





For frame contact system, please refer to relevant bolt marking for torque information.



#### **ASSEMBLY STEPS**

STEP 1
Unbox the
bike vertically
(lift it by the
rear wheel
and fork).



STEP 2
Place the bike on the floor.
Rotate the fork so that the bike is stable.

STEP 3 Remove any protective packaging.





When unpacking or moving the handlebar, take care not to damage the cables or hoses.



#### **ASSEMBLY STEPS**

STEP 4
Unscrew the front cover of the stem.



4

Assemble and align the handlebar using the laser marking (you can also set your prefered angle).

STEP 6
Tighten the top two
screws to bring the
clamps into contact
and to torque. Then
tighten the screws
at the bottom.





STEP 7
Root the electrical wire through the plastic clip.



#### **ASSEMBLY STEPS**

STEP 8
Remove the front axle and apply grease along the shaft and thread.



9a

STEP 9

Assemble the front wheel into the fork. Install the front axle.

For quick release axles, tighten and close it vertically. Refer to the manufacturer manual if the lever does not align verticaly to change the setting.





#### STEP 10

Align the stem with the front wheel and ensure there is no play in the headset (see page 44). After, tighten the stem collar screws.

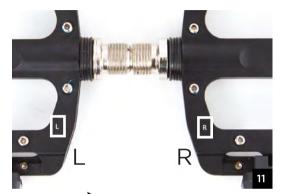




#### **ASSEMBLY STEPS**

#### STEP 11

Identify the left and right pedal. This is clearly shown by a «L» and «R» on the pedal axle





## i

STEP 12

Grease both

pedal axle

threads.

The left side pedal (L) has a reverse thread (anti-clockwise) and the right side pedal (R) has a classic thread (clockwise)

#### STEP 13

Tighten the right side pedal as shown in the photo.



Charge the battery fully before turning on. After every charge, do not switch-on the battery when there is pressure on the pedals.





#### STEP 14

Tighten the left side pedal as shown in the photo.



#### SEAT POST AND SADDLE

#### SADDLE HEIGHT



To adjust your saddle height, untighten the seat clamp (by hand or with the allen key), adjust the height and tighten the seat clamp.



To set the correct height, sit on your bike and put one pedal as low as possible: your leg should be straight.



Your dropper seat should be actuated to complete this set-up.





Warning, the maximum insertion line should not be visible.

#### SADDLE POSITION



For your health and comfort, it is important to correctly orientate your saddle. An inapproriate setting could result in uncomfort or pain when using your bike.

To set your saddle positon, unscrew bolts (A and B). First, set the lateral position along the rails to your preference. Second, tighten to achieve a horizontal orientation.



#### **BRAKES**

#### **CALIPER ALIGNMENT**



To align the caliper to the disc, unscrew the two bolts by half a turn so it is fairly loose. Turn the wheel and press the corresponding brake lever.

Whilst holding the brake lever, tighten the caliper bolts.

Check that your wheel turns without causing any rubbing (or very little). However, repeat the process if it is not satisfactory.



You must break in your pads before achieving good performance from the brake. You must actuate your brakes 20 to 30 times to slow down from

30 km/h to 5 km/h to break in your pads sufficiently. Brake as hard as possible without stopping the wheel. It is normal to have friction between the disc and the pads before the system has been fully broken in.



Warning, wet conditions can increase braking distance.

#### ADJUST YOUR BRAKE LEVER REACH



You can adjust the reach of the brake lever. Simply turn the fine adjuster found on the brake lever. This can also be in the form of an allen key bolt.

For any maintenance, (adjustment, replacement of brake discs or brake pads etc.) please refer to the corresponding manufacturer's website.



The left brake lever operates the front brake.

The right brake lever operates the rear brake.
Incase of doubt, check which caliper is connected
to which lever. (exception: UK, Australia, New Zealand
and Japan use an opposite brake configuration)





#### AIR PRESSURES

#### FORK AND SHOCK



It is very important to set up your suspension corresponding to your weight. Regulate the pressure of the suspension with the high pressure pump.



To know the correct pressure and settings, please consult the respective manufacturers manual. For coil shocks, tighten the spring to set your SAG.



Stand on your bike fully equipped as if you were going riding. Your suspension should compress to 25%.



We recommend that you check your tire pressure before every ride.

The air pressure will have a significant impanct on the behaviour of the bike. We recommend that you adjust your pressure in function of your weight, riding style and terrain.



TIRE PRESSURES

To know the correct pressure for your tires, look at the manufacturers recommendations found on the side walls of the tires. This will include the maxium and minimum pressure.

Warning, you must never exceed pressure limits (max/min). You risk causing irreversable damage to your bike.

If you can not achieve the correct SAG setting on your coil shock, you should change the coil.



#### **DERAILLEUR**

#### **DERAILLEUR POSITION SET UP**



The limit screws prevent your chain from exceeding the limits of the cassette. You have one screw controlling the higher limit (H) and one screw for the lower limit (L). The higher limit corresponds to the smallest cassette ring while the lower limit corresponds to the biggest cassette ring.

Adjust so that you achieve the correct limitation without compromising gear range.



To ensure the correct setting vou must be sure that:

- When your chain is on the biggest gear, align the center of the upper guide pulley with the outboard edge of the smallest cog.
- When your chain is on the lowest gear, the derailleur pulley should align with the largest cassette ring.

#### CABLE TENSION



Once your limit screws are set, you have to adjust the cable tensionner. Try shifting through the gears:

- If you have difficulty shifting from smaller to bigger rings then loosen gradually (turn anticlockwise) the cable tensionner to tighten the cable.
- If you have difficulty shifting from bigger to smaller rings then tighten gradually (turn clockwise) the cable tensionner to untighten the cable.



Make sure your derailleur hanger is not bent.

Read the manufacturers manual to learn more about specific settings.

If you have difficulties with your settings, please seek advice from a professional.





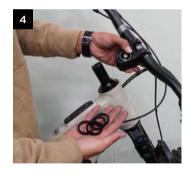
#### OTHER

#### SET THE HANDLEBAR HEIGHT



If prefered, you can adjust your handlebar height by modifying the spacer stack. To do so, unscrew and remove the topcap. Then, untighten the stem bolts. Remove the stem and adjust the spacer stack to change height.









#### **CONTROLS POSITION**



When you have finished assembling your bike, you can adjust your controls and grips position.
These settings are personal, you are free to set them to your preference.



Do not remove or add spacers to the stack.



Respect the torques provided and be sure that all the controls are working and reachable.





#### **VERIFICATION**

#### BEFORE YOUR FIRST RIDE







### CHECK THAT EVERYTHING IS TIGHT

Check that all the bolts or other tightening features are sufficiently tight, such as the brake calipers, seatclamp, stem, cockpit, levers, headset, derailleur, wheels and so on...

#### THINGS TO CHECK

<u>Check the wheels</u>: they should turn without any problem (trueness, roudness...) and be correctly assembled in the frame or the fork.
<u>Check your brakes</u>: they should work correctly and the levers should not feel too hard or too soft.

<u>Transmission:</u> gears should shift easily, the crankset should turn without friction and the chain guide should set to the 34 tooth position.

Check that the pedals and

Check that the pedals and crankset have no play.

#### SETTING CHECKS

Be sure that your bike is set up to your body specifically:

- Saddle height.
- Suitable saddle orientation.
- Specific air pressure in suspension and tires.
- Cockpit and controls position adjusted.



#### **VERIFICATION**

#### BEFORE YOUR FIRST RIDE







#### Contact COMMENCAL Customer Service for info on any changes or modifications of cockpit components (handlebars, stem, grips, etc.).

#### **TIGHTEN HEADSET**

Check that there is no play in the headset.

To do so, stand next to your bike. Push the front brake and place your other hand on the headset. Keep your brake activated and move your bike forward and backward.

If you feel some play, here are the steps to follow:

- 1) Untighten the two bolts of the stem.
- 2) Tighten the topcap to 3N.m maximum.
- 3) Check that there is no more play and your headset can rotate freely.
- 4) Align your stem with the frontwheel.
- 5) Tighten the stem bolts.



#### **MAINTENANCE**

#### BEFORE AND AFTER EVERY RIDE





hard and not too soft.

BRAKE CHECK Check your brakes. They should be working as usual: not too

AIR PRESSURE CHECK Check your suspension pressure by compressing them. They should feel as previously set

Check that your tires are well inflated (better to do so with a pump with an air pressure gauge).



BOLT CHECKS Check all the bolts on your bike and be sure that there is no play. You can check the headset, brake calipers, seatclamp, wheel axle, derailleur, stem, frame bolts...



### AFTER EVERY RIDE

CLEAN YOUR BIKE Clean your bike with a sponge and water without insisting on the motor and electric parts.

BIKE CHECK Check that there are no problems, any play, defects (cracks, impacts, deformation, scratches, decoloration, strange noises...) on your frame or components.

LUBE YOUR CHAIN After washing your bike, apply some specific lubricant to your chain.



Warning, after use, some parts can be hot: such as disc rotors or the battery.

Warning, do not use a high pressure cleaner. You could damaged seals, bearings, electric system...



#### MAINTENANCE

#### MONTHLY / YEARLY

#### **MONTHIY**

CHECK THE BRAKE PADS Check that your brake pads are not worn out. They should have a minimum of 1mm thickness on each pad.

#### **TRANSMISSION**

Clean your transmission, grease it and make sure it works correctly.

Check the wear visually on your chainring, cassette and derailleur pullies.

Check your chain wear with a specific tool.

CABLE AND HOSE CHECK Check that there is no bend. damage or rust to any cables or hoses. If there is, you should replace them.

#### WHEEL CHECK

Check that your wheels are not damaged, rolling striaght with no significant dents. Make sure that the hubs have

no play and turn correctly. Check the spoke tension.





Good teeth



Worn teeth



If you ride with a damaged wheel you can break your wheel and hurt vourself

#### CRANKSET CHECK Check that there is no play in

vour crankset.

#### TIRE CHECK

Check the wear of your tires: the material compound, the tread, any cuts or holes... Refer to the information (diameter, size, pressure) indicated on the tyre or inner tube

#### CHECKS

Check your whole bike: you should find no problems or defects. If you have any doubt. seek advice from a professional.

#### FRAME CONTROL

Look fo any: dents, scratches, cracks, general defects, bearing aualitv...

#### BRAKE BI FEDING

For better performance and a longer life, we recommand that you get your brakes bled by a professional.

#### YEARLY

SUSPENSION MAINTENANCE We recommand that you service your suspension with a professionnal every year or every 100h of riding. Refer to the manufacturers manual to know the different maintenance procedures (dates and operations) specific to each model.

#### GREASE

Clean and grease the following parts:

- Hub
- Crankset (thread)
- Headset
- Seatpost
- Frame bolts and contact system



## **SECURITY** WARNING

#### GENERAL

- Always keep your bike clean and in good working order.
- For your security, follow the instructions given in the «before your first ride», «before and after every ride», «monthly» and «yearly» maintenance sections. These steps will enable you to keep your bike running smooth.
- Don't use your bike if you find any problems.
- Always wear a helmet when you ride your bike.
- Respect the laws of the road and the other road users.
- Do not overestimate you physical capability and be aware of the risks associated to bicycle riding.
- Respect the steps of the assembly instruction process and settings process. Use only remplacement parts which are compatible or the same as original components.
- Be sure to break-in your brake pads when new.
- Do not sit your bike upside down, you can damage the cockpit, levers or other parts.
- In case of extreme use (like dirt jumping, tricks, downhill, competition) you are responsible for the any injuries that may occur.

Refer to the manufacturer's user manual for all information regarding the lighting device. In addition, please learn the rules and guidelines in the country of use.

#### IN THE EVENT OF A CRASH

If you crash, you must check that no component (or your frame) has been damaged. If so, remplace it accordingly. In case of any doubt, seek advice from a professional.

#### **CORRECT USE**

You must respect the intended use your bike was designed for.

If you exceed these limits, you can damage your bike or break components and, as a result, injured yourself.

### REMINDER TO INSTALL SECURITY ACCESSORIES

We remind you that as well as respecting the law of the road, and other users, you must install all necessary security equipment to be safe on the road.

Refer to the national law in your country for more details

#### COMPOSITE COMPONENTS

For composite components impact damage may be invisible to the user. In the event of an impact, you should returned your component to the manufacturer for inspection or destroyed and replace it.



- Warning, intensive use can lead to damage to your bike.
   You should inspect it often to detect any problems.
- Intensive use can lead to damage to components.
- As with all mechanical components, your bike is subject to wear and high stresses. If the design life of a component has been exceeded, it may result in sudden failure and personal injury. Any form of crack, scratches or change of colouring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.
  - Warning, incorrect installation, poor assemby procedure or inapropriate parts assembly can lead to irreversable damage to your bike or to your health.

#### Accessories:

When these are offered already mounted, please refer to the corresponding manufacturer's site for all details concerning use and possible maintenance. This also applies to the corresponding spare parts.



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## COMMENCAL

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#### Customer Service

COMESPORT S.A BP36 - Erts AD400 La Massana PRINCIPAT D'ANDORRA

Du lundi au vendredi  $\,$  de 9h à 13h et de 15h à 19h / Monday to Friday from 9 AM to 1 PM and 3PM to 7PM

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