

**POWERPLAY™**

---



-ENG-FR-GER- IT

# Table of contents

---

Introduction	2	Battery	26
Register	2	Motor	32
Warning	3	Rider screens	36
Shrediquette	6	Reset	38
Getting to know your bike	7	Service	40
Cockpit Setup	10	Cable routing	42
Suspension Setup	11	Brake hose	45
Spring Chart	12	Brakes	48
Shock eyelet bearing	15	Front and rear axle	49
RIDE-4	16	General maintenance	51
Critical dimensions	17	Replacement Parts and Accessories	53
Fastener Torque Specifications	18	Transport	53
Images	19	Warranty information	54
Jumbotron	22	Declaration of conformity	56
Display	22	Patterns	57
Riding the bike	23		

# Table des matières

---

Introduction	58	Batterie	82
Enregistrement	58	Moteur	88
Avertissements	59	Écran du rider	92
Étiquette de la montagne	62	Réinitialisation	94
Survol de votre vélo	63	Entretien	96
Configuration de base	66	Passage des câbles	98
Tableaux de ressorts	68	Câble de frein	101
Paliers d'amortisseur à oeillet	71	Freins	104
RIDE-4	72	Axes avant et arrière	105
Guide des dimensions	73	Entretien général	107
Images	75	Transport / Enregistrement	109
Jumbotron	78	Garantie	110
Écran	78	Déclaration de conformité	112
Utilisation du vélo	79	Brevets	107

# Inhaltsverzeichnis

---

Einleitung	114	Akku	137
Registrieren	114	Motor	144
Warnungen	115	Fahrerbildschirme	148
Verhaltensregeln	118	Zurücksetzen	150
Lerne Dein Bike Kennen	119	Service	152
Grundeinstellung	123	Kabelführung	154
Federtabelle	124	Bremsleitung	157
OcchielloAmmortizzatore	127	Bremsen	160
RIDE-4	128	Vorder- und Hinterachse	161
Wichtige Abmessungen	129	Allgemeine Wartung	163
Bilder	131	Transport	165
Jumbotron	134	Garantieinformationen	166
Anzeige	134	Konformitätserklärung	168
Einstellung der Unterstützung	136	Patente	169

# Indice

---

Introduzione	170	Batteria	194
Registrazione	170	Motore	200
Avvertenze	171	Schermate di guida	204
Shrediquette	174	Reimpostazione	206
Conoscere La Tua Bicicletta	175	Interventi	208
Configurazione Di Base	178	Passaggio dei cavi	210
Tabella Molle	180	Tubo del freno	213
Occhiello Ammortizzatore	183	Freni	216
RIDE-4	184	Asse anteriore e posteriore	217
Guida Alle Misure	185	Manutenzione generale	219
Immagini	187	Trasporto	221
Jumbotron	190	Informazioni sulla garanzia	222
Display	190	Dichiarazione di conformità	224
Uso della bicicletta	191	Brevetti	225

## Introduction

---

This manual contains important safety, maintenance, and use information. Be sure to read it carefully and understand it thoroughly before your first ride on your new Powerplay™ bicycle.

This material applies only to the Powerplay™ Drive and should be used in conjunction with your Rocky Mountain Owner's Manual.

Please read the Owner's Manual before your first ride on your Powerplay™ bicycle. If you do not have a copy of your Owner's Manual, you can get it from your nearest authorized Rocky Mountain dealer.

## Register

---

Registering your bike is the official way for us to welcome you into the Rocky Mountain family. It's also an important step in activating your bike's warranty. If you ever have an issue, we'll be able to handle your case efficiently and get you back riding as soon as possible. It's easy and only takes a few minutes.

**Register your bike: [bikes.com/register](https://bikes.com/register)**

## Warnings

### Power

Your Powerplay™ bicycle features a powerful pedal assist when force is applied to the pedals. Familiarize yourself with your bike's ride and pedal assist characteristics in safe, flat surroundings before riding it off road.

### Instant start

Your Powerplay™ bicycle features "Instant Start" technology, which uses a sophisticated torque sensing circuit to deliver smooth, instant, natural feeling power. This circuit is very sensitive, so care must be taken to ensure the bike does not accelerate from a stop in an unexpected or uncontrolled manner.

### Use caution on trails

Your Powerplay™ bicycle accelerates more quickly and handles differently than traditional non-assist bicycles. Use appropriate caution on trails and be aware of your bike's unique handling and acceleration characteristics.

### Keep your fingers away

Do not place your fingers or tools near the Drive unit. Maintenance and repair of the drive unit should only be performed by an Authorized Rocky Mountain Service Centre.



### Do not modify

Do not modify the Powerplay™ Drive unit or any components directly connected to the drive unit. Maintenance and repair of the drive unit should only be performed by an Authorized Rocky Mountain Service Centre. Any attempt to modify the Powerplay™ Drive unit may result in serious personal injury or death, and will immediately void the bicycle's warranty.

## Warnings

### **Riding with a bicycle carrier, child carrier or seat, or trailer**

Rocky Mountain bicycles are only designed and tested for use by one person at a time. Carrying a child, pet, or cargo load on your Rocky Mountain Powerplay bicycle is at your own risk. If you choose to install an accessory on your Powerplay model such as a child carrier or a trailer, make sure it is compatible and refer to the manufacturer's instructions and your authorized Rocky Mountain dealer. You should make sure your bicycle is still safe to ride with the accessory installed. Be sure to not exceed the maximum weight limit of the bicycle when using a trailer or child carrier. Also make sure to not exceed the maximum cargo weight when using a child carrier.

If a child carrier is fitted to your Rocky Mountain Powerplay bicycle behind the saddle, you must ensure that the saddle is free of coil springs to avoid possible injury to the child's fingers.

Riding with kids on your bicycle will affect the handling by altering the center of gravity, weight, and balance. It may also negatively impact your cornering ability, increase your stopping distance, and reduce your ability to slow down and maneuver, especially at higher speeds or down a steep grade. All of this can result in a loss of control, potentially causing serious injury and/or death. You should also become familiar with and practice riding with the accessory in a controlled environment away from traffic.

Do not attach a child carrier, trailer, or similar accessory to a composite or carbon fiber part or component, either directly or indirectly. For example, do not attach a triangle to a rear axle when the rear triangle is made of composite or carbon fiber. Likewise, do not attach a trailer to a composite or carbon seatpost or a child carrier to a composite or carbon fork. Either may potentially apply unusual forces on your bicycle frame or component which could result in damage and cause a complete failure, with the risk of serious injury or death. If you have previously attached an accessory to a composite or carbon fiber part or component, do not ride until you have had your authorized Rocky Mountain Dealer conduct a careful safety inspection.

Before riding with kids on your bicycle, please inform yourself of all applicable legal requirements and regulations in your country and state or province. There may be restrictions on riding your bicycle with certain or any accessory(ies). This is especially true for electric and pedal-assist bicycles.

## Warnings

---

**WARNING 1** As with all mechanical components, EPAC is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail possibly causing injuries to the rider. 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 2** For composite components impact damage may be invisible to the user, the manufacturer shall explain the consequences of impact damage and that in the event of an impact; composite components should either be returned to the manufacturer for inspection or destroyed and replaced.

**WARNING 3** Do not expose the bicycle to prolonged direct sunlight or excessive heat, such as inside a parked car or near a heat source such as a radiator. Excessive heat may degrade the material properties of components and parts such as batteries, composite parts such as handlebars, crankarms, and other items made of composite materials, and various plastics components that contribute to the integrity of the complete bicycles

**WARNING 4** The permissible total payload (rider plus luggage, and the empty weight of the EPAC) is 150kg.

**WARNING 5** Failure to follow the warnings in this section may result in damage to the components on your bicycle and will void your warranty, but, most importantly, may result in serious personal injury or death. If your bicycle exhibits any signs of damage, do not use it and immediately bring it to your Rocky Mountain Bicycles Retailer for inspection.

**WARNING 6** In the event of a crash or improper assembly, the handlebar and handlebar controls may be compromised and the rider's response to steering and braking safely may be adversely affected.

**WARNING 7** Never inflate a tire beyond the lower of the two values of the maximum pressure marked on the tire's sidewall and the maximum pressure marked on the rim that the tire is installed on. Exceeding the recommended maximum pressure may blow the tire off the rim, which could cause damage to the bike and injury to the rider and bystanders.

# Shrediquette

---

## Users

Always be courteous to other trail users. Use extra caution around domestic animals, such as dogs and horses. Give other trail users right-of-way in all situations, during both climbing and descending.

The Altitude and Instinct Powerplay models are designed for Enduro riding in approved areas. The intended use is for riding more difficult terrain that includes moderate jumps and technical features. These models are not designed for extreme forms of riding that include hardcore Dirt Jumping, Freeriding, Downhill, North Shore types of trails and terrain. These models are not intended for large drop-offs, jumps, or launches from wooden structures, or features that require hard landings and harsh obstacles.

## Trail

Only ride your Powerplay™ bicycle on trails and paths sanctioned for motorized vehicle use. Follow all local laws and regulations. As with all trail users, care should be taken by all cyclists to avoid impacts to the trail or environment. Do not skid on or modify trails.

## Public Roads

Before riding your Rocky Mountain Powerplay model, please inform yourself of all applicable legal requirements and regulations in your country, state, and/or province. There may be restrictions on riding your Powerplay bicycle on public roads, cycling paths, and/or trails. There may also be applicable helmet and light requirements, age restrictions or license or insurance requirements. Rocky Mountain does not, and will not, make any promise, representation, or warranty regarding the use of your Powerplay bicycle. As laws and regulations regarding electric bicycles vary by country and/or state and province and are constantly changing, please make sure to obtain the latest information. You should also regularly see your Authorized Rocky Mountain Bicycles Dealer for updated information.



## Getting to know your bike



### Technical details

- Reduced size and weight
  - The Dyname 4.0 motor is 18.5% lighter than the previous generation, Dyname 3.0.
  - We've given our motor a weight reduction while also increasing reliability. The Dyname 4.0 motor features oversized bearings for increased drive durability.
- A quiet drive system
  - The Dyname 4.0 features a reduced motor rpm that lowers the amount of the electrical whine compared to other systems.
  - We've removed the upper chain slider that was seen on the Dyname 3.0 drive system to reduce the mechanical noise, as well as the drag when pedalling.
- A responsive, natural power delivery
  - Our system's torque sensor reads the tension that is being applied directly to the chain, and removes unwanted lag time to give an instantaneous and natural response when the power is applied.
  - We've developed a new torque curve that is designed to gradually apply power that achieves a maximum power of 770w at optimal cadence (85rpm). By having a variable power curve, you'll have more control of your bike on the trail including scenarios like steep, technical hill starts.
- Torque and power
  - The Dyname 4.0 drive system packs the same 108Nm of class-leading torque that the Dyname 3.0 brought to our previous generation of bikes.
  - Our drive system has 770W of peak output, meaning that more watts are delivered when you really need them.
- Jumbotron
  - The Jumbotron is our display screen, seamlessly integrated into the top tube of our new Powerplay bikes. Positioned to show all key data and information in a convenient, easy to see location, the screens can be navigated through using the handlebar remote or the buttons on the Jumbotron itself.
- Battery Size
  - We've increased the capacity of the Powerplay battery from 672Wh to 720Wh, allowing you to spend more time riding.

## Getting to know your bike



### Technical details

- **Smaller Remote**
  - We've replaced the iWoc that was featured on our previous generation of Powerplay's with a new, smaller remote. Designed by us, our new remote has better ergonomics for you as the rider and is focused on keeping the cockpit clean and uncluttered. The smaller design also allows it to be used in combination with more shifter and brake options.
- **Charging**
  - We have a 4-amp charger and a 2-amp charger for the all-new Powerplay models, both of which quickly refuel your battery to get you back out there, faster. The less powerful of the two, the 2-amp charger, will charge the battery from 0-100% in 7 hours and 35 minutes which out paces the competition.
- **Mid-High Pivot Kinematics and Wheelpath**
  - Our revised suspension design features a mid-high main pivot location that seamlessly integrates with our Dymale 4.0 drive. The kinematics have better support in both leverage rate and anti-squat, this translates to smoother power delivery to the ground with less energy loss. The mid-high main pivot also creates a more rearward wheel trajectory which all but eliminates small to medium trail chatter.
- **RIDE-4 adjustment system**
  - The RIDE-4 adjustment system allows riders to quickly fine-tune their geometry and suspension with a single Allen key. Four configurations are possible thanks to two small chips.
- **Adjustable Chainstay Length**
  - The chainstay length is adjustable by 10mm, achieve by flipping the axle chips and 200mm direct mount brake adapter. The short position encourages a playful and agile setting while the longer position favours high speed stability. The Rocky Mountain hanger is UDH compatible in the long position as well.
- **Secure and Internal Routing**
  - There are internal cable trays with secure tie downs to ensure a rattle free ride while making it easy to run cables and housing, even if you prefer a Moto-Style setup with the front brake on the right hand side.

## Getting to know your bike



### Technical details

- Added protection, guards, and chainguide
  - The frames feature downtube protection, noise cancelling chainstay protection, and downtube shuttle guards.
- Modular shock mount - Our modular shock mount, available only on the carbon models, allows for future suspension kinematic updates.
- Updated Pivot Design
  - Our chainstay and seatstay pivots feature dual bearings for Increased stiffness and durability. There are shielded bearings featured on all pivots including at the lower shock mount (compatible with aftermarket shocks as well).

# Cockpit Setup

---

## Seatpost insertion

Both the frame and seatpost have minimum insertion requirements. In addition, the frame has a maximum insertion requirement to prevent damage to the frame and seatpost.

**Minimum insertion:** The seatpost must be inserted in the frame deep enough so the minimum insertion / maximum extension mark on the seatpost is not visible. The frame requires a minimum insertion of 100mm.

**Maximum insertion:** The seat tube is reamed to a specified maximum insertion depth for each frame size. This ream depth limits the insertion depth of the seatpost. Please refer to the Critical Dimensions portion of this manual.

**Correct seatpost fitment:** If the desired seat height cannot be achieved within the minimum and maximum insertion requirements, the seatpost should be replaced for a shorter or longer one.

## Brakes

Due to the complexity and specification variances of the Powerplay models, proper assembly and setup requires a high degree of mechanical expertise, skill, training, and specialty tools. Therefore, it is essential for your safety that the assembly of the complete Powerplay model and setup, including brake setup, be performed by an authorized Rocky Mountain Bicycles dealer. Before your ride, make sure your bicycle and components are assembled and adjusted in accordance with the manufacturer's instructions and are functioning properly.

## Suspension Setup

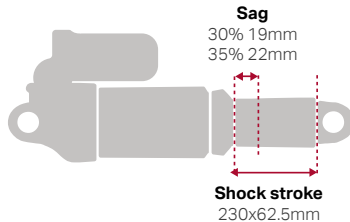
There are several variables that can be modified to fine-tune the setup of your suspension. These are some basic guidelines to get you in the ballpark, and you can experiment to see what suits you best from there. The first step is to set your sag. Sag refers to how much the suspension moves under just the weight of the rider (including all riding accessories). Air pressure or coil spring rate and preload is adjusted until the desired amount of sag is measured.

Please observe the minimum and maximum amount of preload recommended by the manufacturer for a given coil spring. If you need to change the spring rate, please note you must remove the eyelet bearings to remove the coil spring.

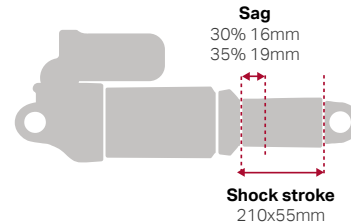
### Shock sag

We recommend approximately 30–35% sag for this platform.

#### ALTITUDE POWERPLAY



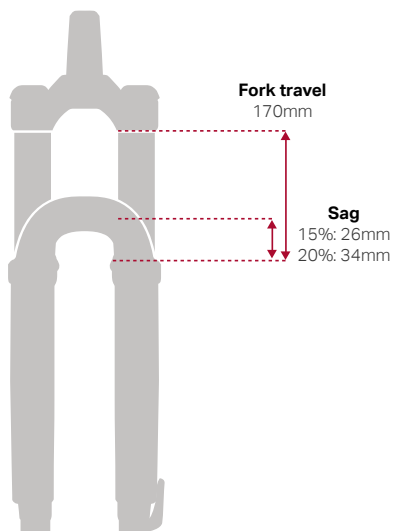
#### INSTINCT POWERPLAY



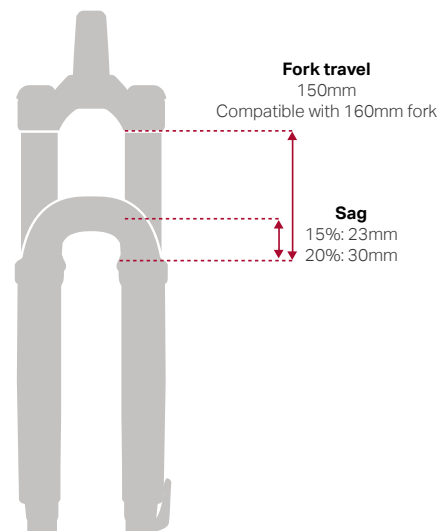
### Fork sag

We recommend approximately 15–20% sag for this platform.

#### ALTITUDE POWERPLAY



#### INSTINCT POWERPLAY



# Altitude Powerplay Spring Chart

## Rebound

Rebound damping adjustment controls how quickly your suspension returns to full extension after it hits a bump. Too much rebound damping, which means clicking the rebound knob towards the slow setting, the fork or shock will move too slowly. This will cause the suspension to sink deeper and deeper into its travel under repeated hits, which will feel harsh. Too little rebound damping, which means clicking the rebound knob towards the fast setting, and the suspension can spring back too quickly, causing a loss of traction and control. Follow the manufacturer's recommendations for base settings, and experiment to find your happy place.

## Compression

Low speed compression (LSC) controls rider weight shifts, pumping through terrain, G-outs, and other slow inputs. Too much LSC will result in a harsher ride feel; too little LSC will result in a ride feel that's too soft and unresponsive.

### 2022 ALTITUDE POWERPLAY 230x62.5 FOX DHX2 COIL SHOCK \*Count clicks from Closed: 0 Clicks = Closed\*

RIDER WEIGHT LBS / KG	STEEL SPRING WEIGHT	FOX SLS SPRING WEIGHT	SHOCK SAG	RECOMMENDED LSC SETTING *IF AVAILABLE	RECOMMENDED HSR SETTING	RECOMMENDED LSC SETTING	*RECOMMENDED HSC SETTING*
100 / 45	300	300	19 - 22 mm	10-11	6-7	14-15	6-7
110 / 50	300	325	19 - 22 mm	9-11	6-7	14-15	6-7
120 / 55	350	350	19 - 22 mm	8-9	6-7	14-15	6-7
130 / 59	350	375	19 - 22 mm	8-10	6-7	13-14	6-7
140 / 64	400	400	19 - 22 mm	6-7	5-6	12-13	5-6
150 / 68	400	425	19 - 22 mm	6-7	5-7	11-13	5-6
160 / 73 *Size MD	450	450	19 - 22 mm	5-6	4-5	9-10	5-6
170 / 77	450	475	19 - 22 mm	5-6	4-5	9-11	4-6
180 / 82 *Size LG	500	500	19 - 22 mm	4-5	4-5	9-10	4-5
190 / 86	500	525	19 - 22 mm	4-5	3-5	7-9	3-4
200 / 91 *Size XL	550	550	19 - 22 mm	3-4	3-4	6-7	3-4
210 / 95	600	Not Available	19 - 22 mm	2-3	2-3	5-6	2-3
220 / 100	600		19 - 22 mm	2-3	2-3	5-6	2-3
230 / 105	650		19 - 22 mm	1-2	1-2	4-5	1-2
240 / 109	700		19 - 22 mm	1-2	0-1	3-4	0-1
250 / 114	Not Available		19 - 22 mm	Not Available	Not Available	Not Available	Not Available

### 2022 ALTITUDE POWERPLAY 230x62.5 FOX FLOAT X2 AIR SHOCK \*Count clicks from Closed: 0 Clicks = Closed\*

RIDER WEIGHT LBS / KG	FOX FLOAT X2 PSI	SHOCK SAG	RECOMMENDED LSR SETTING	RECOMMENDED HSR SETTING	RECOMMENDED LSC SETTING	RECOMMENDED HSC SETTING
100 / 45	135	19 - 22 mm	11-14	5-6	14-16	6-7
110 / 50	145	19 - 22 mm	11-13	5-6	14-16	6-7
120 / 55	155	19 - 22 mm	10-12	5-6	13-15	6-7
130 / 59	165	19 - 22 mm	9-11	4-5	13-15	6-7
140 / 64	175	19 - 22 mm	8-10	4-5	12-14	5-6
150 / 68	190	19 - 22 mm	7-9	4-5	11-13	5-6
160 / 73	200	19 - 22 mm	7-9	3-4	10-12	5-6
170 / 77	210	19 - 22 mm	6-8	3-4	9-11	4-5
180 / 82	220	19 - 22 mm	6-8	3-4	8-10	4-5
190 / 86	230	19 - 22 mm	5-7	2-3	7-9	4-5
200 / 91	240	19 - 22 mm	4-6	2-3	6-8	4-5
210 / 95	255	19 - 22 mm	3-5	2-3	5-7	3-4
220 / 100	265	19 - 22 mm	2-4	2-3	4-6	3-4
230 / 105	275	19 - 22 mm	2-4	1-2	2-4	3-4
240 / 109	285	19 - 22 mm	1-3	1-2	2-4	3-4
250 / 114	295	19 - 22 mm	1-3	1-2	2-4	2-3

# Altitude Powerplay Spring Chart

## 2022 ALTITUDE POWERPLAY 230x62.5 FOX FLOAT X AIR SHOCK \*Count clicks from Closed: 0 Clicks = Closed\*

RIDER WEIGHT LBS / KG	FOX FLOAT X PSI	SHOCK SAG	RECOMMENDED LSR SETTING	RECOMMENDED LSC SETTING *IF AVAILABLE
100 / 45	140	19 - 22 mm	12	Start open / Adjust to suit
110 / 50	145	19 - 22 mm	11-12	Start open / Adjust to suit
120 / 55	155	19 - 22 mm	11	Start open / Adjust to suit
130 / 59	165	19 - 22 mm	10-11	Start open / Adjust to suit
140 / 64	175	19 - 22 mm	10	Start open / Adjust to suit
150 / 68	185	19 - 22 mm	8-10	Start open / Adjust to suit
160 / 73	190	19 - 22 mm	8	Start open / Adjust to suit
170 / 77	200	19 - 22 mm	7-8	Start open / Adjust to suit
180 / 82	210	19 - 22 mm	7	Start open / Adjust to suit
190 / 86	220	19 - 22 mm	7	Start open / Adjust to suit
200 / 91	230	19 - 22 mm	7	Start open / Adjust to suit
210 / 95	240	19 - 22 mm	5-6	Start open / Adjust to suit
220 / 100	250	19 - 22 mm	5	Start open / Adjust to suit
230 / 105	260	19 - 22 mm	2-3	Start open / Adjust to suit
240 / 109	270	19 - 22 mm	2	Start open / Adjust to suit
250 / 114	280	19 - 22 mm	2	Start open / Adjust to suit

## 2022 ALTITUDE POWERPLAY 230x62.5 FOX DHX2 COIL SHOCK \*Count clicks from Closed: 0 Clicks = Closed\*

RIDER WEIGHT LBS / KG	STEEL SPRING WEIGHT	*FOX SLS SPRING	SHOCK SAG	RECOMMENDED LSR SETTING	RECOMMENDED HSR SETTING	RECOMMENDED LSC SETTING	RECOMMENDED HSC SETTING
100 / 45	300	300	19 - 22 mm	11-12	Not Available	14-15	Not Available
110 / 50	300	325	19 - 22 mm	10-11		14-15	
120 / 55	350	350	19 - 22 mm	9-11		14-15	
130 / 59	350	350	19 - 22 mm	8-9		14-15	
140 / 64	400	400	19 - 22 mm	8-10		14-15	
150 / 68	400	425	19 - 22 mm	6-7		13-14	
160 / 73 *Size MD	450	450	19 - 22 mm	6-7		12-13	
170 / 77	450	475	19 - 22 mm	5-6		11-13	
180 / 82 *Size LG	500	500	19 - 22 mm	5-6		9-10	
190 / 86	500	525	19 - 22 mm	4-5		9-11	
200 / 91 *Size XL	550	550	19 - 22 mm	4-5		9-10	
210 / 95	600	Not Available	19 - 22 mm	3-4		7-9	
220 / 100	600		19 - 22 mm	2-3		6-7	
230 / 105	650		19 - 22 mm	2-3		5-6	
240 / 109	700		19 - 22 mm	1-2		5-6	
250 / 114	Not Available		19 - 22 mm	Not Available		6-7	

## Instinct Powerplay Spring Chart

2022 INSTINCT POWERPLAY 210X55 FOX FLOAT X AIR SHOCK *Count clicks from Closed: 0 Clicks = Closed*				
RIDER WEIGHT LBS / KG	FOX FLOAT X PSI	SHOCK SAG	RECOMMENDED LSR SETTING	RECOMMENDED LSC SETTING *IF AVAILABLE
100 / 45	130	16 - 19 mm	12	Start open / Adjust to suit
110 / 50	140	16 - 19 mm	11-12	Start open / Adjust to suit
120 / 55	150	16 - 19 mm	11	Start open / Adjust to suit
130 / 59	160	16 - 19 mm	10-11	Start open / Adjust to suit
140 / 64	170	16 - 19 mm	10	Start open / Adjust to suit
150 / 68	180	16 - 19 mm	8-10	Start open / Adjust to suit
160 / 73	190	16 - 19 mm	8	Start open / Adjust to suit
170 / 77	200	16 - 19 mm	7-8	Start open / Adjust to suit
180 / 82	210	16 - 19 mm	7	Start open / Adjust to suit
190 / 86	220	16 - 19 mm	7	Start open / Adjust to suit
200 / 91	230	16 - 19 mm	7	Start open / Adjust to suit
210 / 95	240	16 - 19 mm	5-6	Start open / Adjust to suit
220 / 100	250	16 - 19 mm	5	Start open / Adjust to suit
230 / 105	260	16 - 19 mm	2-3	Start open / Adjust to suit
240 / 109	270	16 - 19 mm	2	Start open / Adjust to suit
250 / 114	280	16 - 19 mm	2	Start open / Adjust to suit

2022 INSTINCT POWERPLAY 210X55 ROCK SHOX DELUXE AIR SHOCK *Count clicks from Closed: 0 Clicks = Closed*				
RIDER WEIGHT LBS / KG	FOX FLOAT X PSI	SHOCK SAG	RECOMMENDED LSR SETTING	RECOMMENDED LSC SETTING *IF AVAILABLE
100 / 45	110	16 - 19 mm	8	Start open / Adjust to suit
110 / 50	120	16 - 19 mm	7-8	Start open / Adjust to suit
120 / 55	130	16 - 19 mm	7-8	Start open / Adjust to suit
130 / 59	140	16 - 19 mm	7	Start open / Adjust to suit
140 / 64	150	16 - 19 mm	6-7	Start open / Adjust to suit
150 / 68	160	16 - 19 mm	6-7	Start open / Adjust to suit
160 / 73	170	16 - 19 mm	6	Start open / Adjust to suit
170 / 77	180	16 - 19 mm	5-6	Start open / Adjust to suit
180 / 82	190	16 - 19 mm	5-6	Start open / Adjust to suit
190 / 86	200	16 - 19 mm	5	Start open / Adjust to suit
200 / 91	210	16 - 19 mm	4-5	Start open / Adjust to suit
210 / 95	220	16 - 19 mm	4-5	Start open / Adjust to suit
220 / 100	230	16 - 19 mm	4	Start open / Adjust to suit
230 / 105	240	16 - 19 mm	3-4	Start open / Adjust to suit
240 / 109	250	16 - 19 mm	3-4	Start open / Adjust to suit
250 / 114	260	16 - 19 mm	3	Start open / Adjust to suit



## Shock Eyelet Bearing

### Service

Your frame is equipped with cartridge bearings in the rear eyelet, allowing for better small-bump compliance. These bearings are carried by cups that have a very firm press fit into the shock shaft.



If you have your shock serviced, we highly recommend removing these components, as suspension service centres cannot guarantee they will be returned. To remove the system, follow these steps:

- Use the Rocky Mountain Bearing Eyelet Tool Kit (Part# 1810031)
- Install the top hat piece on one side of the bearing eyelet
- Next, install one of the cup removal tools over the bearing cup with the top hat piece installed.
- Thread the M8 screw snugly against the top hat piece
- Install the other cup removal tool over the other bearing cup
- Thread the M8 screw all the way in until it starts pushing on the other side. It is contacting the inside of the top hat piece.
- Keep threading until one of the cups is full pushed out.
- Next insert the drift tool through the shock eyelet and rest it firmly against the bearing cup that is still pressed in the shock eyelet.
- Gently, but firmly, hammer the drift tool until the bearing cup is fully removed from the shock eyelet.

If you do not have the Rocky Mountain Bearing Eyelet Tool Kit, use a blind bearing puller:

- Use a blind bearing puller (8 mm extension) to remove both bearings.
- Remove the centre sleeve.
- Use the blind bearing puller (10 mm extension) to remove the empty cups.

**NOTE:** the inner diameter of the cups is 11 mm, which means the 12 mm extension won't fit (So don't force it); Use the 10 mm extension.

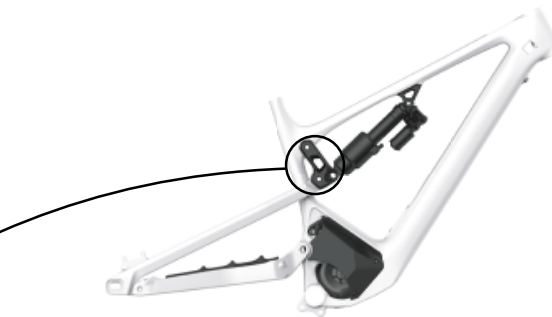
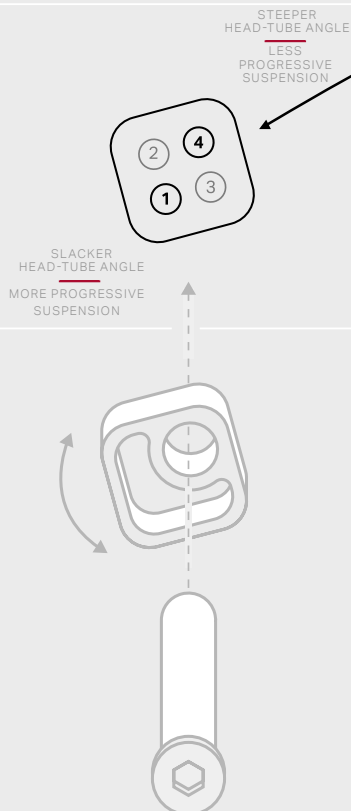
To install new cups, use a bearing press or vice with soft jaws installed, making sure to press on the outer edge of the cups, and don't forget the centre spacer sleeve between the cups.

## RIDE-4

The RIDE-4™ adjustment system allows riders to quickly fine-tune their geometry with a single 5-mm Allen key. Four configurations are possible thanks to a pair of rotating chips. Geometry setup is a complex art form with huge variables in rider style, preference, terrain and ability. We do recommend the use of professional services, but we also believe that learning to dial in your own bike is the best way to fully understand its performance. When adjusting your RIDE-4 position, make gradual, incremental changes, take notes and be methodical. Don't adjust in a hurry before a big ride. Take your time and enjoy the process.

### READY FOR ANY TRAIL

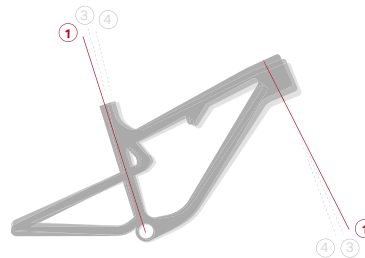
The RIDE-4™ adjustment system allows you to quickly fine-tune your geometry and suspension with a single 5-mm Allen key



### Position

#### SLACK

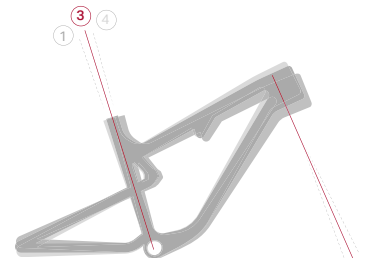
The lower bottom bracket and progressive suspension increase stability at higher speeds. Recommended for more aggressive trail riding



### Position 3

#### NEUTRAL

This position offers a balanced blend of geometry and suspension performance to cater to a wide variety of trails



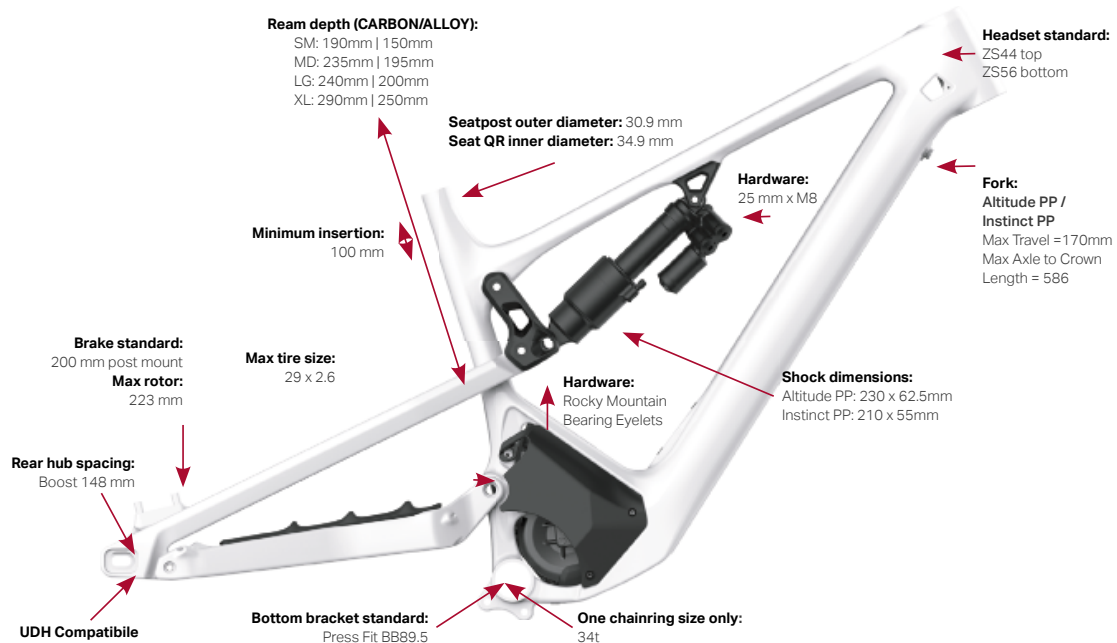
### Position 4

#### STEEP

The higher bottom bracket and linear suspension allow for better pedal clearance, a more supportive initial suspension rate, and a position on the bike better suited for climbing.



## Critical Dimensions



### Shock fitment

We check clearances for many shocks but cannot guarantee compatibility with all makes and models. Please contact your local dealer if you have a specific question regarding shock fitment.

### Approved shocks for Altitude Powerplay and Instinct Powerplay

#### Fox

- FLOAT DPS
- FLOAT X
- FLOAT X2
- DHX
- DHX2

#### Marzocchi

- Bomber RC

#### RockShox

- Deluxe
- Super Deluxe
- Super Deluxe Coil
- \*SIDLuxe not approved

#### Can Creek

- DB Coil
- DBiL Coil
- DB Air
- DBiL Air

### Hub fitment

Shimano XTR centerlock hubs are not compatible with the Powerplay frames due to fitment issues with the Rocky Mountain centerlock speed sensor magnet.

### Full list of Parts & Exploded View

Click [HERE](#) to visit the Exploded View & the complete list of parts including part numbers, descriptions, torque values and assembly instructions for the Powerplay.

### Small Parts Kits

Click [HERE](#) to visit the complete list of parts including part numbers, descriptions, and assembly instructions.

## Fastener Torque Specifications

Correct tightening torque of threaded fasteners is very important to your safety. Always tighten fasteners to the correct torque. In case of a conflict between the instructions in this manual and information provided by a component manufacturer, consult with your dealer or the manufacturer's customer service representative for clarification. Bolts that are too tight can stretch and deform. Bolts that are too loose can move and fatigue. Either mistake can lead to a sudden failure of the bolt.

Always use a correctly calibrated torque wrench to tighten critical fasteners on your bike. Carefully follow the torque wrench manufacturer's instructions on the correct way to set and use the torque wrench for accurate results.

SEAT POST	MODEL	IN-LB	N-M
Dropper Post	Fox Transfer   Race Face Turbine R	45	5.1
Dropper Post	Race Face Aeffect R	70	8
Dropper Post	Rocky Mountain Toonie Droppe   X Fusion Manic	70 - 88	8 - 10
SEAT COLLAR		IN-LB	N-M
Single Bolt Collar	Rock Mountain Single Bolt seat collar - SC66R	35 - 44	4 - 5
PEDALS		IN-LB	N-M
Pedals	General recommendation. Consult manufacturer specification	305 - 480	35 - 55
CRANKS		IN-LB	N-M
Crankset	Next R crank bolt   Turbine crank bolt	442	50
Crankset	Aeffect   Aeffect R   Ride crank bolt	540	61
Clutch Lock Ring	Rocky Mountain Clutch Lockring	540	61
Chainring bolts	Race Face 104 BCD Spider Chainring bolts	124 - 150	14 - 17
STEMS		IN-LB	N-M
Faceplate	Rocky Mountain 35 CNC	35 - 53	4 - 6
Stem body to fork steerer	Rocky Mountain 35 CNC	44 - 71	5 - 8
Faceplate	Rocky Mountain 35 AM	35 - 53	4 - 6
Stem body to fork steerer	Rocky Mountain 35 AM	44 - 71	5 - 8
Faceplate	Rocky Mountain 31.8 AM	35 - 53	4 - 6
Stem body to fork steerer	Rocky Mountain 31.8 AM	44 - 71	5 - 8
SHIFTERS / DERAILLEURS		IN-LB	N-M
Shifters	Bar clamp style	27 - 35	3 - 4
Shifters	Shimano I-Spec EV style	27 - 35	3 - 4
Shifters	Sram MMX style	27	3
Derailleurs	Shimano Direct Attach style	71 - 89	8 - 10
Derailleurs	Sram	71 - 89	8 - 10
BRAKES		IN-LB	N-M
Shimano Lever	I-Spec EV Hinge style	35 - 53	4 - 6
Shimano Lever	Bar clamp style	53 - 71	6 - 8
Sram Lever	All styles	35	4
Shimano caliper	All styles	53 - 71	6 - 8
Sram Caliper	All styles	84	9.5
FORK		IN-LB	N-M
Front Axles	Fox Kabolt 2.0	80	9
Front Axles	Rock Shox Maxle Stealth	80 - 120	9 - 13.5
FRAME		IN-LB	N-M
	Refer to frame exploded diagram with torque values	80 - 120	9 - 13.5

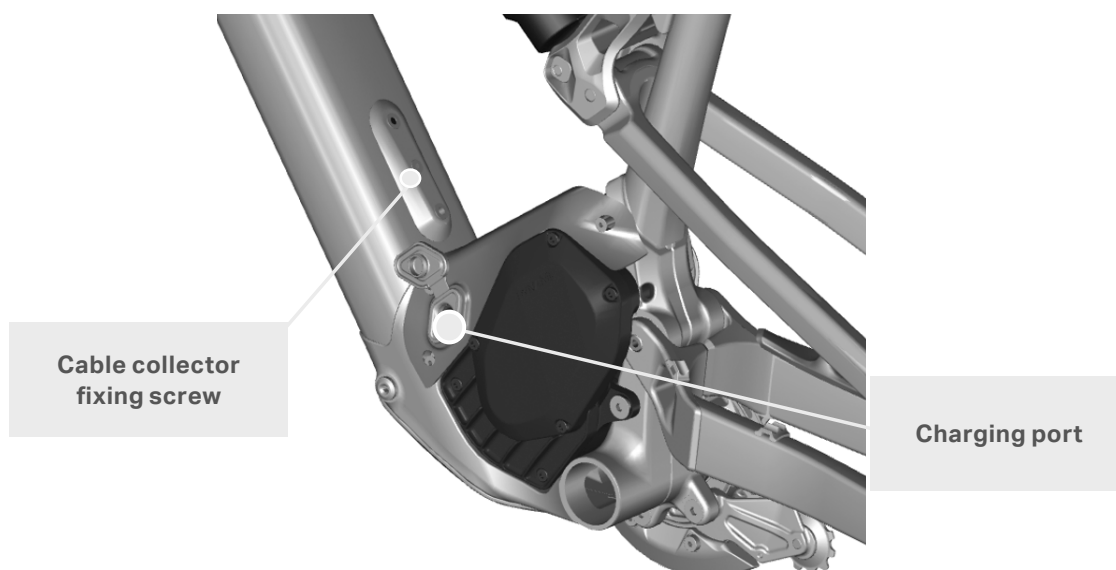
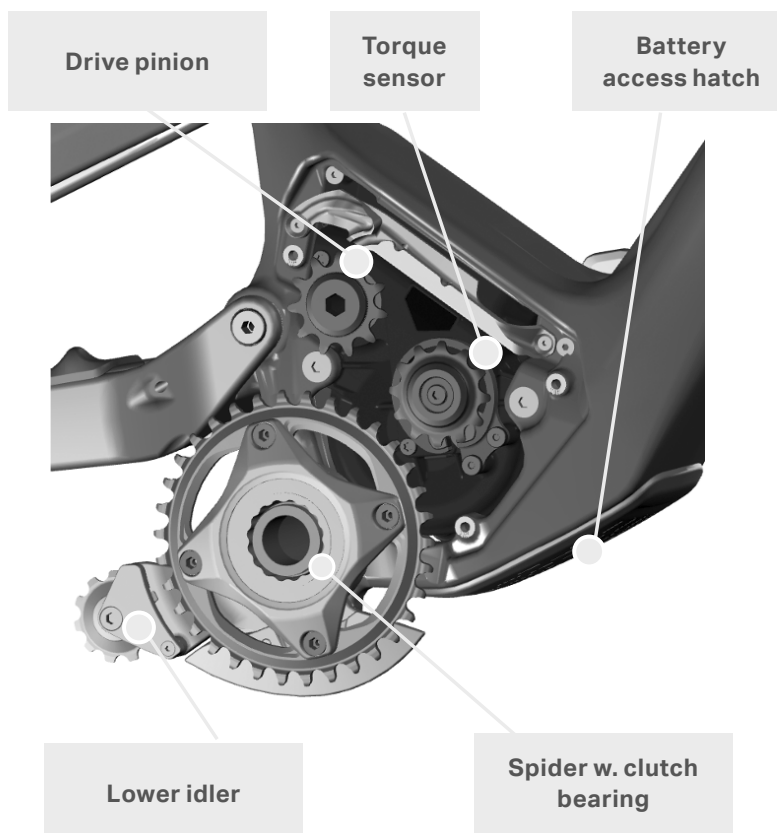
## Images

ENGLISH



## Images

ENGLISH



## Rider Controls

**TMI** (Thumb – Machine Interface, aka the remote)



## Jumbotron

The Jumbotron display is the communication centre of your Powerplay™ bike. It serves to operate the system, display information and diagnose and repair issues. Firmware updates will be carried out through the USB module and computer as required.



## Display





## Riding the bike

### Warning

Make sure the brakes are applied before putting any pressure on the pedals, or even resting your foot on the pedals. The Powerplay™ Drive uses a sophisticated torque sensing circuit to deliver smooth, instant, natural feeling power. This circuit is very sensitive, so you must be careful to ensure the bike does not accelerate away from you when stopped.

### Power ON

To power up the Powerplay™ Drive, use the button on the Jumbotron to turn the bike on, by holding it for 2 seconds. Note: The Powerplay™ Drive will always power up in the second lowest assistance mode. The rider can then increase the assistance using the remote, or the Jumbotron.

### Power levels

The Powerplay™ Drive provides several levels of power assistance:

#### Level 1: Eco

This is the lowest power setting, used for maximum battery life and rider input.

#### Level 2: Trail

This level balances assistance and battery life for all around trail riding .


#### Level 3: Trail+

This level gives the rider sufficient boost for an exciting ride, and good speed to get you to the downhills, without leaving the battery drained.

#### Level 4: Ludicrous

For maximum speed and assistance, this level delivers a huge amount of power to the rear wheel. Note that prolonged use of Ludicrous Mode will drain the battery relatively quickly.

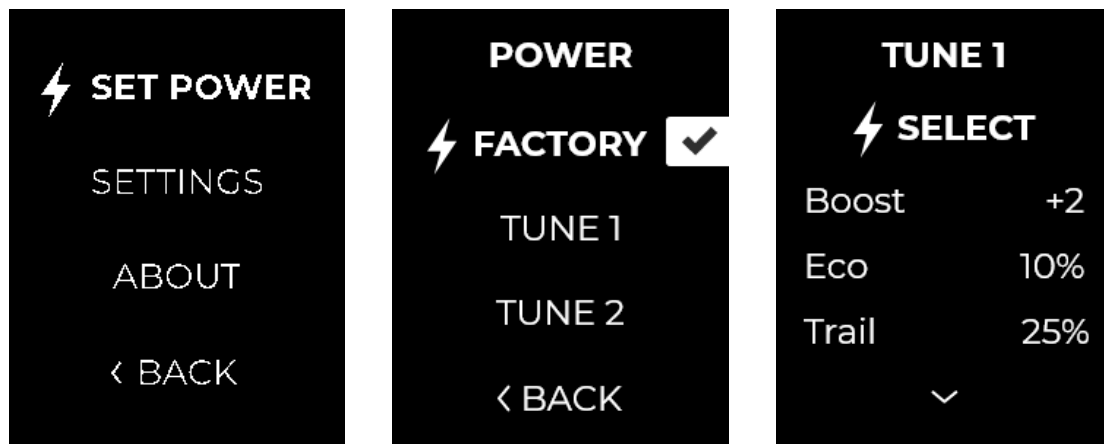
To change assist levels, use the remote (up or down button) or click the button on the Jumbotron.

NOTE: THE RIDER CAN CUSTOMIZE BOTH THE POWER SETTINGS OF ALL 4 MODES, AS WELL AS THE MOTOR BOOST (TORQUE SENSITIVITY) IN THE MAIN MENU. HOLD  TO ACCESS.

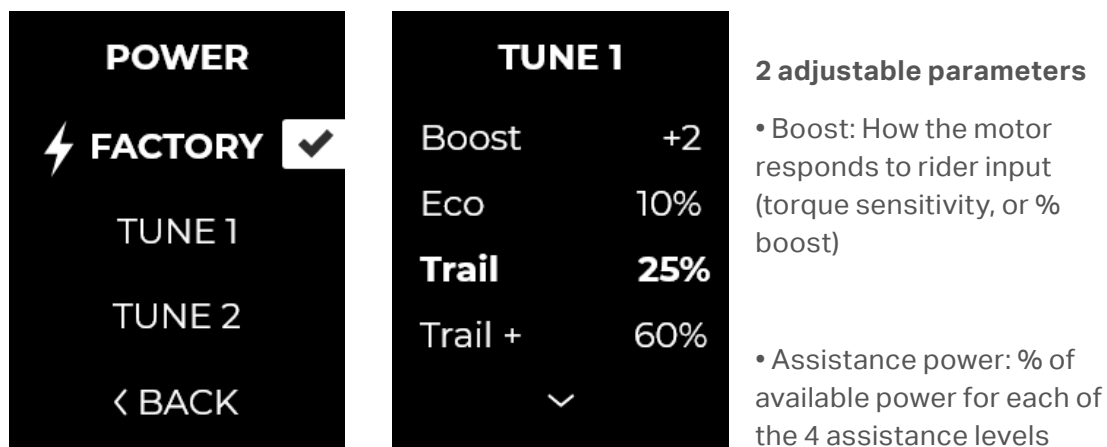
## Assistance adjustment

Assist levels can be adjusted at the start or at any time during the ride. The Dymate™ 4.0 system can hold 3 different assistance maps in its memory: a default FACTORY map and two customizable tunes. The rider can select between the maps depending on how they want the drive system to react.

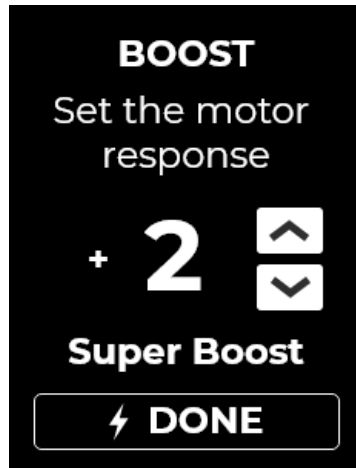
### Select Tune



### Adjust Tune



## Motor boost



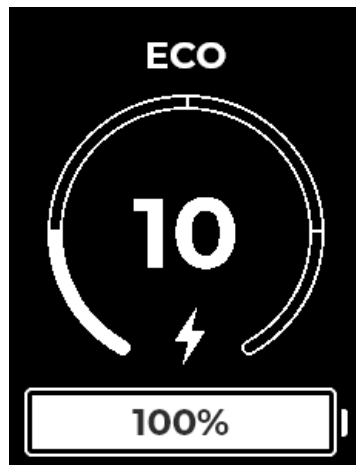
### Adjust from +2 to -2

**+2** Very little effort required from the rider. Maximum boost, minimum battery range: BRAAAAAAP

**0** Balanced performance, good response and battery range

**-2** Significant pedalling input required from rider, maximized battery range, best workout.

## Assistance power



### Adjust from 1% to 100%

For each of the 4 assistance modes (Eco, Trail, Trail +, Ludicrous), you can select the power output. It represents a percentage of the peak available power. You cannot adjust the power of a high assistance mode to be lower than a lower assistance mode, e.g., Trail mode cannot be adjusted lower than Eco mode.

# Battery

---

Our Powerplay™ models feature proprietary controls, motors, and battery components. Some of these components are sensitive and require extra care. We want to ensure that you have the most information possible. Please take note of the following updated details related to the Rocky Mountain Powerplay™ battery, recharging and care.

Failure to follow the instructions and guidelines in this section may result in damage of electrical components on your bike and will void your warranty. More importantly, failure to follow the instructions may result in serious personal injury or death.

## General

- The batteries used in all Rocky Mountain Powerplay™ devices have all the required certifications and a Battery Management System (BMS) that provides multiple levels of fail-safes to prevent hazards. Despite these safety measures, a charged battery that has reached extreme temperatures or a charging port that has sustained damage can be dangerous, leading to electrical shock, fire, or injury.
- If your battery or charger shows any signs of damage, do not use it, and immediately bring your bike to your authorized Rocky Mountain retailer for inspection.
- The battery and drive unit, along with other proprietary Powerplay™ components, should only be serviced by mechanics that have gone through Rocky Mountain Powerplay™ training.
- Do not allow any small, sharp, and/or metallic objects to come in contact with the battery or the battery's recharging socket.
- Do not modify, open, or disassemble the battery or charger.
- Never clean an Powerplay™ with a high-pressure washer or submerge the bike in water. Rain and normal washing will not cause a problem.
- Undamaged batteries will not release fluids or gases. However, in the event of damage, battery fluid can cause skin irritation and burns, and battery gases can be released and irritate the airways. In the event of skin or eye contact with any fluids or gases from the battery, immediately flush with water and seek medical assistance.
- When transporting the bike on a car, if the battery is removed, ensure all connections are covered to avoid contamination from road grit, water and salt.

- If a battery fire occurs, do not attempt to directly extinguish it with water. You can use water to extinguish materials surrounding the battery, but not the chemical cells themselves. To properly extinguish a burning battery, **use a Class ABC or BC fire extinguisher**. Sand can also be used to smother the fire effectively. If possible, without exposing yourself to any personal risk of injury, bring any heated or ignited battery or complete bike outside to prevent the fire from spreading. If the battery is connected to a charger, the first action should be to unplug the charger or cut the power from the grid.

## Charging

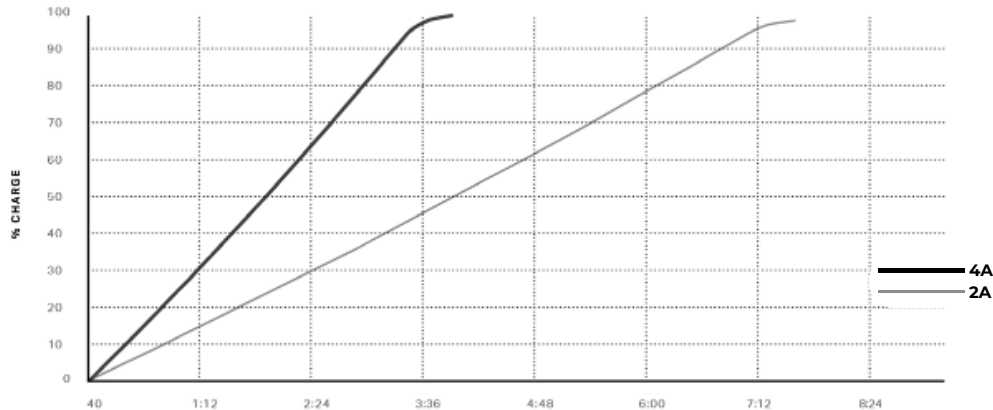
- Only use the dedicated Powerplay™ chargers for any Powerplay™ battery.
- Do not leave the charger in direct sunlight, especially during recharging.
- **To recharge the battery:**
  1. Find the recharging port on the Powerplay™ bike and open the recharging port protector.
  2. Note the shape of the charging cable connector, and orient it correctly to the charge port on the bike. Connect the charger to the Powerplay™ bike.
  3. Plug the charger into an electrical source. The LED on the charger will illuminate red to indicate charging .
  4. When the battery is nearing its full charge, it the system will slow the charging rate down to top up and balance the cells. The charger may alternate between "charging (red)" and "full (green)" led, at 30 second intervals, for 30 minutes. If the LED remains green for more than 5 minutes, the battery is fully charged. It is not necessary to disconnect the charger immediately after the recharge is complete; however you should not leave the bike connected to the charger for a period longer than 12 hours.

## NOTES:

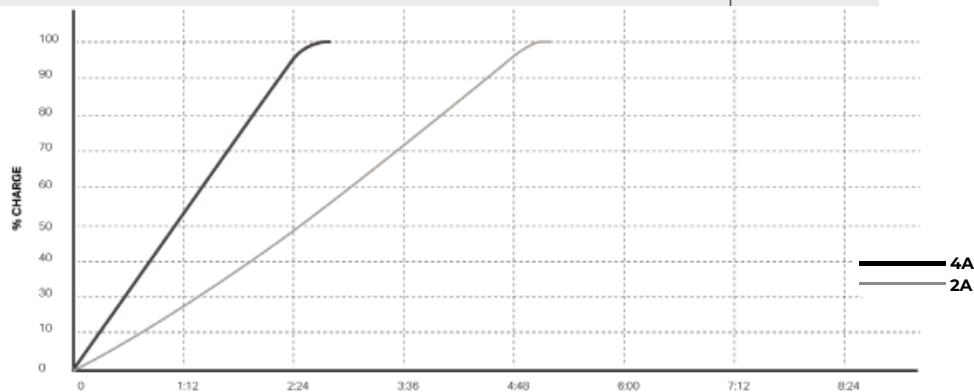
1. Do not confuse this end of charge situation with a system fault, which will trigger a rapid blinking of the charger.
  2. This end of charge state represents the final 3% of battery charging. You can disconnect the charger at any time if you are satisfied with the battery level.
- Recharge your Powerplay™ bike in an open area with clear access to an outside exit.
  - As with all bikes and equipment with lithium-ion batteries, it is recommended to only recharge the bike under supervision.
  - If the battery reaches 50 °C (122 °F), the recharge will be stopped until the battery temperature drop to 45 °C (113 °F). If the battery drop to 0 °C (32 °F), the recharge will be stopped until the battery temperature rises to 3 °C(37.4 °F).
  - Recharging time will vary depending on remaining energy in the battery.

- Recharging time is as follows:

720 Wh	4A charger	2A charger
Time to charge from 0–80%	2h55	6h00
Time to charge from 0–95%	3h25	7h00
Total charge time from 0–100%	3h55	7h35



480 Wh	4A charger	2A charger
Time to charge from 0–80%	1h55	4h00
Time to charge from 0–95%	2h20	4h40
Total charge time from 0–100%	2h35	5h05



- It is not necessary to fully charge the battery every time. You can also partially charge it, but we recommend fully charging it once every 10 charges.

### Storage

- To store your Powerplay™ bike, keep it in a secure place that is not exposed to extreme temperatures (above 30 °C (86 °F), or below 0 °C (32 °F)), excessive sun exposure, humidity or condensation. If you believe that the bike has been stored in the conditions listed above, please cease usage and contact your authorized Rocky Mountain retailer.
- Storing a fully depleted battery for a prolonged period will cause damage and diminish its capacity. It is recommended to disconnect the battery prior to long term storage that exceeds 2 weeks. It is also recommended to recharge your battery to at least 75% capacity whenever possible to avoid damage from deep discharge over prolonged storage periods that exceed 2 weeks.

- If you store your bike for long periods of time, you must recharge the battery periodically, at least once every three months, to maintain its capacity. Failure to do so may cause damage to the battery, and a loss of its capacity. A good way to manage storage recharging is to set calendar reminders in your computer or mobile device.
- The best practice to maintain the optimum battery capacity over time is to store the bike at temperatures between 10 °C (50 °F) and 25 °C (77 °F) and relative humidity below 65%.
- After 1 month of storage, the battery will enter a protection mode. To revive the battery, please plug into the charger.

### Battery functionality

- The battery will function in cold weather, though at a diminished capacity. Expect 70% of full capacity at -10 °C (14 °F). It is recommended to warm up a cold bike prior to use.
- If the battery reaches 65 °C (149 °F), it will shut itself down for protection until it drops below 60 °C (140 °F). If the battery reaches -20 °C (-4 °F), it will shut itself down for protection until it warms up to at least -15 °C (5 °F)
- When the remaining battery capacity is low, the Powerplay™ drive will progressively reduce power output to maximize its range.
- Please note that lithium-ion batteries gradually lose capacity depending on age and use. A dramatic decrease in capacity may be a sign that the battery is reaching the end of its lifespan and must be replaced. Please visit your authorized Rocky Mountain retailer for battery replacement. Under normal use, you can expect:

#### 720 Wh / 480 Wh Battery

Will operate at 80% of full capacity after 500 full charging cycles (0% to 100% charge).

### Battery LED

- **During charging**
  - White: 100% - 75%
  - Green: 74.9% - 50%
  - Yellow: 49.9% - 25%
  - Red: 24.9% - 0%
- **Error codes (Flashing LED)**
  - Red: Stop riding/visit your dealer
  - Yellow: Wait 15 mins.
  - Blue: Too cold! Try again in warmer conditions.

## Removal

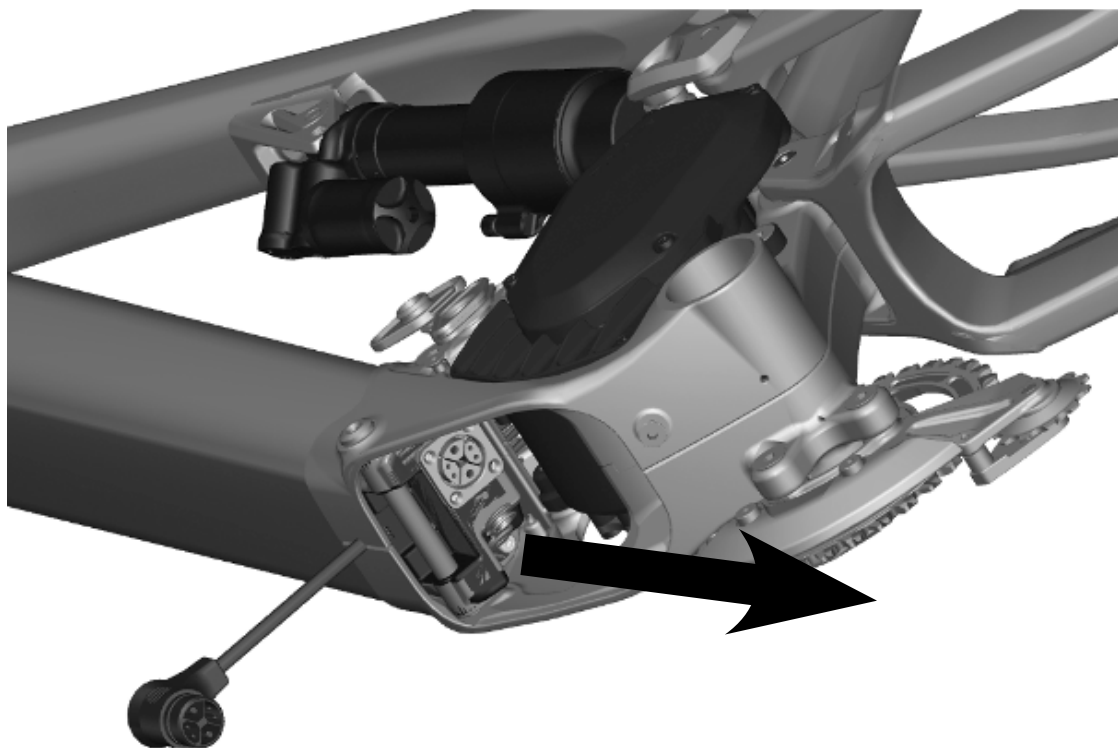
Powerplay™ bicycles are equipped with a removable battery. It is fixed with a 4 mm hex retaining bolt, for a solid, rattle-proof attachment.



- Remove the bash cover fixing screw and bash plate.



- Unplug the power connector from the battery.
- Remove battery fixing screw. Warning ! Do not drop the battery.
- Pull the battery from the downtube.



## Installation

Reverse the steps above, taking care to avoid pinching the power cable by moving it clearly out of the path of the sliding battery.

### **WARNING:**

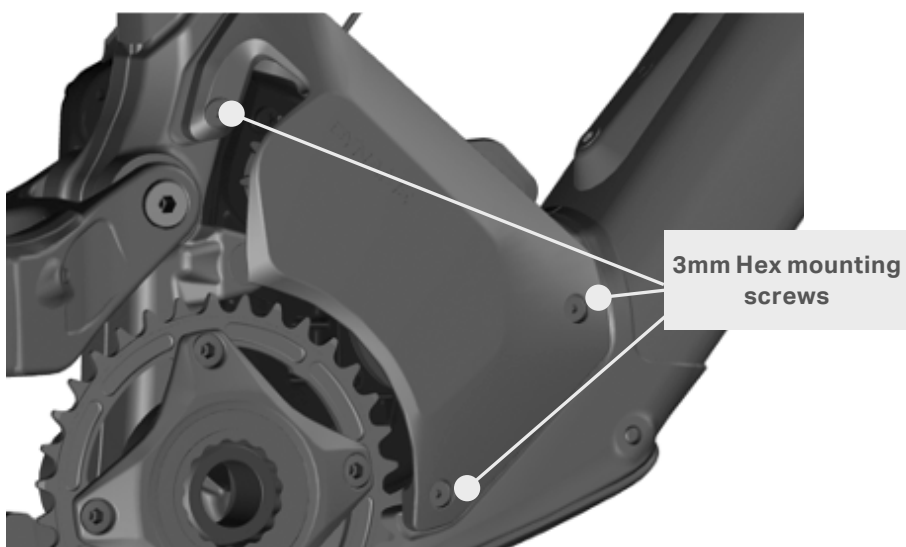
A compromised power cable can be dangerous, leading to electrical shock, fire or injury.

## Motor

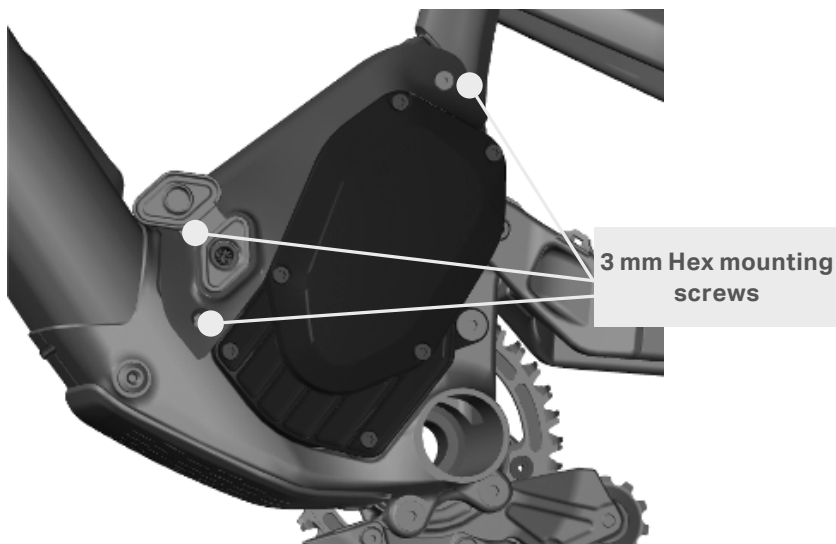
### Drive removal

To remove the motor from the frame, follow these steps.

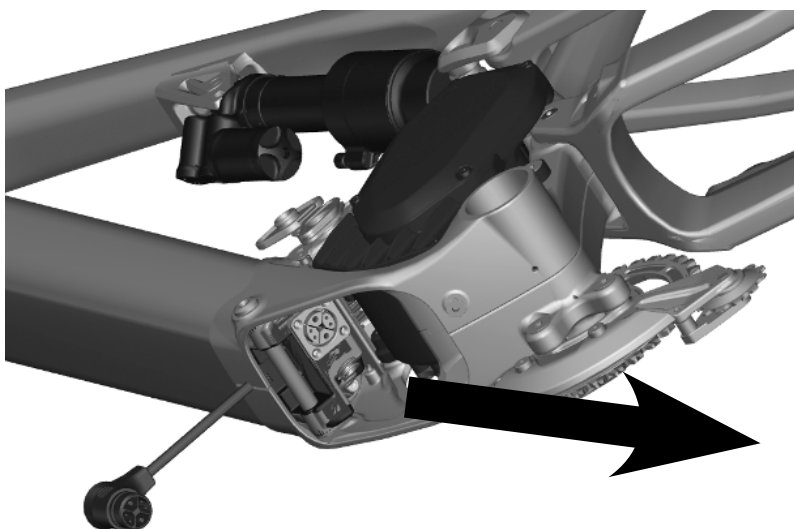
- Turn off bike.
- Unscrew the three mounting screws and remove drive side motor cover



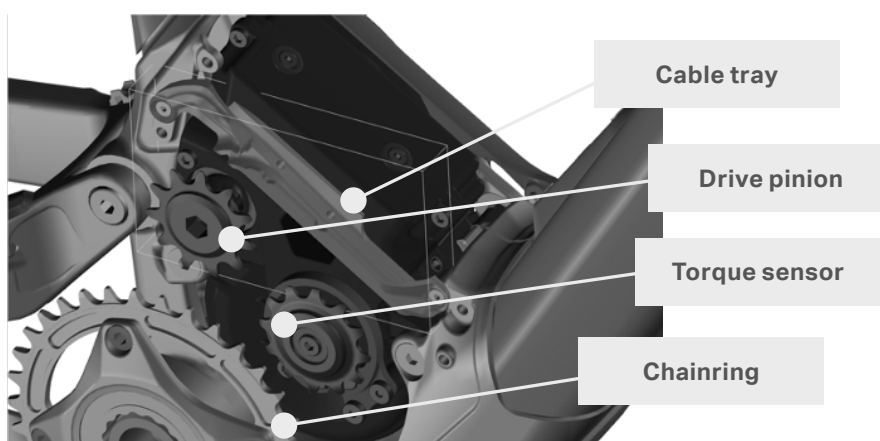
- Unscrew the three mounting screws and remove non-drive side motor cover.



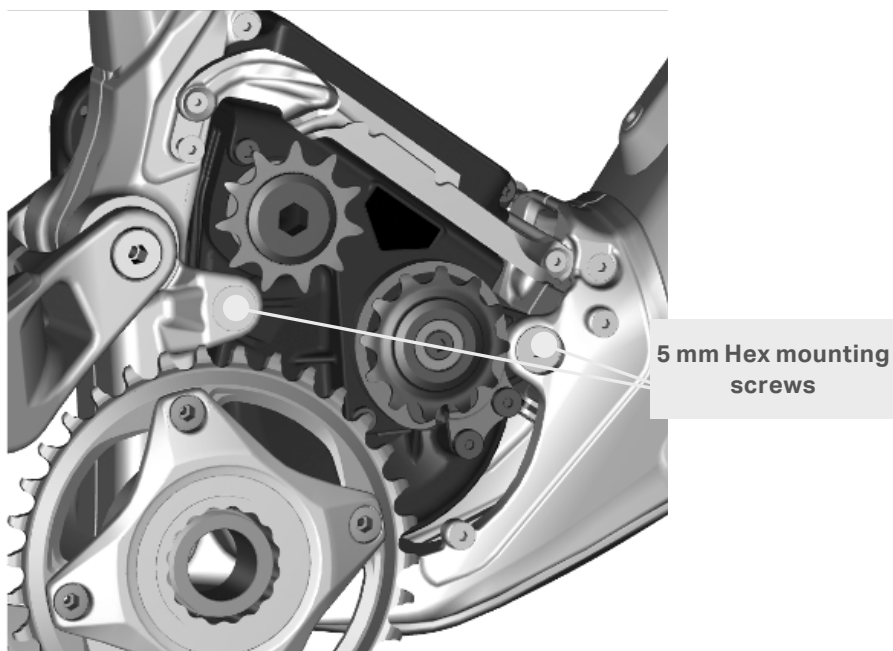
- Remove battery as outlined previously (page 30).



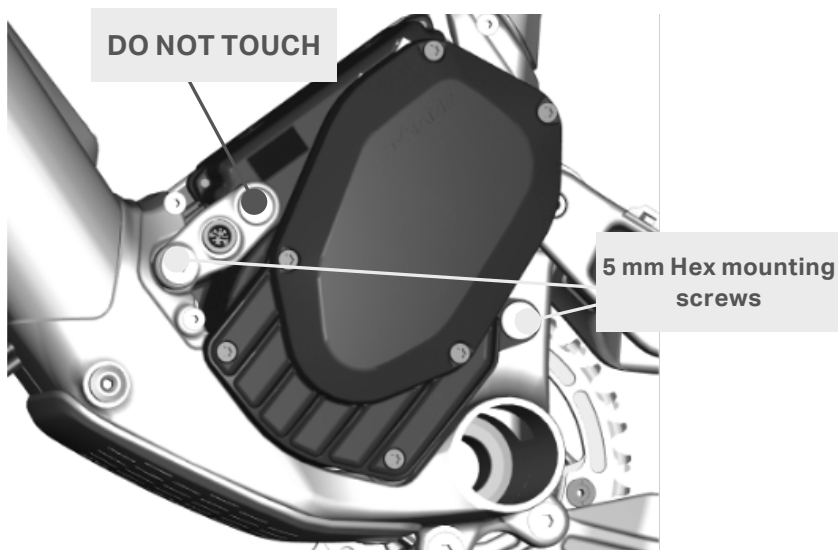
- On the drive side, locate the cable tray. Remove zip ties, and disconnect the speed sensor (YELLOW connector).
- Remove chain from chainring, drive pinion and torque sensor.



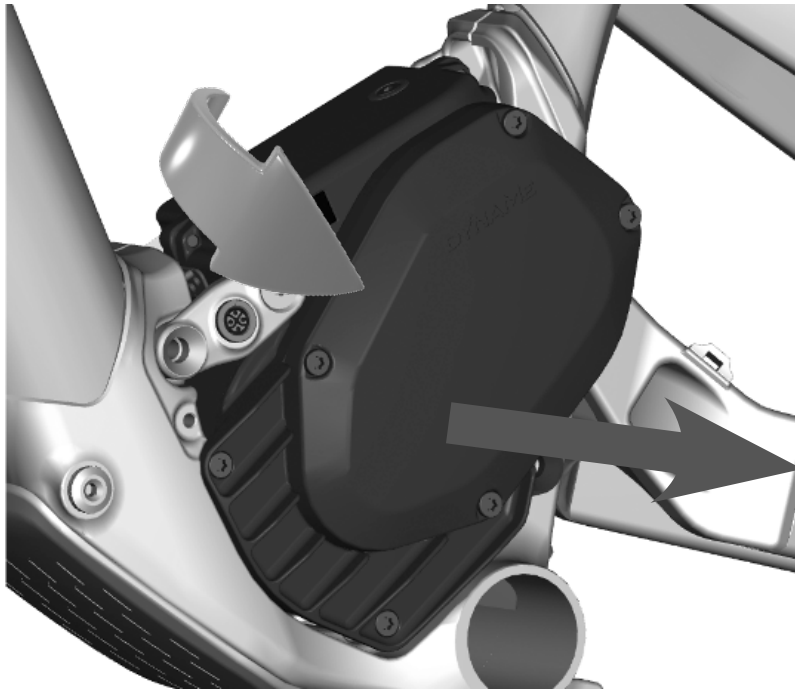
- Remove the two mounting screws securing the motor on the non-drive side



- Remove the two mounting screws securing the motor on the non-drive side. Note the charge port remains on the mounting bracket with the motor. Do not remove this 5 mm hex screw



- Disconnect the remote (RED connector) .
- Remove the entire motor from the non-drive side, rotating slightly to avoid the drive pinion colliding with the frame.



To reinstall the motor, simply reverse all the steps above and refer to the torque specifications below.

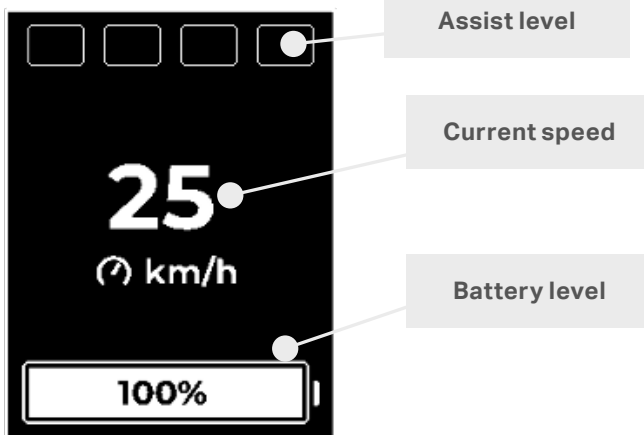
- Motor mount screws: 14 Nm
- Cover mount screws: 1.5 Nm

## Rider screens

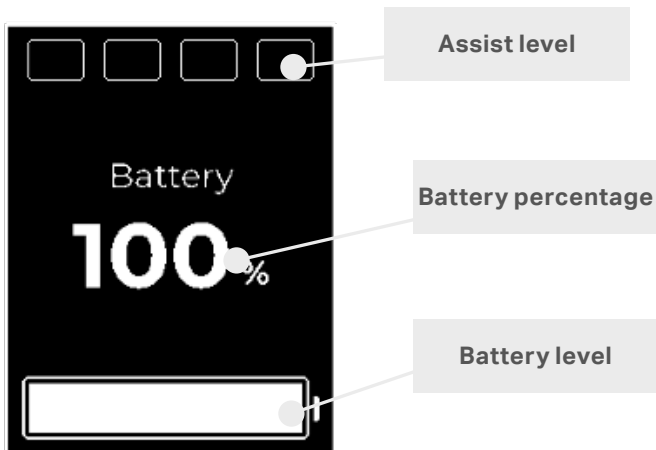
ENGLISH

Depending on the selection, the screen will display one type of information, while still showing critical data.

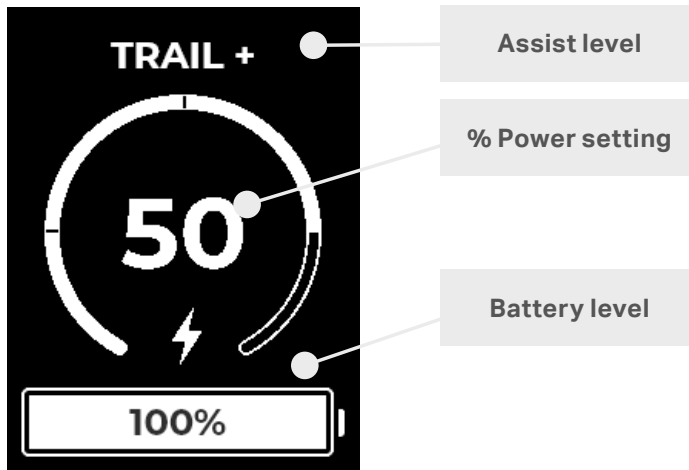
### Speed View



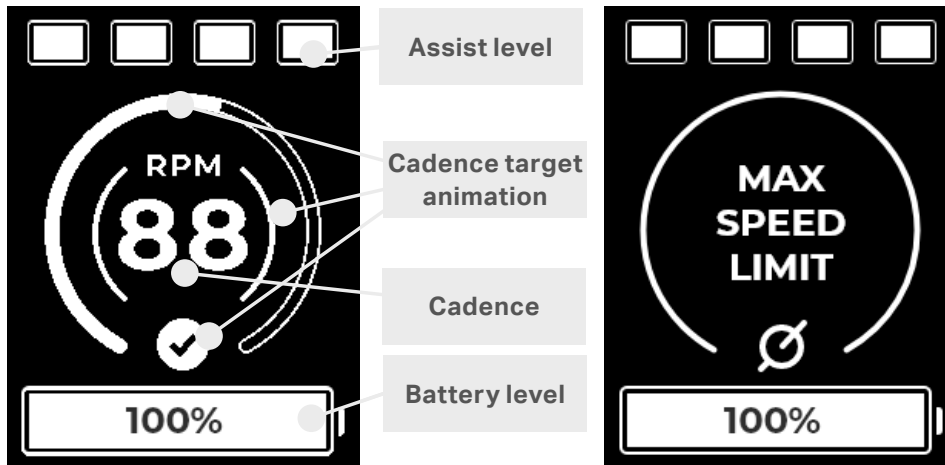
### Battery View



### Assist View

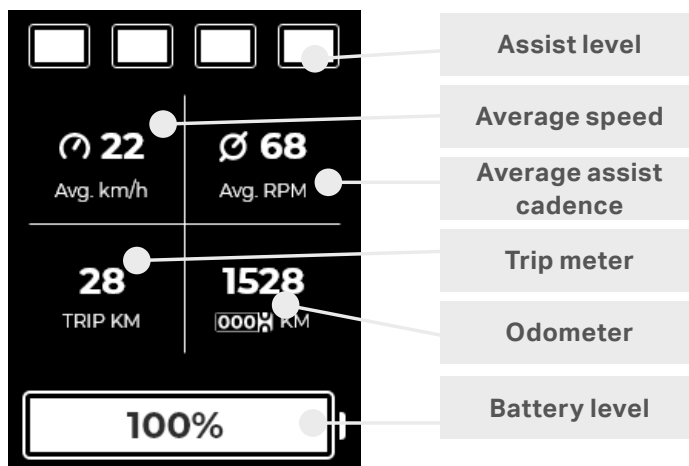


### Cadence View



Note that cadence is interpreted through motor RPM, and is an estimate. That also means that when the motor is stopped (ex: above max speed), there is no cadence reading.

### Odo / Trip View



## Reset

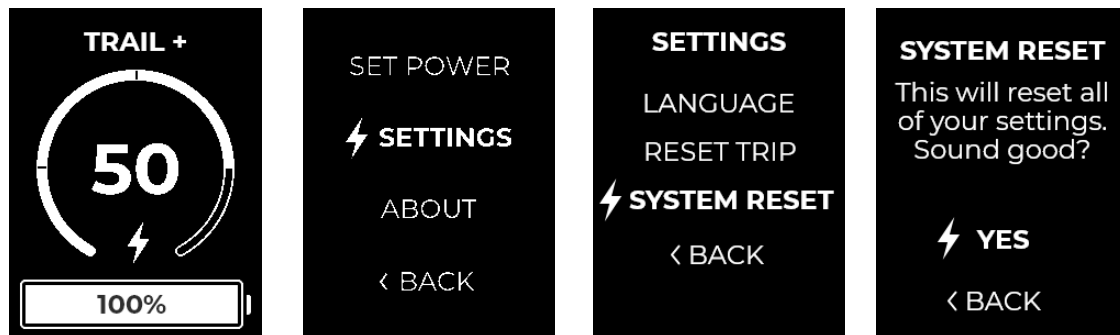
The rider can always reset the trip information (average speed, average cadence, distance), as well as restore the Dyname system to original factory settings.

### Trip reset



In the odometer view, hold the UP button on the TMI

or



From any rider screen, enter the main menu by HOLDING ⚡. Go to Settings – System reset.



### Walk Mode

The Powerplay™ has a Walk Mode you can use should the need arise. The Powerplay™ Drive is able to assist the bike at a walking speed. On the remote, push and hold button (A). The bike will slowly power up the climb as you push it.

⚠ The Walk Mode may not be used while a rider is on the bike. The Walk Mode may be used only when walking alongside the bike.

### Power OFF

To power down the Powerplay™ Drive, hold the button on the Jumbotron. If the bike is left idle for 10 minutes, it will automatically shut itself off to conserve battery life.

## Notes

---

### Damage to remote

In the event the remote is damaged and stops working, the rider can continue to use the bike and cycle through the assist modes using the Jumbotron.

NOTE: The menus and adjustments are not accessible via the Jumbotron, without the remote.

### Range

The distance over which the battery will power the drive system varies depending on several factors, such as assist level and boost mode selected, ambient temperature, acceleration, wind resistance, poor maintenance, battery age, hilly and rough terrain, and/or rider weight.

### Riding tips

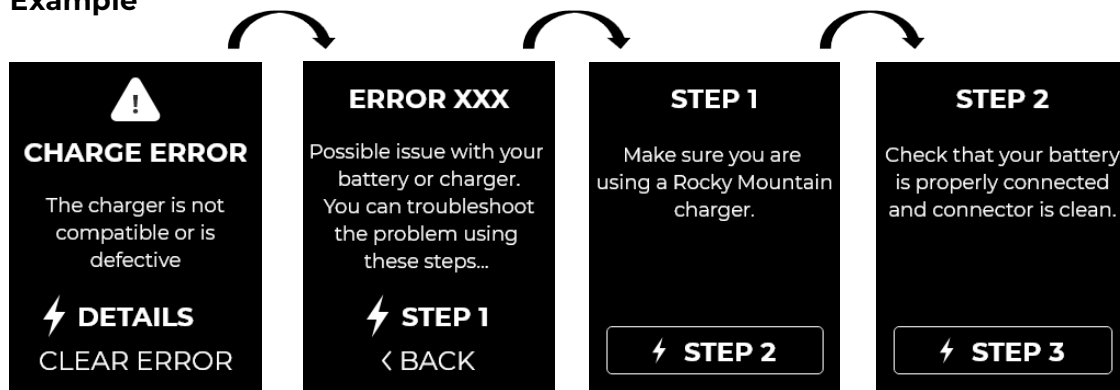
- The Powerplay™ Drive delivers smooth, natural feeling power to the rear wheel and works best under these circumstances.
- Use a smooth, consistent pedal stroke, rather than "mashing" the pedals.
- Shift often, to maintain a cadence between 80 and 120 RPM for optimal motor efficiency, yielding high torque and maximum battery performance. Use the cadence view on the Jumbotron, which informs the rider when they are pedalling in the efficient zone.
- When shifting gears, care should be taken:
  - Ease off pedalling pressure prior to shifting to avoid stressing the chain.
  - Do not shift multiple gears at once.

## Service

### Diagnostics and repair

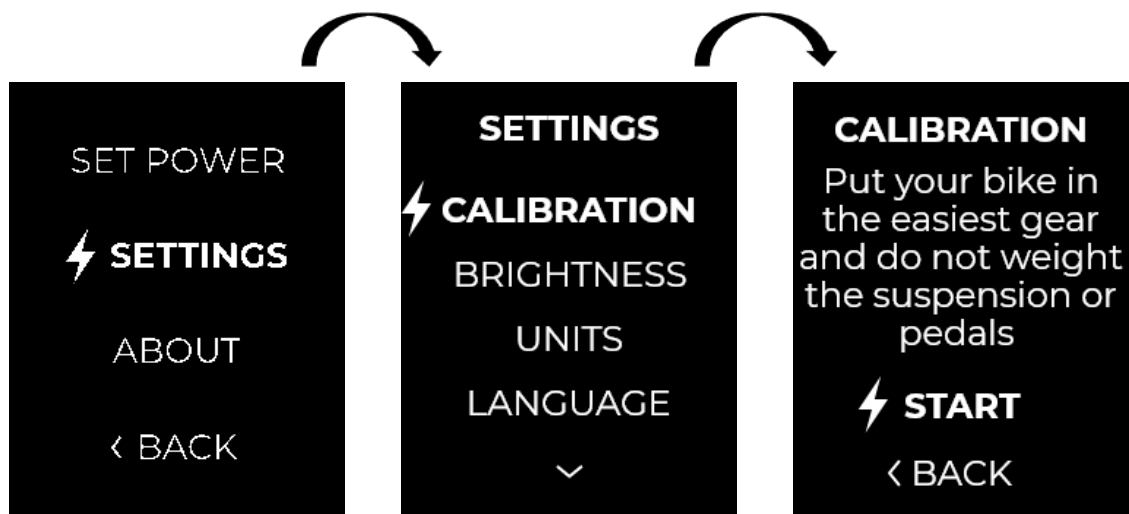
The Jumbotron can display error messages, as well as prompt the rider with instruction for repairing the system in some cases.

#### Example



### Calibrating

A calibration procedure may occasionally be required to maintain the performance of the drive system. Typically this is done any time a drivetrain component is replaced (chain, chainring, drive pinion, etc) or the motor is reinstalled in the frame.



## Troubleshooting

Please work with your local dealer for troubleshooting. Your Jumbotron display can generate error codes for diagnostics. When an error code appears, the system will prompt you with instructions. In some instances a field repair may be possible, in others, the rider may need to see an authorized dealer. Some errors will engage a limp mode, allowing the rider to return home at reduced power.

## Warning

**WARNING** - Do not tamper with your Rocky Mountain bicycle. Tampering is removing or replacing any original equipment or modifying your Rocky Mountain bicycle in any way that may change its design and/or operation. Such changes may seriously impair the handling, stability, and other aspects of the bicycle, making it unsafe to ride. Tampering can void the warranty and render your Rocky Mountain bicycle not in compliance with the applicable laws and regulations where the bicycle is being ridden. To ensure safety, quality, and reliability, use only original parts or Rocky Mountain Bicycles authorized replacements for repair and replacement. Rocky Mountain Bicycles is not responsible for any direct, incidental, or consequential damages, including, without limitation, damages for personal injury, property damage, or economic losses due to tampering.

### *Attention:*

*The A-weighted emission sound pressure level at the driver ears is less than 70 dB[A].*

## Bottom bracket standard

The Powerplay™ Drive uses a Press Fit BB89.5.

### NOTE:

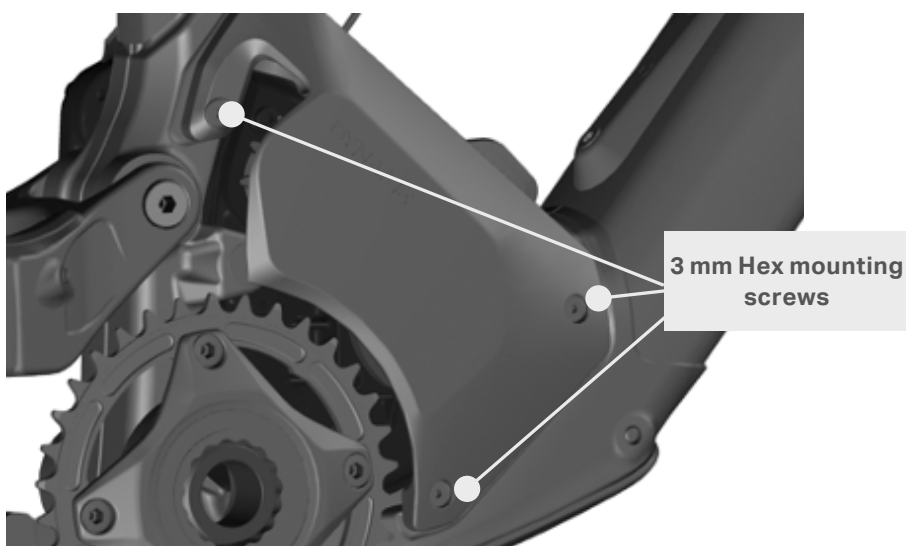
- This allows a gap on the Race Face spindle for the Clutch Spider.
- USE THE CORRECT SPIDER FOR EITHER RACE FACE OR SRAM EAGLE CHAINRINGS. THESE ARE THE ONLY APPROVED CHAINRINGS.

## Cable routing

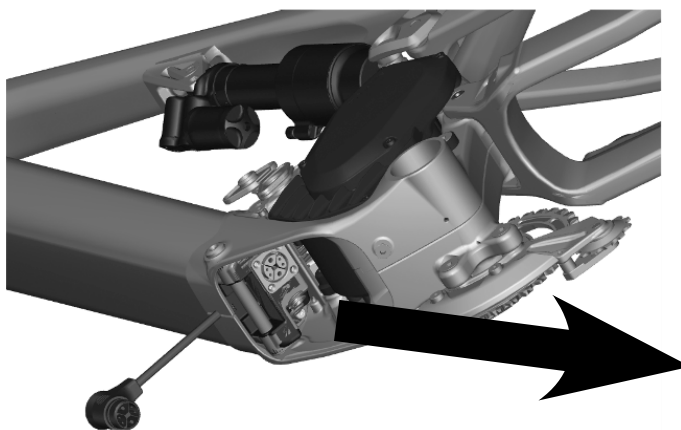
### Shift cable

To replace worn shift cable housing, follow these steps:

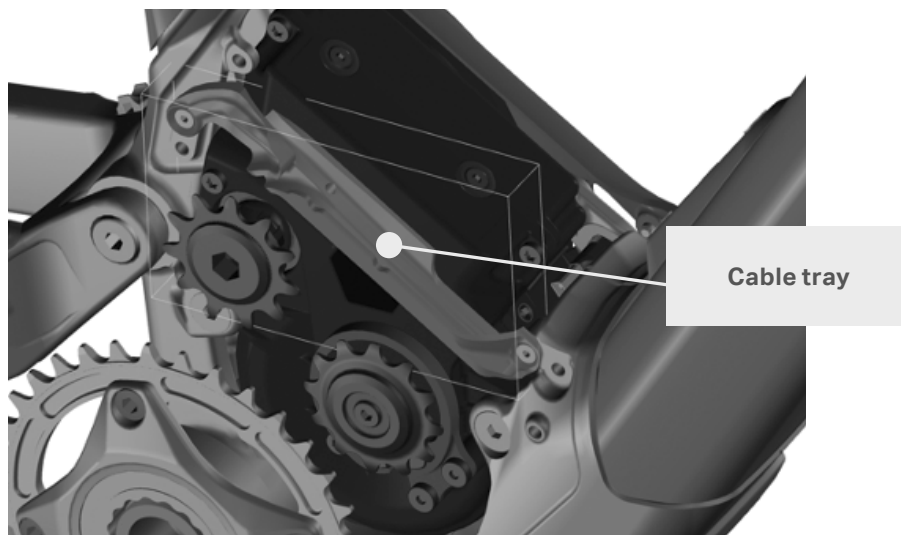
- Unscrew the three mounting screws and remove drive-side motor cover.



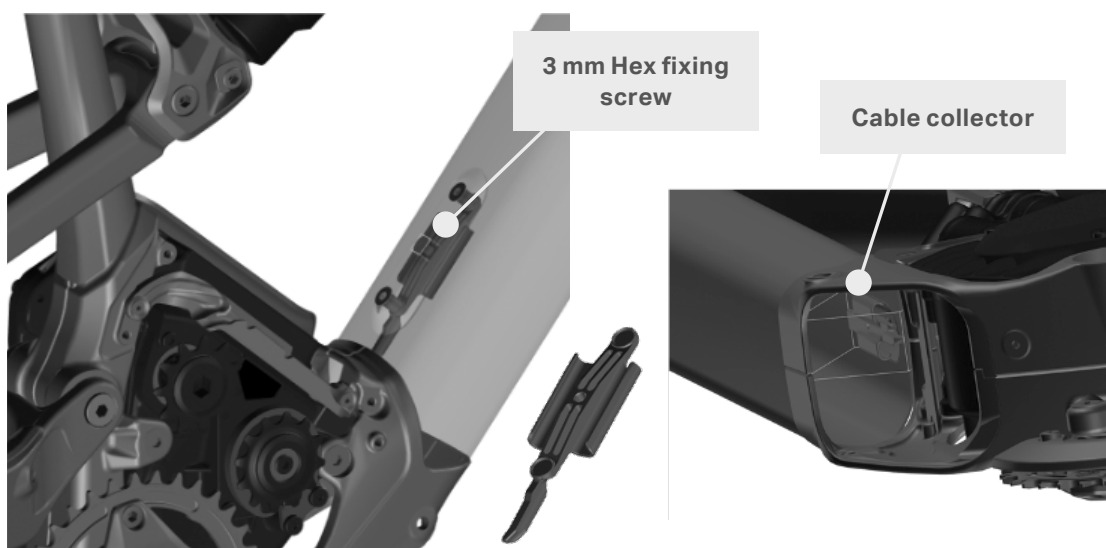
- Remove battery as outlined previously (page 30).



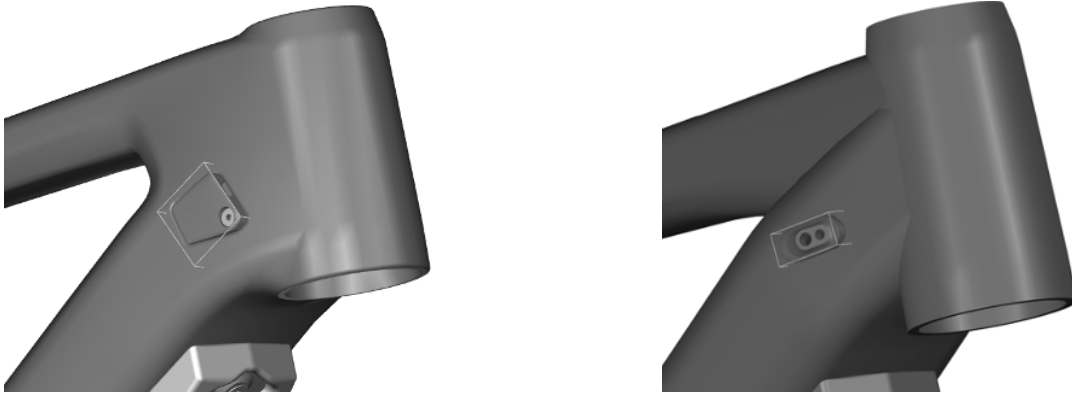
- Cut and remove the zip ties fixing cables and wires to the cable tray on the drive side of the motor. NOTE POSITION OF HOUSING ON TRAY.



- Loosen the 3 mm hex screw between the water bottle bolts, which in turn loosens the cable collector found INSIDE the downtube. You can slide the cables off the sides of the collector, inside the downtube.



- Remove cable port (carbon) or rubber grommet (alloy) on the right side of the downtube.

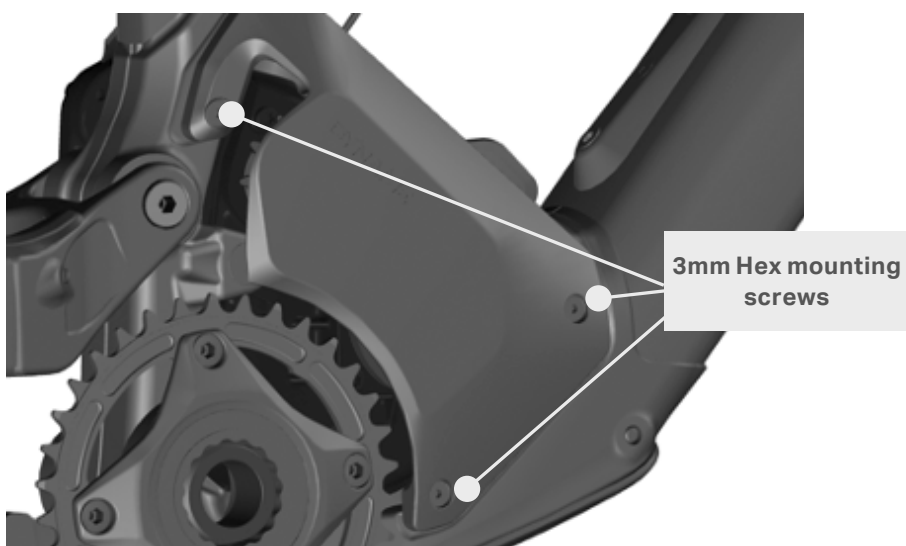


- Remove old housing and cable.
- Working from BACK to FRONT, insert shift housing at the rear of the chainstay assembly.
- Run the shift housing in the cable tray, and into the downtube.
- Run the shift housing all the way to the front of the bike and out the port.
- Run the shift housing in the cable collector, pull taut, and fix the cable collector in the downtube with the 3 mm hex screw.
- Fasten cables and wires to the cable tray on the drive side of the motor with zip ties.
- Install the main pivot cable guide.
- Trim and adjust shift cable and housing.
- Reinstall port or rubber grommet over the shift housing.
- Reinstall battery.

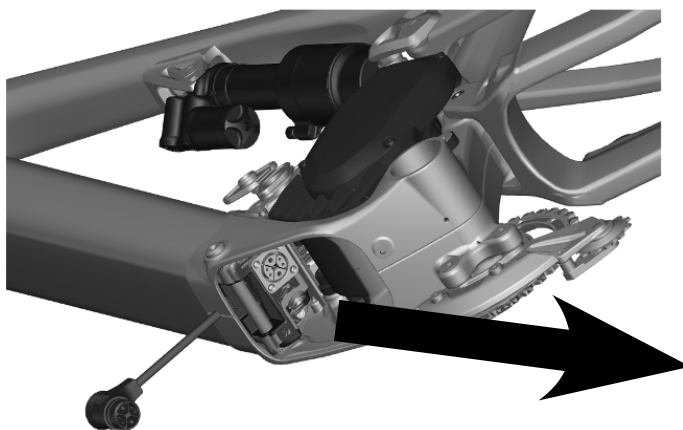
## Brake Hose

To replace a rear brake hose, follow these steps:

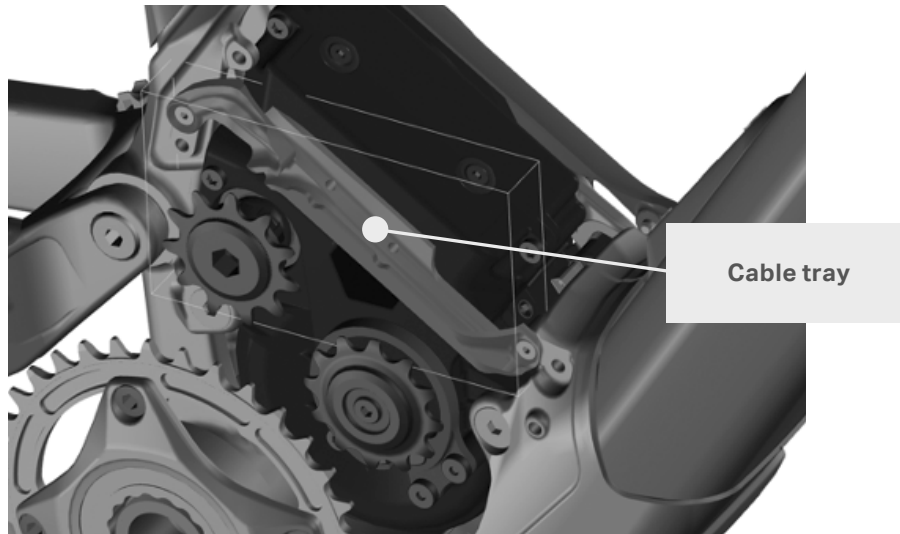
- Unscrew the three mounting screws and remove drive side motor cover.



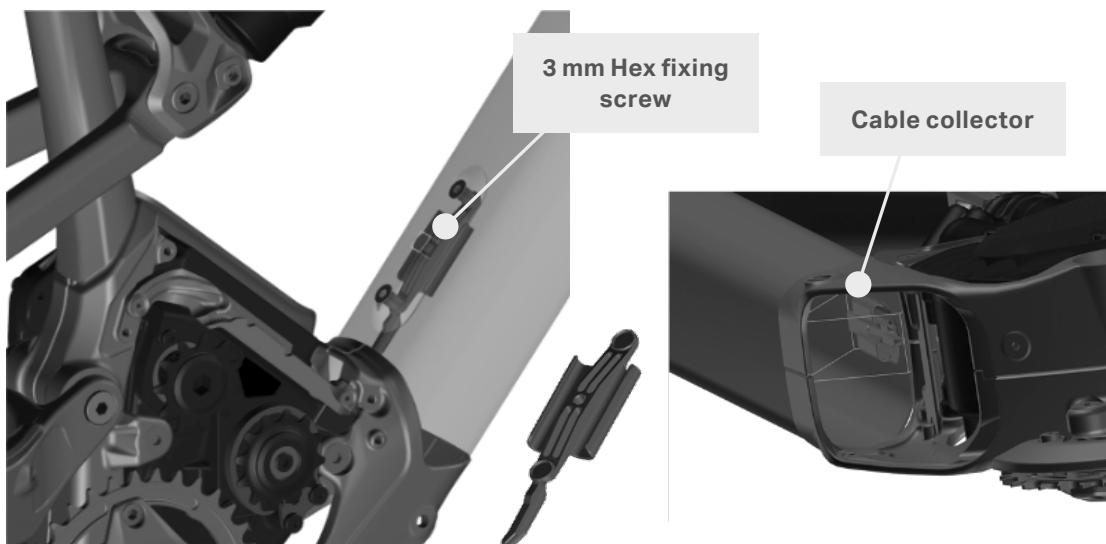
- Remove battery as outlined previously (page 15).



- Cut and remove the zip ties fixing cables and wires to the cable tray on the drive side of the motor. NOTE POSITION OF HOSE ON TRAY.



- Loosen the 3 mm hex screw between the water bottle bolts, which in turn loosens the cable collector found INSIDE the downtube. You can slide the cables off the sides of the collector, inside the downtube.

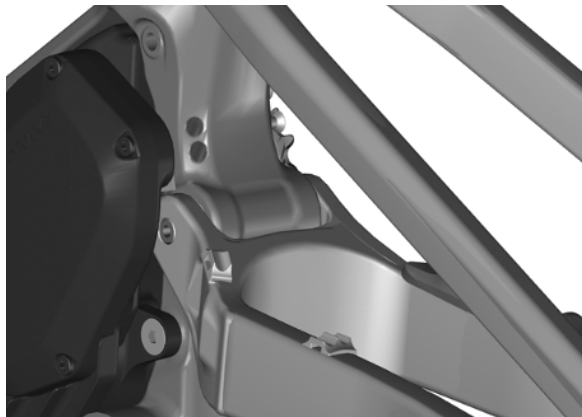




- Remove cable port (carbon) or rubber grommet (alloy) on the left side of the downtube.



- Remove old hose. Measure new hose to match length.
- Working back to front, install the hose on the caliper, and run along the chainstay to the lower hole at the back of the seat tube.



- Run the brake hose in the top portion of the cable tray and into the downtube.
- Run the brake hose in the cable collector, pull taut, and fix the cable collector in the downtube with the 3 mm hex screw.
- Fasten the hose, cables and wires to the cable tray on the drive side of the motor with zip ties.
- Pull the brake hose out of the left side port hole by the head tube, and reinstall the cover or grommet.
- Reinstall the drive side motor cover.
- Reinstall battery.

## Brakes

---

It's very important to your safety that you learn and remember which brake lever controls which brake on your bike. Traditionally, the right brake lever controls the rear brake and the left brake lever controls the front brake; but, to make sure your bike's brakes are set up this way, squeeze one brake lever and look to see which brake, front or rear, engages. Now do the same with the other brake lever. Make sure that your hands can reach and squeeze the brake levers comfortably. If your hands are too small to operate the levers comfortably, consult your dealer before riding the bike. The lever reach may be adjustable; or you may need a different brake lever design.

Disc brakes can get extremely hot with extended use. Be careful not to touch a disc brake until it has had plenty of time to cool.

See the brake manufacturer's instructions for operation and care of your brakes, and for when brake pads and rotors must be replaced. If you do not have the manufacturer's instructions, see your dealer or contact the brake manufacturer. If replacing worn or damaged parts, use only manufacturer approved genuine replacement parts.

## Front and Rear Axle

Your Rocky Mountain Powerplay bicycle comes equipped with tooled axles on the front and rear wheels.

The rear axle is a Rocky Mountain made axle. To correctly install the rear axle slide the rear axle through the drop out and hub until it contacts the threads of the opposite side drop out. Tighten the rear axle with a 6mm allen wrench to the specified torque of 10Nm.

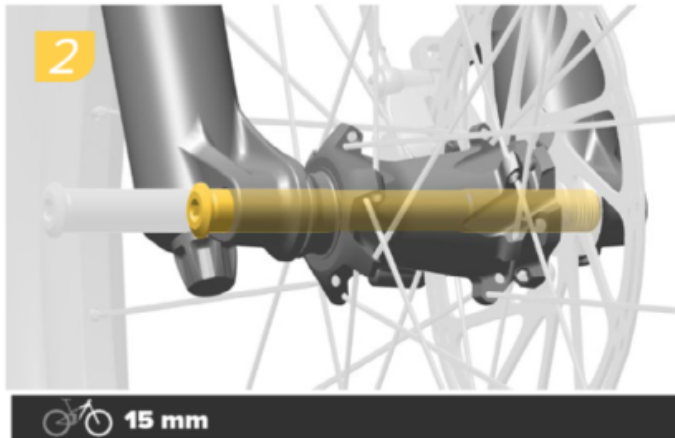
The front axle is specific to the fork manufacturer brand. Please review all instructions related to the fork in the manufacturer documentation either supplied in the small parts box or located on the manufacturers website.

### **Fox Kabolt-X Quick Start Guide**

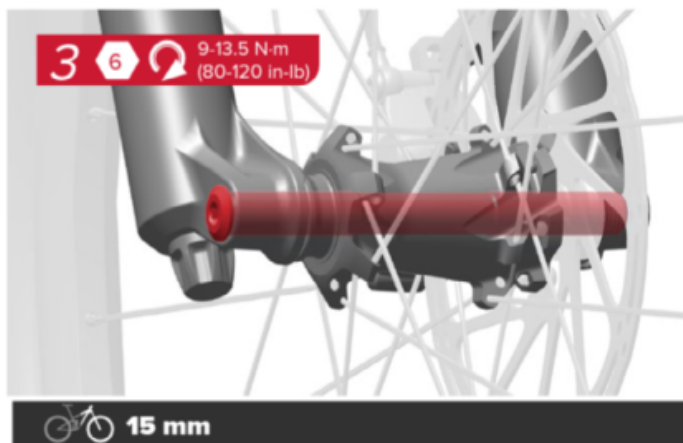
1. Loosen the pinch bolt, then install the front wheel into the fork dropouts. Slide the KaboltX axle through the drive side dropout and hub.
2. Use a 6 mm hex wrench to torque the KaboltX axle clockwise to the torque specification that is etched on the head of the Kabolt.
3. Compress the fork a couple of times to ensure that the lower leg has settled into its low-friction point.
4. Tighten the pinch bolt on the drive side dropout to 5.1 Nm (45 in-lb) torque.

### Sram Stealth Axle Quick Start Guide

1. Slide the Maxle through the drop out and hub until it contacts the threads of the opposite side drop out.



2. Use a 6 mm hex wrench to torque the Maxle Stealth axle clockwise to the torque specification of 9-13.5Nm.



## General maintenance

Please note that electric assist bikes put more stress and strain on components than traditional mountain bikes. They should therefore be inspected and maintained more frequently to maximize safety, performance and longevity.

### Seasonal charging

If you store your bicycle for long periods of time, be sure to charge the battery at least once every three months. Failure to do so may cause damage to the battery, and a loss of capacity. After one month of storage, the battery will enter a protection mode. To revive the battery, plug it into the charger.

A good way to manage storage charging is to set calendar reminders in on your computer or mobile device.

### Cleaning

A clean bike is a happy bike. The best way to clean a dirty bike is with a bucket of warm , soapy water. Avoid using a pressure washer.

NOTE: Do not spray water at directly on any electrical component.

### Preventative maintenance

#### Clean and inspect drivetrain for wear

- Chain
- Cassette
- Pulleys (lower idler, derailleur pulleys)
- Chainring
- Drive pinion

#### Check bolts and fasteners

- All standard bicycle fasteners: pivots, stem, crank bolts, chainring bolts
- Motor mounts
- Torque sensor mount
- Battery retaining pin
- Check spoke tension
- Inspect brake pads & rotors
- Keep charge port clean / closed

## Maintenance

Periodic maintenance and adjustment checklist	Checklist					Notes
	500KM	1000KM	1500KM	2000KM	2500KM	
Bicycle chain - inspect for wear, clean and lube	Before each ride					Check condition (stretch, cracks) and lubricate with the chain supplier's recommended lubricant.
Charge port	Before each charge					Check for water intrusion, corrosion, pin alignment & dirt
Torque sensor - calibration	Bi-monthly					OR each time you replace a component of the drive system or drivetrain
Motor mount screws	●	●	●	●	●	Check for proper torque
Drive pinion & lockring	●	●	●	●	●	Check condition; replace whenever worn to the limit
Torque sensor & idler pulley	●	●	●	●	●	Check for cracks or damage
Motor casing & covers		●		●		Check for cracks or damage
Motor cables		●		●		Check for insulation or connector damage
Battery casing	Inspect each time battery is out of the bike					Check for casing or connector damage
Handlebar remote & cable	●	●	●	●	●	Check for casing or connector damage
Toptube display & cable	●	●	●	●	●	Check for excessive play & screen damage
Downtube extension cable	●	●	●	●	●	Check for casing or connector damage
Speed sensor & cable	Inspect each time wheel is off the bike					Check for casing or connector damage; ensure magnets are well secured
Transfer chain - clean and lube		●		●		Check condition and lubricate with the same oil used on the drivetrain chain
Transfer chain - replace	Replace every 2500KM					Check condition to avoid internal motor wear and noise
Motor clutch bearing - replace	Replace every 2500KM					Check bearing for smooth operation
Spider clutch bearing - replace	Replace every 2500KM					Check bearing for smooth operation

## Replacement Parts and Accessories

---

Rocky Mountain replacement parts and accessories should be obtained through your local authorized Rocky Mountain Dealer. We highly recommend that you carry a spare inner tube and the required tools to undertake a tube replacement when you ride your bike.

## Transportation

---

Transporting and/or shipping your Powerplay™ Drive equipped bike may be subject to restrictions and require special handling, labelling and/or packaging. Be sure to inform yourself beforehand of all legal requirements in your country. When transporting the bike on a car, if the battery is removed, ensure all connections are covered to avoid contamination from road grit, water and salt.

## Register

---

Registering your bike is the official way for us to welcome you into the Rocky Mountain family. It's also an important step in activating your bike's warranty. If you ever have an issue, we'll be able to handle your case efficiently and get you back riding as soon as possible. It's easy and only takes a few minutes.

**Register your bike: [bikes.com/register](https://bikes.com/register)**

## Warranty information

Your Powerplay™ bike is warranted against defects in materials and manufacturing as per the following table:

Category	Term	Notes
Frame Members	5 Years	Front Triangle + Rear Triangle
Hardware	1 Year	Pivots, Axles, etc.
Electronics	3 Years	Drive, Remote, Jumbotron, Sensors, Charger
Drive Wear Items	1 Year	Pulleys, Pinions, Transfer Chain and Bearings
Battery	24 Months	<p>The Powerplay™ Drive will progressively reduce power output to maximize range, as the battery depletes.</p> <p>Range varies depending on several factors, such as assist level, ambient temperature, acceleration, wind resistance, poor maintenance, battery age, hilly and rough terrain and/or rider weight.</p> <p>If stored for 3+ months, charge battery every 3 months. Failure to do so may cause damage &amp; void warranty.</p>
Components	As per Original Manufacturer Warranty	

All warranty and after sale service must be handled by the authorized dealer who sold the complete bicycle or frame. We cover your Rocky Mountain frame against defects in material and workmanship from the original date of purchase of your new Rocky Mountain bicycle according to the frame material and the type of use.

### Frame material / Type of use

- Carbon fiber: 5 years - Limited\*
- Aluminum – front & fully suspended: 5 years - Limited\*
- Please refer to limitations stated below



### **Other warranty coverage against defects in workmanship and materials**

- Coating – paint and decals: 1 year
- Frame hardware, suspension, pivots and bushings: 1 year
- Pivots and bushings: 6 months

### **NOTE**

#### **Warranty is not valid in the following situations:**

- Bicycles previously used for commercial activity such as rental, courier, police, security, etc.
- Installation of components, parts or accessories not originally intended for or compatible with the bicycle (or frame) as sold.
- Rocky Mountain Bicycle purchased from an unauthorized dealer.
- Purchasing a Rocky Mountain Bicycle or frame off from third party internet sites (such as eBay) no matter what the listing says.

#### **Detail of what is not covered under warranty:**

- A. Normal wear and tear on tires, tubes, brakes, gear cables, brake pads, etc. is not covered. Your authorized Rocky Mountain dealer will inform you of what falls under normal maintenance.
- B. Consequential damage or any damage caused by accident, misuse or abuse.
- C. Improper assembly and/or lack of proper maintenance, sandblasting, sanding, grinding, wire brushing, filing, welding, brazing, drilled holes, anodizing, repainting, or chrome plating is not covered under your warranty and may void the warranty of the component manufacturers.
- D. You take great personal risk and shall forfeit the warranty, as outlined in the Warranty Table, when you ride in extreme terrain as depicted in mountain bike videos, i.e., riding «trials»-style courses, riding ramps, doing stunts, riding on BMX tracks, riding in the city down steps and embankments, riding in other similar terrains. It is important to note that bent components, frames, forks, handlebars, seat posts, pedals, cranks and wheel rims are signs of accidents and/or abuse.
- E. Labour for part replacement or changeover is not included.
- F. Rocky Mountain retains the right to repair or replace at its discretion any part that is deemed a valid warranty claim. Please note that Rocky Mountain cannot guarantee a colour match to the original component.

### **EXCLUSION AND LIMITATION OF DAMAGES**

THE WARRANTY OF ROCKY MOUNTAIN IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCTS AND DOES NOT GRANT ANY WARRANTY EITHER EXPRESSED OR IMPLIED, LEGAL OR CONVENTIONAL AND DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES AND ROCKY MOUNTAIN SHALL UNDER NO CIRCUMSTANCES BE LIABLE FOR DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES EVEN WHERE ROCKY MOUNTAIN HAS BEEN ADVISED OF SUCH DAMAGES, AND ROCKY MOUNTAIN'S LIABILITY SHALL BE LIMITED TO \$50.00.

## Declaration of conformity

---

The following Powerplay™ equipped bicycle platforms fulfill the requirements of the standards listed below.

Rocky Mountain Altitude Powerplay™

Rocky Mountain Instinct Powerplay™

Rocky Mountain FusionPowerplay™

For a complete list of models go to [www.bikes.com](http://www.bikes.com).

- EN 15194:2017: Electrically power assisted cycles – EPAC Bicycles
- ISO 4210-2:2015: Safety requirements and testing procedures for mountain bicycles
- IEC/EN 62133-2:2017 : Requirements and tests for the safe operation of portable sealed secondary lithium cells and batteries. Part 2: Lithium systems

### **Manufacturer**

**Rocky Mountain**

**division of Industries RAD inc.**

9095, 25th Avenue

St-Georges, QC

Canada, G6A 1A1

2022/7/10

## Patents

---

ENGLISH

Powerplay™ bikes may be covered by one or more of these patents:

- Dyrnne System  
USA: US9643683B2  
EUROPE: EP2957496B1  
CANADA: CA2894856C
- Torque Sensor  
USA: US10583893B2  
EUROPE: Pending  
CANADA: Pending