



MANUALS & DOCUMENTS

DUNE 2024 / EN



GENERAL AND SAFETY INSTRUCTIONS

This technical guide may use the following 3 icons. Each icon denotes that the following precautions should be taken:

WARNING:

Improper use or failure to follow directions may result in serious injury or death. These tasks are technically difficult and, if not performed properly, could cause damage to your bicycle or void your warranty.

CAUTION:

Improper use or failure to follow directions may result in minor injuries. These tasks are technically difficult and, if not performed properly, could cause damage to your bicycle or void your warranty.

INFORMATION

Essential information to correctly perform this task in order to avoid any damage to the bicycle or void the warranty, without any risk to people.

FURTHER CONSIDERATIONS

- Using non-original spare parts can lead to damage, malfunctions and accidents with potentially serious consequences.
- Some of the steps described in this manual require skills beyond those of the average bicycle user. If you are unable to follow any of these steps, please arrange for your bicycle to be serviced and replaced at an authorized Mondraker service centre. Installing spare parts incorrectly may result in malfunctions, accidents, injuries and void the warranty.

CLEANING AND MAINTENANCE

- Once the parts have been disassembled, components to be reused should be cleaned, greased and thread sealed (if necessary).

SYMBOL LEGEND



Medium grade threadlocker. Loctite 243 or similar.



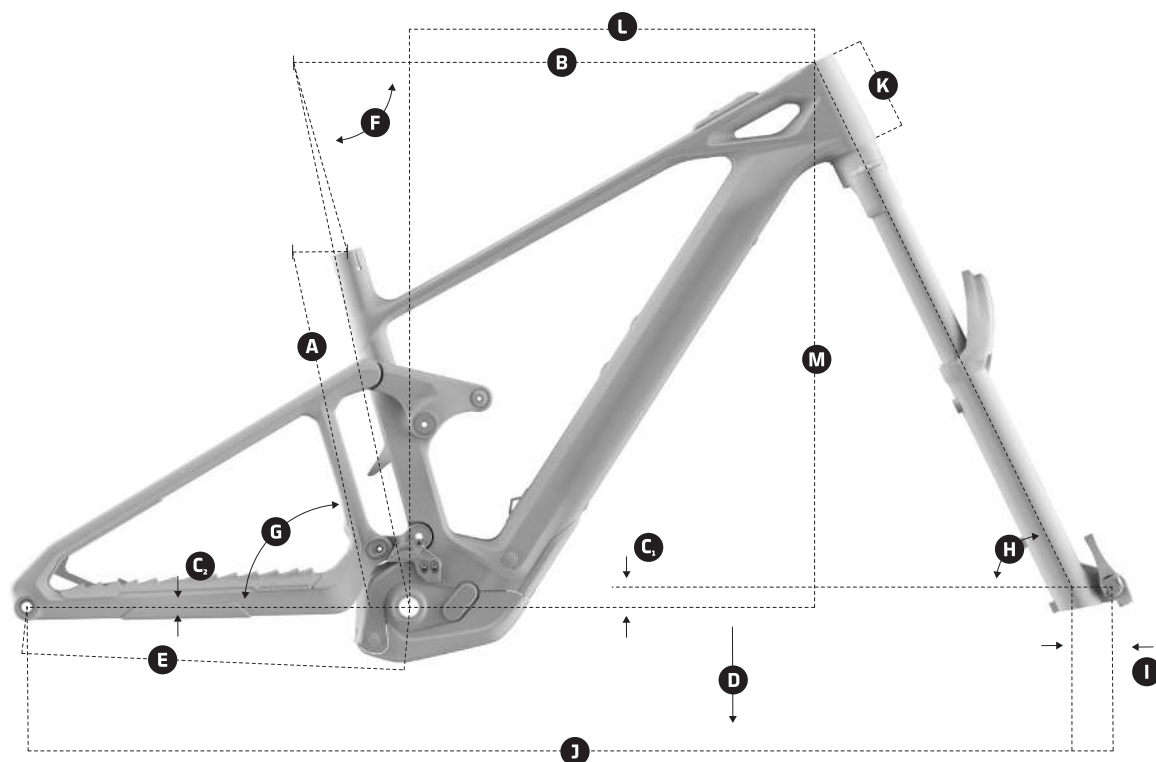
Quality synthetic assembly grease.



Special carbon friction grease.



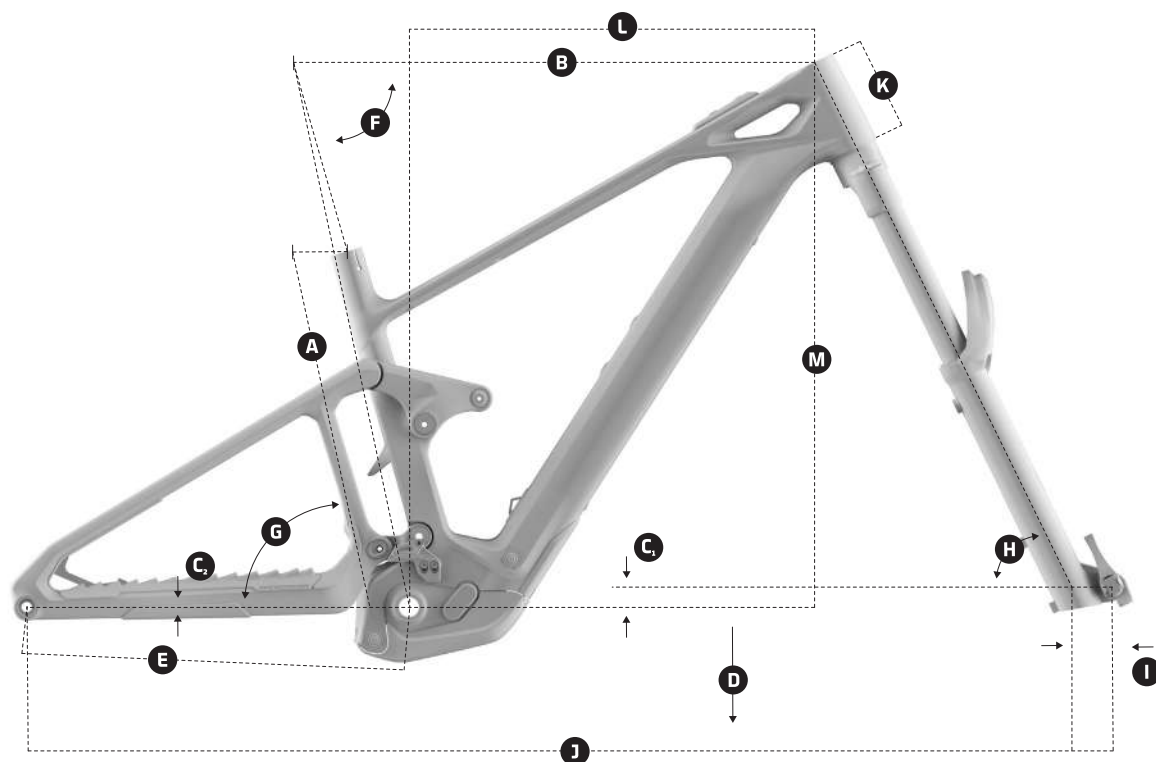
1. DIMENSIONS



Dune Carbon XR

FRAME SIZE	S	M	L	XL
A Seat tube length	380mm	420mm	450mm	490mm
B Top tube length	580mm	600mm	625mm	650mm
C Bottom bracket drop	-18/+3mm	-18/+3mm	-18/+3mm	-18/+3mm
D Bottom bracket height	353mm	353mm	353mm	353mm
E Chainstay length	445mm	445mm	445mm	445mm
F Seat tube angle	73,6°	73,6°	73,6°	73,6°
G Effective seat tube angle	77.1°	77.1°	77.1°	77.1°
H Headtube angle	63.6°	63.6°	63.6°	63.6°
I Fork Offset	44mm	44mm	44mm	44mm
J Wheelbase	1236mm	1260mm	1289mm	1313mm
K Headtube length	100mm	110mm	130mm	140mm
L Reach	440mm	460mm	480mm	500mm
M Stack	625mm	634mm	652mm	662mm

1. DIMENSIONS



Dune Carbon RR / R

FRAME SIZE	S	M	L	XL
A Seat tube length	380mm	420mm	450mm	490mm
B Toptube length	580mm	600mm	625mm	650mm
C Bottom bracket drop	-21/0mm	-21/0mm	-21/0mm	-21/0mm
D Bottom bracket height	350mm	350mm	350mm	350mm
E Chainstay length	445mm	445mm	445mm	445mm
F Seat tube angle	74,0°	74,0°	74,0°	74,0°
G Effective seat tube angle	77.5°	77.5°	77.5°	77.5°
H Headtube angle	64.0°	64.0°	64.0°	64.0°
I Fork Offset	44mm	44mm	44mm	44mm
J Wheelbase	1232mm	1256mm	1285mm	1309mm
K Headtube length	100mm	110mm	130mm	140mm
L Reach	445mm	465mm	485mm	505mm
M Stack	621mm	630mm	648mm	658mm



2. FRAME TECHNICAL SPECIFICATIONS

FRAME SIZES	S / M / L / XL
FRONT WHEEL SIZE	29"
FRONT AXLE	110mm x 15mm
REAR WHEEL SIZE	29"
REAR AXLE	148mm x 12mm (BOOST)
REAR SHAFT	L180mm M12 PASO 1.0, 19mm
NUMBER OF BOTTLE CAGES	1 FIDLOCK POCKET + 1 BOTTLE CAGE / RANGE EXTENDER
DIRVE UNIT	BOSCH PERFORMANCE LINE SX
BOTTOM BRACKET	BOSCH
BATTERY	APROX. 400 Wh
RANGE EXTENDER	BOSCH POWERMORE 250
SHOCK TRAVEL	165mm
REAR SHOCK	205 x 65mm TRUNNION, 30 x 8mm
SUSPENSSION TRAVEL	180mm, 170mm
SEATPOST DIAMETER	31.6mm (37mm LOCK)
CHAIN LINE	55mm
HEADSET	IS52 1 - 1/2", LOWER ZS56
MAXIMUM CHAINRING SIZE	34T
REAR BRAKE	POST MOUNT, DIRECT 200mm
MAXIMUM COMPATIBLE WHEEL SIZE	66mm, 27.5 x 2.6"

3. SEATPOST INSERTION DEPTH



FRAME SIZE	MIN. (mm)	MAX. (mm)
XL	100	280
L	100	245
M	100	215
S	100	175

4. DRIVE COMPONENTS

4.1. CHAIN GUIDE



4.2. CHAINRING



5. BATTERY REMOVAL

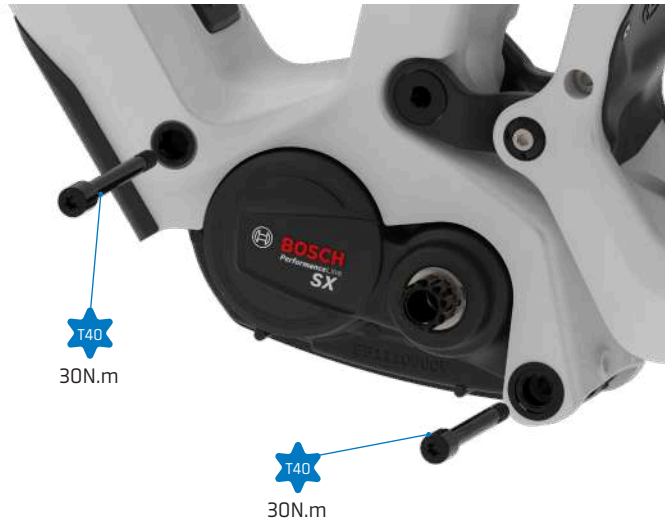
5.1. MOTOR COVER





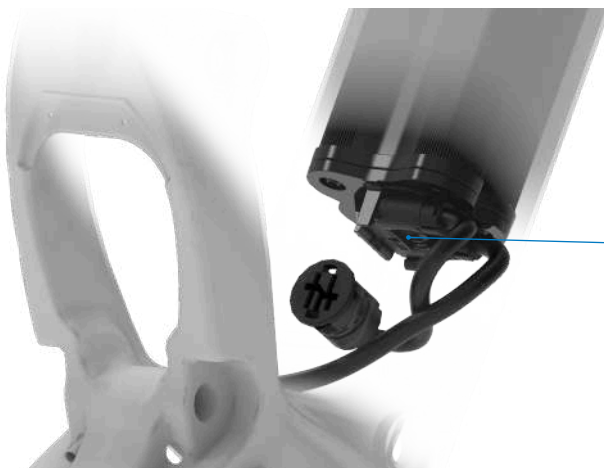
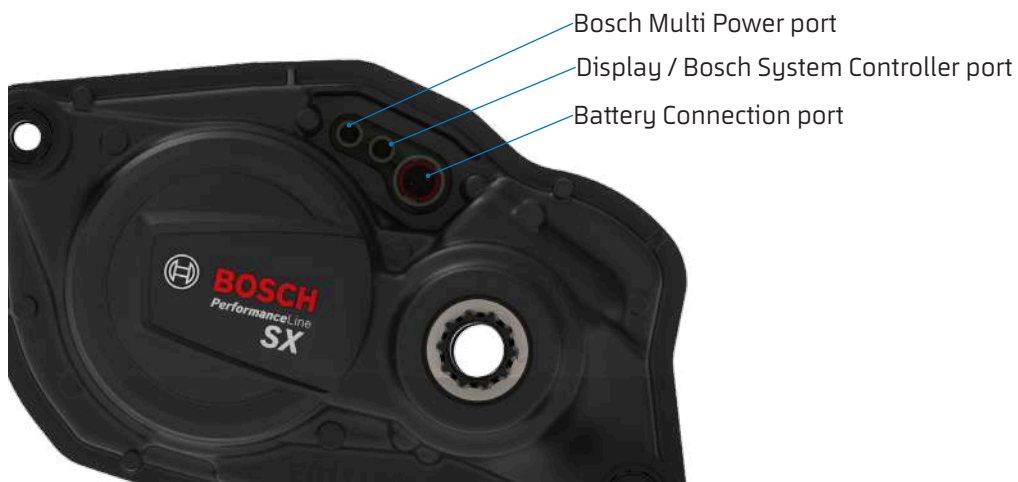
5. BATTERY REMOVAL

5.2. MOTOR REMOVAL



Do not use Loctitte 243

5.3. MOTOR CONNECTIONS

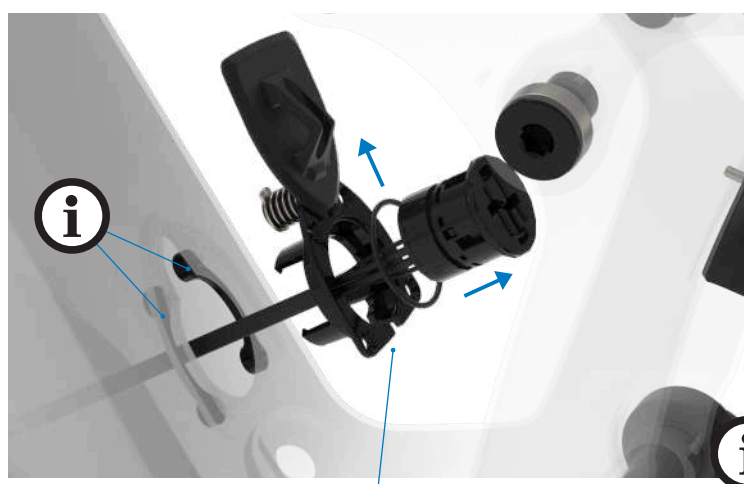


Charging port

Motor port

5. BATTERY REMOVAL

5. 4. CHARGING PORT REMOVAL



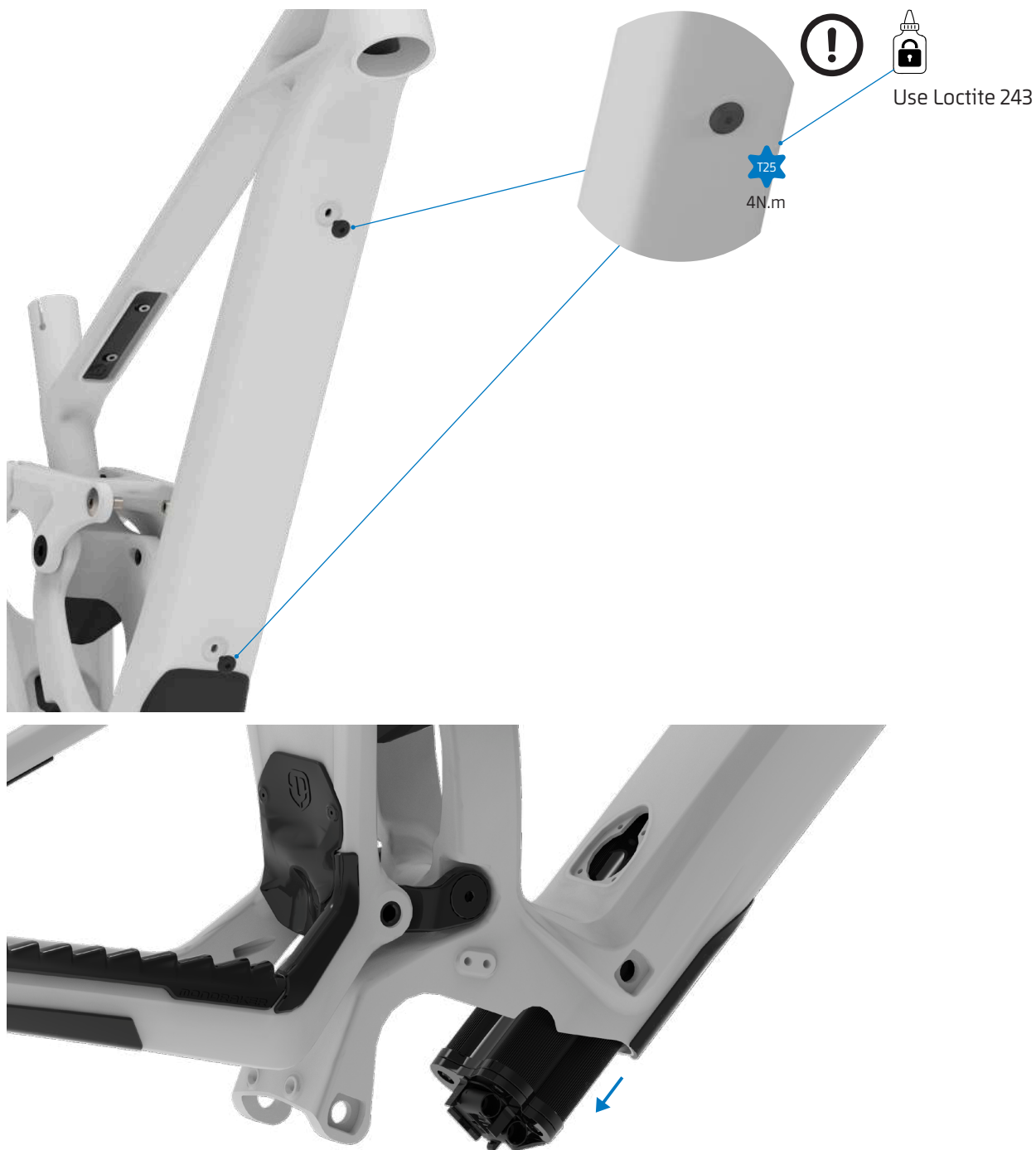
Release the cover sideways



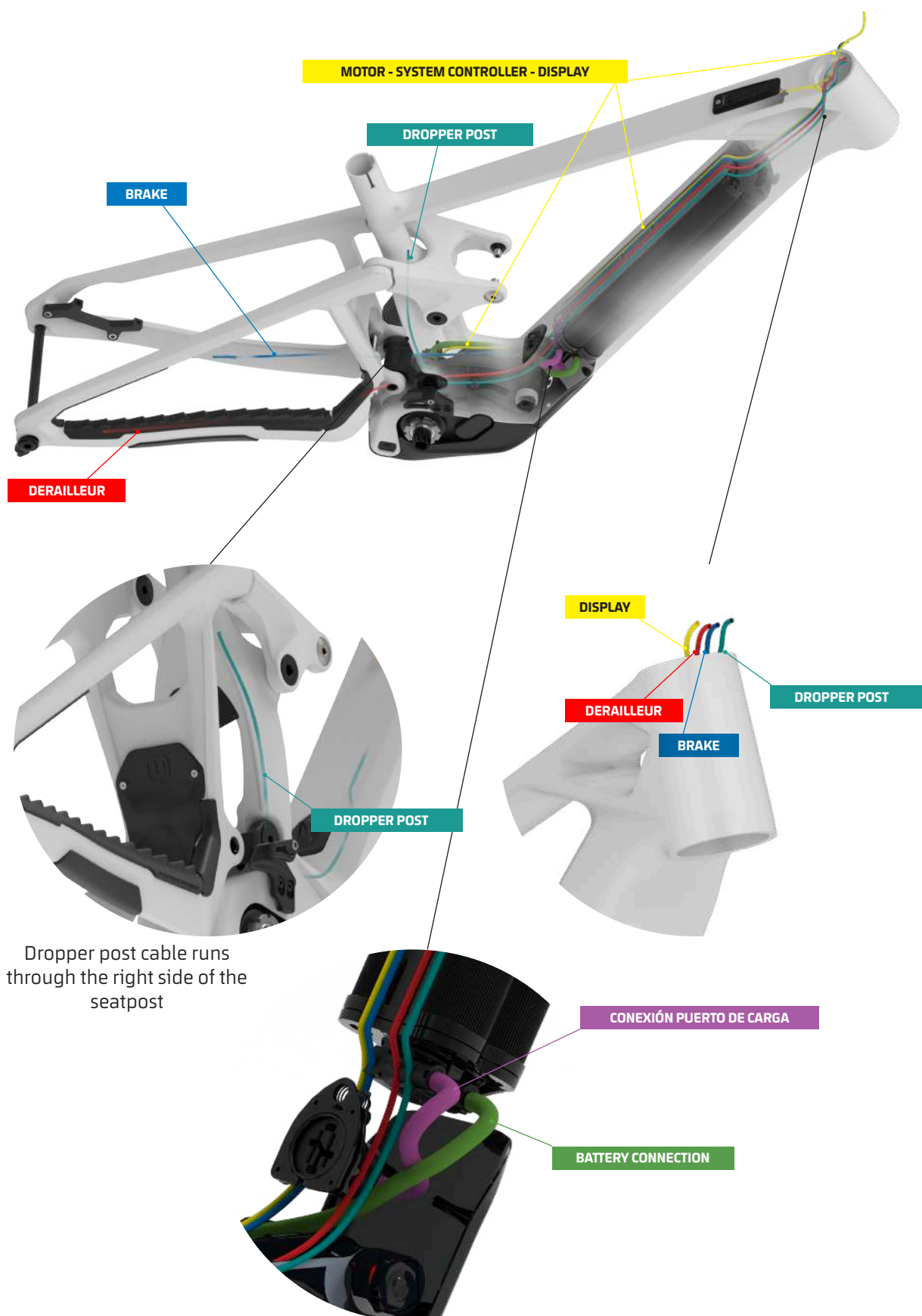
The two metal bases slide out from the inside of the diagonal tube

5. BATTERY REMOVAL

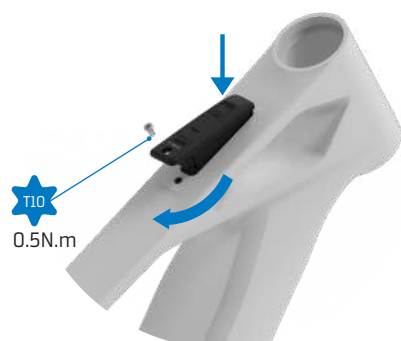
5. 5. LOOSEN BATTERY SCREWS



6. INTERNAL CABLE ROUTING



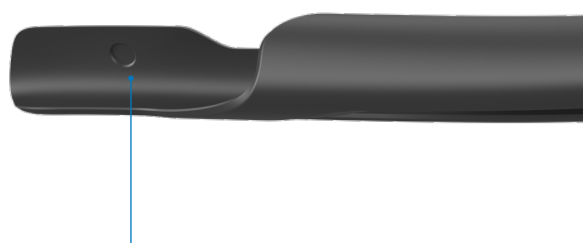
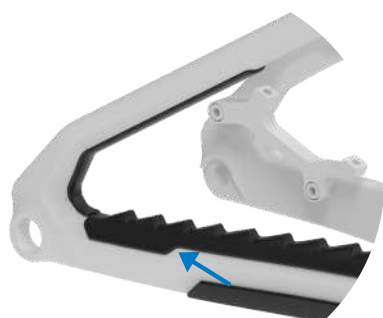
7. BOSCH SYSTEM CONTROLLER



8. BOSCH MINI REMOTE



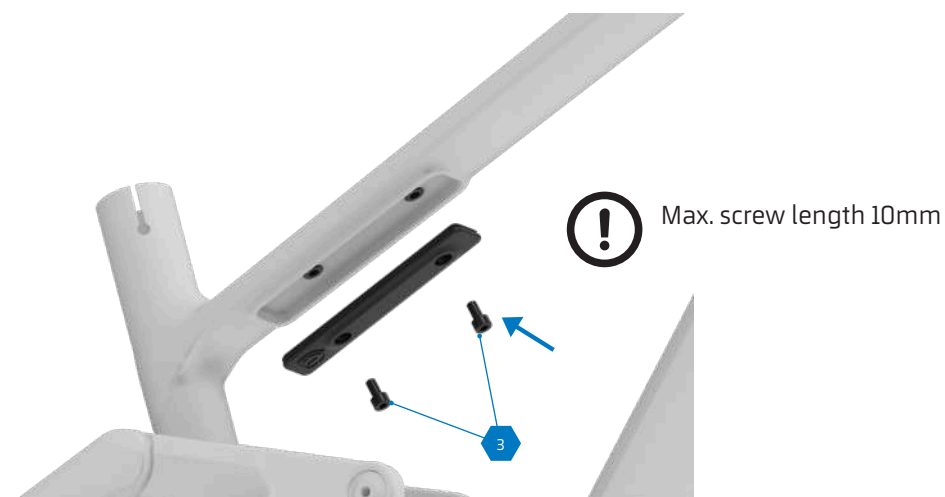
9. CHAINSTAY PROTECTOR



The chainstay protectors come without a hole for mechanical or cable-operated derailleurs. There is a mark on the rear for piercing the cable outlet.

For best results, we recommend using punch pliers.

10. BOTTLE CAGE BASE / FIDLOCK





11. RANGE EXTENDER BOSCH POWER MORE KIT

EU28, CH, NO, AUS, NZ

POWER MORE 250 KIT (BBP3620 EU28,CH,NO,AUS,NZ)
incl. battery holder, bottle holder, screws, IBD packaging

EB12.100.05G

US, CANADA

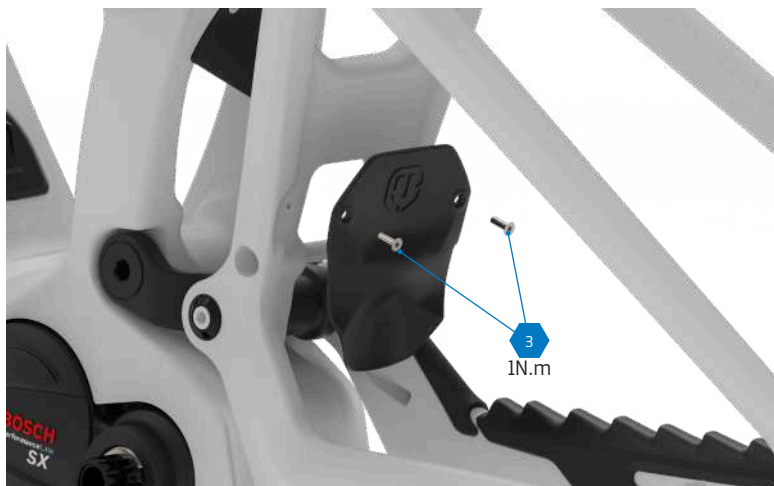
POWER MORE 250 KIT (BBP3625 US, CAN) incl.
battery holder, bottle holder, screws, IBD packaging

EB12.100.05H



CABLE POWERMORE 100MM (BCH3923_100) **EB12.120.035**

12. MUDGUARDS



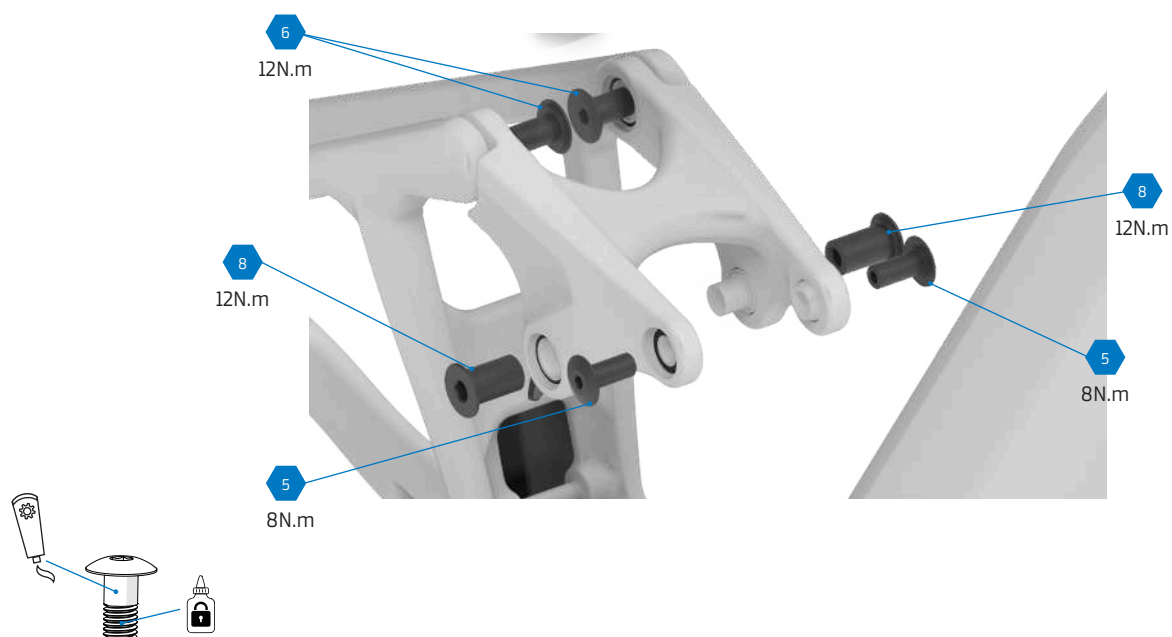
13. SEATPOST LOCK



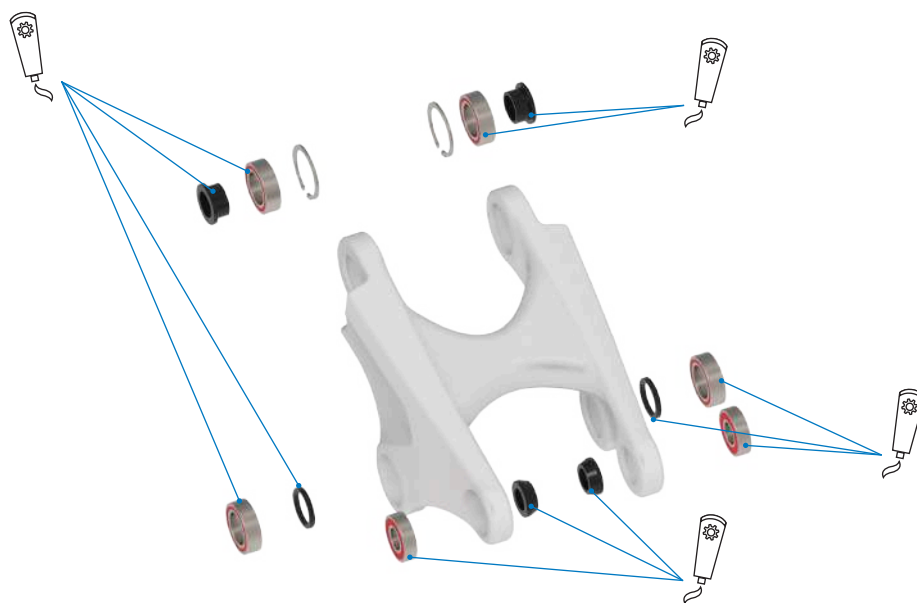
We recommend using
carbon friction paste on the
seatpost



14. UPPER LINK INSTALLATION GUIDE

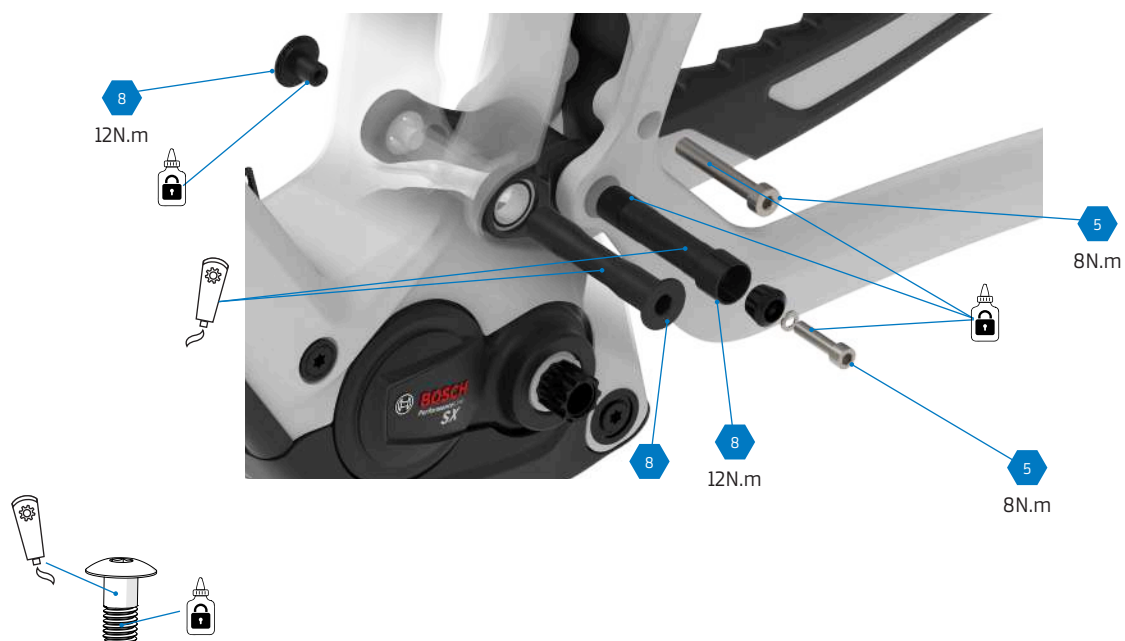


Apply grease to the shaft for the main screws and Loctite 243 or similar to the threads.

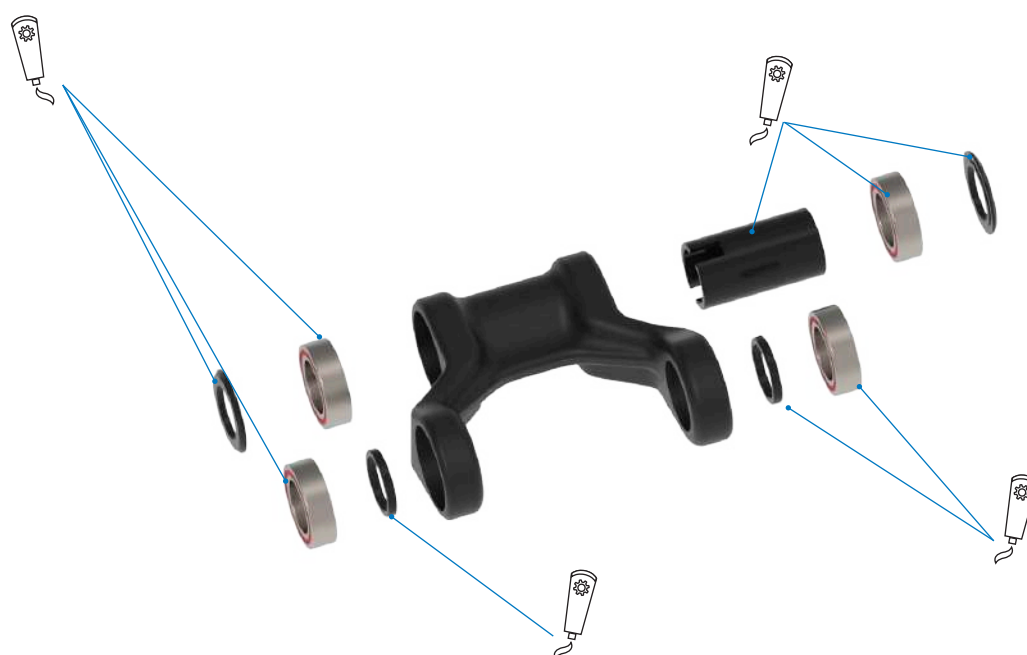


Apply grease.

15. LOWER LINK INSTALLATION GUIDE



! Apply grease to the shaft for the main screws and Loctite 243 or similar to the threads.



! Apply grease.



16. SMARTPHONE CONNECTION



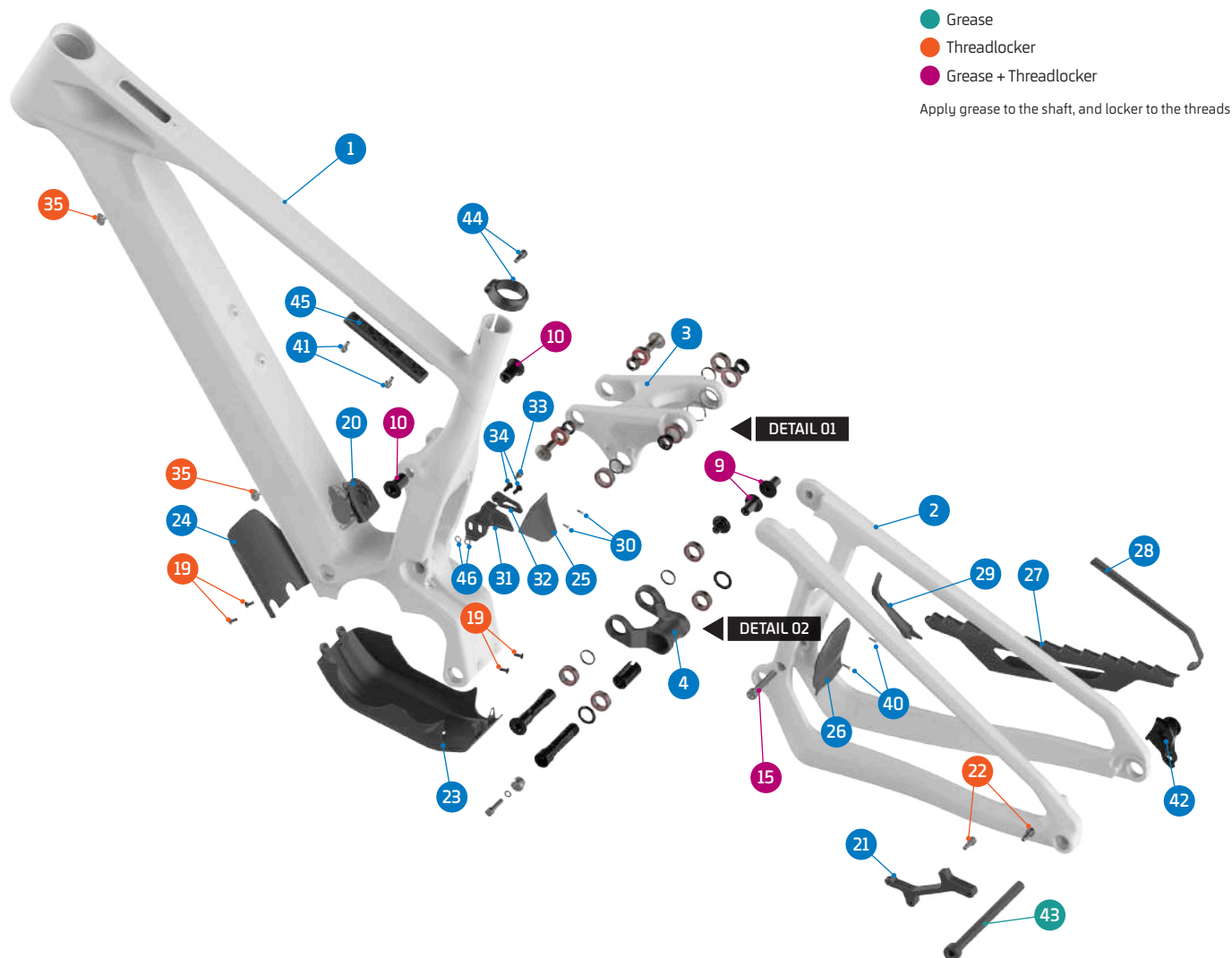
eBike Flow app



Switch on the bike.
After switching on, press and hold the Power button for 5 seconds until a blue LED starts flashing.
Then, open the eBike Flow app and follow the pairing instructions on your phone.



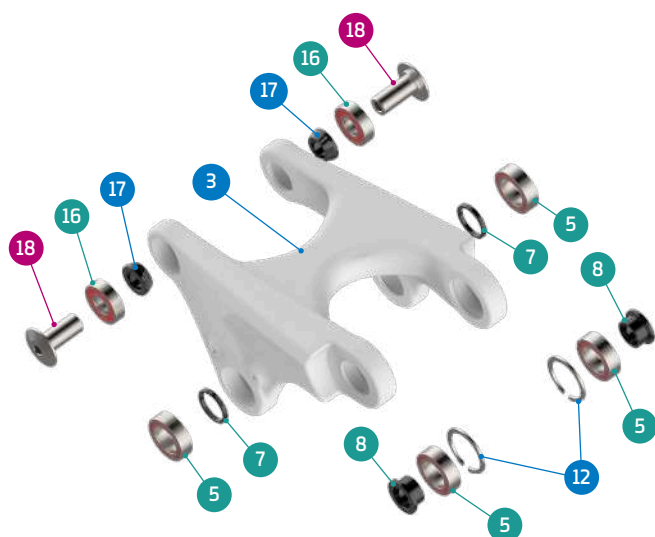
17. SPARE PARTS



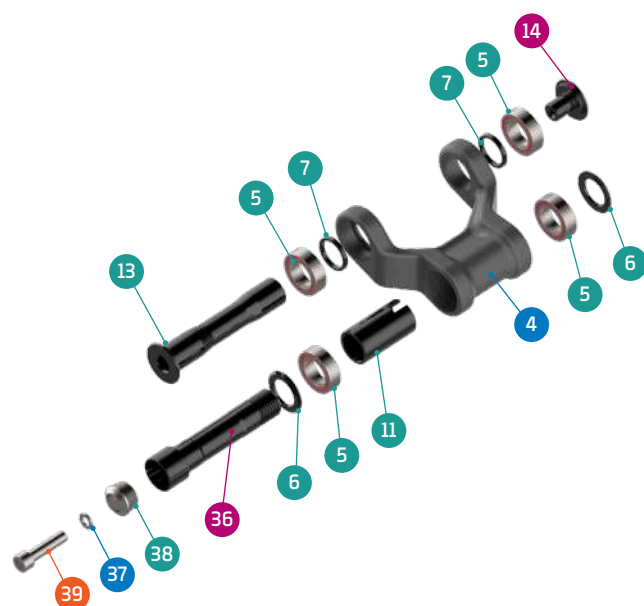
ITEM No.	DESCRIPTION	QTY.	PART NUMBER	TORQUE
1	FRONT TRIANGLE	1		
2	REAR TRIANGLE	1		
3	UPPER LINK	1		
4	LOWER LINK	1	099.24060	
5	BEARING, 24X15X7 3802-2RS	8	SET 1	
6	SPACER, 15x27x2	2	SET 4	
7	SPACER, 15x19x2.5t	4	SET 3/4	
8	UPPER LINK-RT SPACER	2	SET 3	
9	PIVOT AXLE, M12	2	SET 3	12 Nm
10	PIVOT AXLE, M15	2	SET 3	12 Nm
11	INNER LOWER LINK SPACER	1	SET 4	
12	C-RING	2	SET 3	
13	PIVOT AXLE, M10	1	SET 4	
14	AXLE NUT, M10	1	SET 4	12 Nm
15	SHOCK BOLT	1	SET 2 / 099.24022	8 Nm
16	BEARING, 10x22x6 6900V-2RS	2	SET 1	
17	SPACER, 10x17x6	2	SET 2	
18	SHOCK BOLT	2	SET 2	8 Nm
19	SCREW BOLT, M4x10L-M-SB	4		2 Nm
20	CHARGE PLUG SET	1	099.24064	
21	DISC ADAPTOR	1	SET 6	
22	SCREW BOLT, M6x15L-P-S	2	SET 6	8 Nm
23	MOTOR COVER	1	099.24065	

ITEM No.	DESCRIPTION	QTY.	PART NUMBER	TORQUE
24	DT PROTECTOR	1	099.24066	
25	FT SHOCK FENDER	1	099.24067	
26	RT SHOCK FENDER	1	099.24068	
27	CS PROTECTOR	1	099.24069	
28	SS PROTECTOR	1	099.24070	
29	YOKE PROTECTOR	1	099.24071	
30	SCREW BOLT, M3x8L-M-SB	2	099.20068	1,5 Nm
31	CHAIN GUIDE, BASE	1	SET 5	
32	CHAIN GUIDE, OUTER	1	SET 5	
33	SCREW BOLT, M5x8L-P-SB	1	SET 5	
34	SCREW BOLT, M5x12L-SP	2	SET 5	
35	BATTERY SCREW BOLT, M5x10L-CS	2	SET 7	4 Nm
36	MAIN AXLE	1	SET 4	12 Nm
37	SPACER	1	SET 4	
38	TAPER NUT	1	SET 4	
39	SCREW BOLT, M6x25L-P-S	1	SET 4	8 Nm
40	SCREW BOLT, M3x10L-M-SB	2		1,5 Nm
41	SCREW BOLT, M5x10L-P-SB	2		3 Nm
42	HANGER	1	SRAM UDH	
43	REAR AXLE	1	112.90027	
44	SEAT CLAMP	1	020.24900	5-6 Nm
45	FIDLOCK COVER	1	099.22040	
46	WASHER, 5x9x1t	2		

DETAIL 01



DETAIL 02



SET 1

ZERO BEARING KIT 26



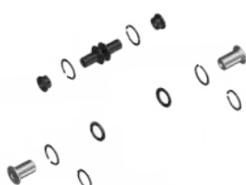
SET 2

SHOCK HARDWARE KIT 18



SET 3

UPPER LINK KIT 30



SET 4

LOWER LINK KIT 36



SET 5

CHAIN GUIDE PLATE + BOLTS



PART NUMBER	DESCRIPTION	COMPONENTS
099.22101	SET 1: ZERO BEARING KIT 26	BEARING 3802-2RS, 24x15x7 (x8) / BEARING 6900V-2RS, 10x22x6 (x2)
099.24200	SET 2: SHOCK HARDWARE KIT 18	SPACER, 10x17x6 (x2) / SHOCK BOLT (x2) / SHOCK BOLT (x1)
099.22300	SET 3: UPPER LINK KIT 30	SPACER, 15x19x2.5T (x2) / UPPER LINK-RT SPACER (x2) / PIVOT AXLE, M12 (x2) / PIVOT AXLE, M15 (x2) / C-RING (x6)
099.24404	SET 4: LOWER LINK KIT 36	SPACER, 15x27x2 (x2) / SPACER, 15x19x2.5t (x2) / INNER LOWER LINK SPACER (x1) / PIVOT AXLE, M10 (x1) / AXLE NUT, M10 (x1) / MAIL AXLE (x1) / SPACER (x1) / TAPER NUT (x1) / SCREW BOLT (x1)
099.24018	SET 5: CHAIN GUIDE PLATE + BOLTS	CHAIN GUIDE BASE (x1) / CHAIN GUIDE OUTER PLATE (x1) / SCREW BOLT, M5X12L (x2) / WASHER (x4) / SCREW BOLT, M5x8-P (x1)
099.22031	SET 6: DISC ADAPTOR KIT	DISC ADAPTOR (x1) / SCREW BOLT (x2)
099.24072	SET 7: BATTERY BOLTS SET	BATTERY SCREW BOLT (x2)



18. FAQs

ARE THERE ANY SPECIAL DIRECTIONS OR CONSIDERATIONS FOR THE BATTERY?

Nothing special. You can control the remaining battery life at the Kiox 500 display on the top left of the screen or through the 5 led bars at the System Controller on the top tube. Each led equals to 20% range and when any led turns white means 10% consumption has been reached on any of the remaining bars. When any bar turns off means 20% battery life has been used. When there is 30% battery life remaining the 2 blue leds still on will turn orange. When there's only 10% battery life the only orange led on will turn red. Even with less than 30% or 10% or less battery remaining motor output will stay constant and not reduced to a lower wattage as it happens on other motor systems.

HOW LONG CAN I RIDE WITH THE DUNE?

This is always a tricky question and also depends on rider fitness, rider weight and riding conditions. An average rider with 80 kgs riding weight can climb around 1.500m/5.000ft elevation gain combining different support modes and ride as much as 3 hours in ECO-TOUR+ modes. Again, depending on riding conditions and rider physical level. The 250Wh PowerMore range extender would increase +60% riding time with only 1.5 kg extra weight.

HOW LONG DOES IT TAKE TO FULLY CHARGE THE BATTERY?

The CompactTube 400Wh battery charges up to 50% in 90 minutes, while a full charge takes around 3,5 hours. If you have a PowerMore range extender, it needs to be charged individually separately and takes around 3,2 hours to be fully charged.

HOW MUCH DOES THE DUNE FRAME WEIGHT?

Dune frame weighs 2,650 grams in size Medium. Float X / Öhlins TTX Air rear shock weighs 520 grams and Öhlins TTX22 m.2 coil weighs 805 grams with 30x8mm hardware installed.

IS DUNE COMPATIBLE WITH 29" REAR WHEEL?

Mondraker do not approve the use of a wheel diameter different from the stock 27.5" one. A larger 29" rear wheel technically fits but the bike has not been designed to ride a 29" setup and the motor would not offer the optimum performance as wheel diameter is altered. The larger wheel circumference will affect the accuracy of the speed reading and cannot be adjusted. Geometry will be heavily compromised and Mondraker does not cover the warranty riding anything different from the stock 27,5" rear wheel.

IS IT POSSIBLE TO CUSTOMIZE THE ASSISTANCE MODES ON THE DUNE?

You can customize the Dune's Bosch Performance SX motor assistance modes the same way as other motor systems in Bosch's motor lineup with the Flow App. Log in the Flow App, turn on the bike and connect to your Dune to customize the motor output Support, initial pedaling assistance through Dynamic, maximum kms/h / mph with the 25kms/h / 20mph assistance and 55 max Nm torque individually on the 4 support modes ECO, TOUR+, EMTB and TURBO.

IS IT POSSIBLE TO DISASSEMBLE THE INTERNAL BATTERY?

No. The internal battery is integrated and non removable. In case disassembly is required, Bosch's Performance SX motor must be removed first.

IS IT POSSIBLE TO REMOVE THE DISPLAY ON THE HANDLEBAR?

Yes. It is possible to remove the Kiox 500 handlebar display and ride without it. Through the System Controller on top of the frame you can control how much battery is remaining and switch support modes through the Mini-Remote switch on the left side of the handlebar.

I'D LIKE TO KNOW MORE DETAILS ABOUT BOSCH'S PERFORMANCE SX MOTOR, WHERE CAN I FIND MORE INFORMATION?

Follow this link from BOSCH: <https://www.bosch-ebike.com/en/products/performance-line-sx>



18. FAQs

RIDING WITH THE POWERMORE RANGE EXTENDER, WHICH BATTERY IS DISCHARGED FIRST, THE INTERNAL ONE OR THE EXTENDER?

To maintain the proper power output from the motor, both batteries discharge at the same time. This is key for proper battery life and constant motor assistance. If you install a Powermore when you are running out of the internal battery, the Powermore will be used as the main battery supply until both charges (internal and extender) are equal and then, both will be equally discharged until fully drained.

WHICH INFORMATION DOES THE DUNE'S DISPLAY OFFER?

You can find all display and remote manual information following this link from BOSCH: <https://www.bosch-ebike.com/en/products/kiox>

WHICH IS THE MAXIMUM ASSISTANCE I CAN GET FROM THE DUNE BOSCH PERFORMANCE SX MOTOR?

Dune models feature the same Stealth Air Carbon frame and the same Bosch's Performance SX latest generation motor. The weight of the motor is around 2.050 grams and delivers 55Nm of torque with 600W peak power at high pedaling cadence.

WHICH IS THE MAXIMUM FORK TRAVEL ON DUNE?

Dune is compatible with forks up to 180 mm travel or 600mm axle to crown.

WHICH IS THE MAXIMUM TIRE WIDTH THAT CAN FIT ON DUNE?

Dune is compatible with tires up to 66mm wide which translate into 27,5"x 2.6" tires. It is recommended to measure the tire before installing as the real width might be different depending on the manufacturer.

WHICH SHOCKS ARE COMPATIBLE WITH DUNE?

In addition to the FOX Float X, Öhlins TTX Air and TTX22 m.2 coil we use for the different models, Dune is also compatible with Fox Float series, DPX2, Float X2, DHX, DHX2 coil, RockShox Deluxe, SuperDeluxe Air or Coil, Vivid Air or Coil. Dune feature metric 205x65 mm sized shocks with Trunnion upper mount and bottom 30x8 mm standard hardware.

WHICH TYPE OF MAINTENANCE OR SAFETY CHECKS DO BOSCH PERFORMANCE SX MOTOR REQUIRE?

Absolutely none. Nor is it required to lubricate any parts in the drive unit nor disassemble it... all you have to do is taking care for it as a traditional mountain bike. It is important to mention, however, as a precaution applicable to any mountain bike: electronic parts and, specifically, the bottom bracket area of the drive unit should never be cleaned with any high-pressure cleaning machine. Therefore, it is not recommended to use high-pressure water jet to clean the cranks axle directly as the electronic parts of the drive unit can be seriously damaged.

WOULD IT BE POSSIBLE TO ADD A BATTERY EXTENDER TO INCREASE THE RANGE AND RIDE LONGER?

Yes, there is a BOSCH POWERMORE 250Wh range extender "water-bottle" mount style. It weighs 1.450 grams or 1.525 grams including Bosch's side-specific mounting bracket and connecting cable. You will enjoy greater +60% longer range compared to the internal 400Wh CompactTube battery.



All information and pictures on this document is provided for information purposes only and does not constitute a legal contract between Mondraker and any person or entity. Specifications, geometries or any other technical information published is subject to change without prior notice.

© ® All trademarks and models are property of Blue Factory Team, S.L.U. and are protected by current laws and applicable international agreements.