

# TECHNICAL GUIDE



## SCHEMATIC - SMALL PARTS



2022  
**KENEVO<sub>SL</sub>**



INDEX

SCHEMATICS - SMALL PARTS.....2

GEOMETRY .....3

MOTOR MOUNTING HARDWARE .....4

MOTOR ASSEMBLY BOLTS .....5

MOTOR ASSEMBLY BOLTS .....5

SPIDER AND CHAINRING .....6

CHAIN GUIDE .....7

ROCK GUARD .....8

BATTERY REMOVAL .....9

BATTERY REMOVAL .....10

MAIN PIVOT ASSEMBLY .....11

SPEED SENSOR CABLE .....12

SPEED SENSOR ASSEMBLY .....13

HEADSET .....14

HEADSET CUPS .....15

STEM .....16

ALLOY TRAIL STEM .....17

MASTERMIND TCU .....18

MASTERMIND TCU - ERROR CODES & FACTORY RESET.....19

HEAD TUBE ICR GUIDES .....20

SRAM UNIVERSAL DERAILLEUR HANGER.....21

SEATPOST CLAMP .....22

CHAINSTAY GUARD AND REAR FENDER .....23

MOTOR CONNECTORS .....24

BATTERY EXPANDER .....25

BATTERY ROCK GUARD & BATTERY CHARGE PORT DOOR .....26

BATTERY INSERTION.....27

SRAM UNIVERSAL DERAILLEUR HANGER.....28

SEATPOST CLAMP .....29

ADDITIONAL SERVICE PARTS & GUIDE TUBES.....30

TORQUE SPECIFICATIONS & GUIDE TUBE LENGTHS .....31

SYMBOLS LEGEND



PART NUMBER



ASSEMBLY PROCESS ORDER



INSERT PATH



ASSEMBLY DIRECTION



GREASE



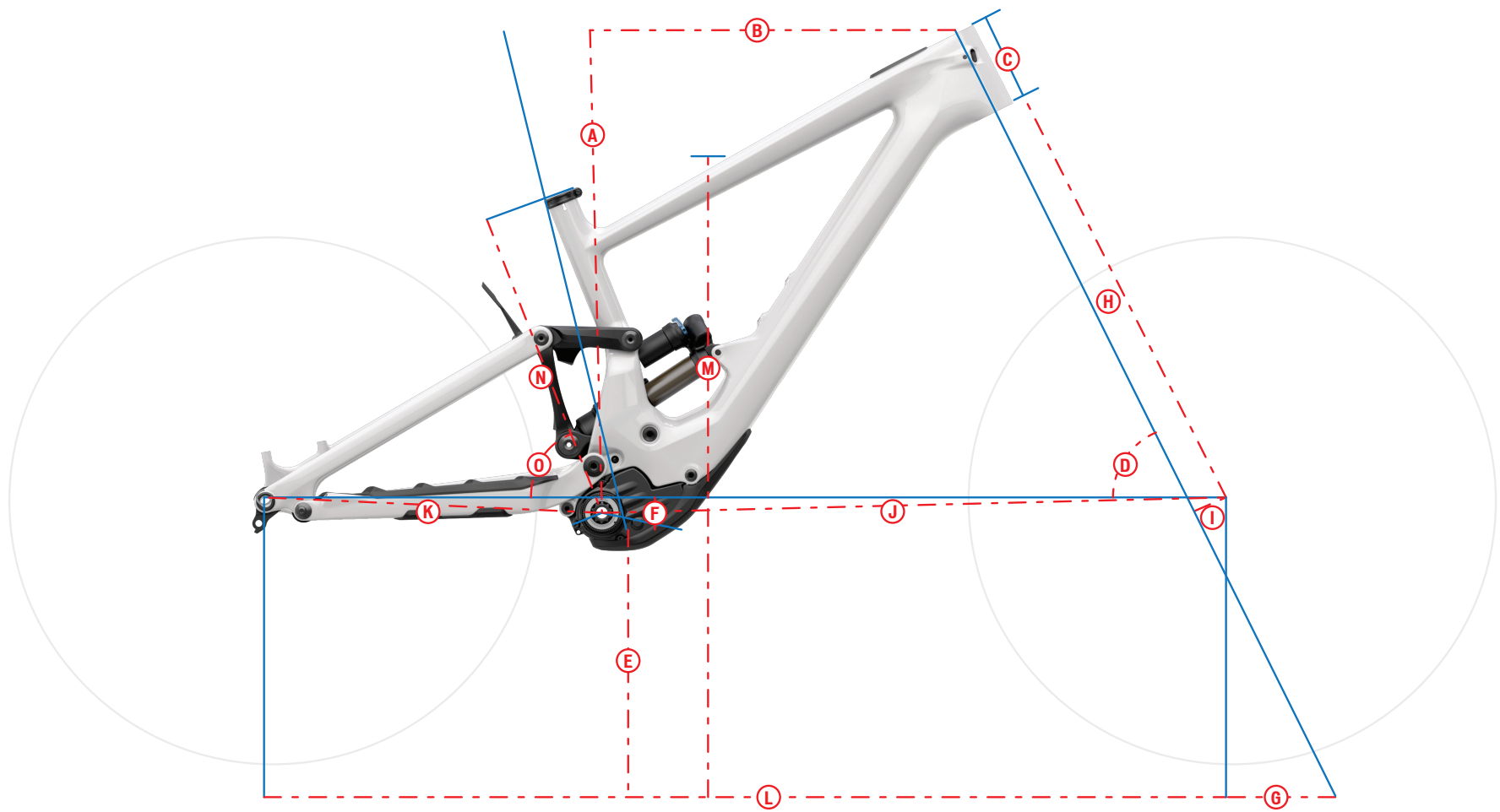
BLUE THREAD LOCK



TORQUE REQUIRED



VIDEO GUIDE AVAILABLE



	FRAME SIZE	S2	S3	S4	S5
A	STACK (mm)	618	626	635	644
B	REACH (mm)	435	460	485	510
C	HEAD TUBE LENGTH (mm)	105	115	125	135
D	HEAD TUBE ANGLE (°)	63.5 °			
E	BB HEIGHT (mm)	350			
F	BB DROP (mm)	25			
G	TRAIL (mm)	136			
H	FORK LENGTH (FULL) (mm)	579			

	FRAME SIZE	S2	S3	S4	S5
I	FORK RAKE/OFFSET (mm)	46	46	46	46
J	FRONT CENTER (mm)	782	812	841	871
K	CHAINSTAY LENGTH (SHORT)	447			
L	WHEELBASE (mm)	1228	1258	1287	1316
M	BIKE STANDOVER HEIGHT (mm)	404	405	417	427
N	SEAT TUBE LENGTH (mm)	400	420	440	465
O	SEAT TUBE ANGLE (°)	76.5			
	CRANK LENGTH (mm)	165	165	170	200

	FRAME SIZE	S2	S3	S4	S5
	HANDLEBAR WIDTH (mm)	800			
	STEM LENGTH (mm)	40	50		
	SADDLE WIDTH (mm)	155	143		
	SEAT POST MAX INSERTION (mm)	150	150	170	200
	SEAT POST MIN INSERTION (mm)	80			
	REAR RIM WIDTH (mm)				
	FORK SIZE (mm)	170			



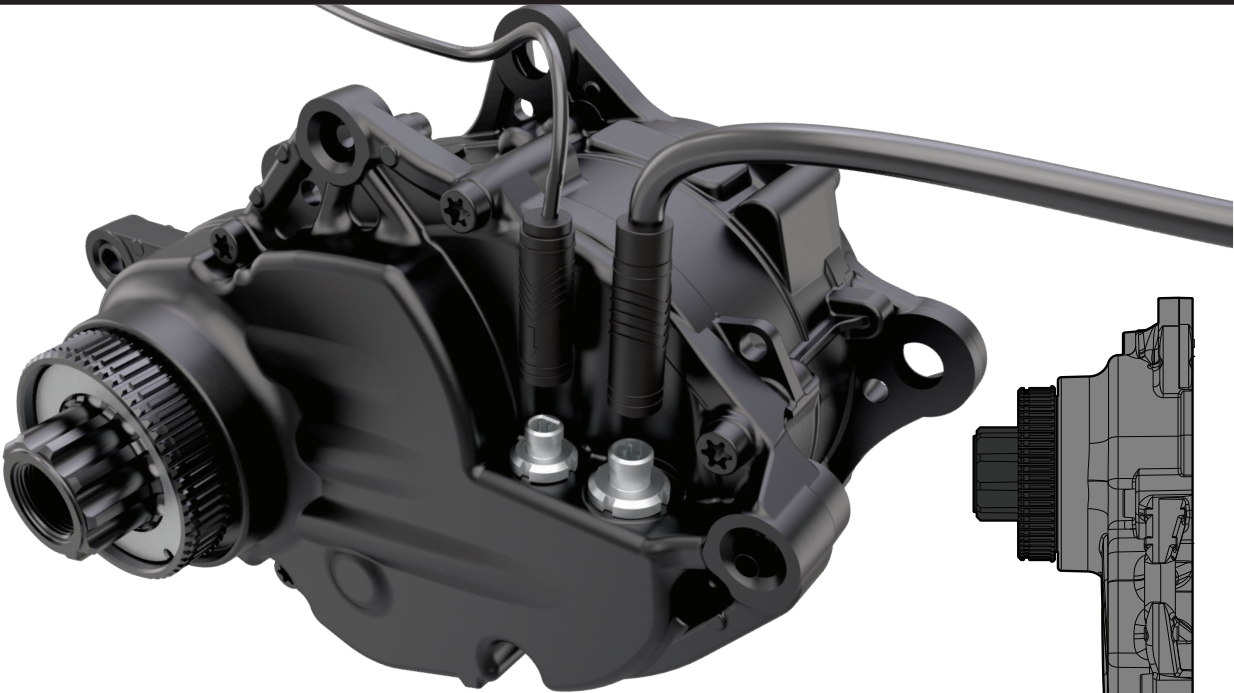
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A

B

C

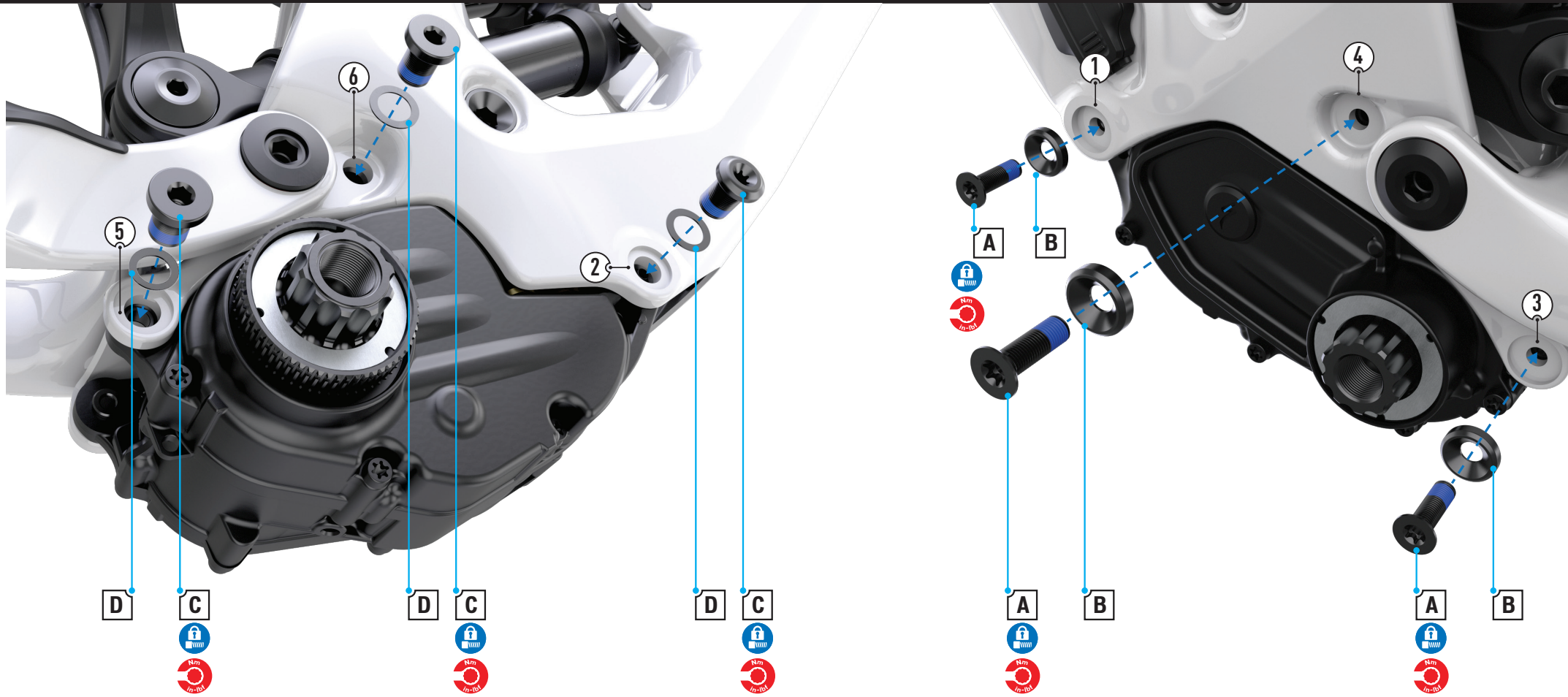


SPEED SENSOR PLUG

POWER SUPPLY PLUG

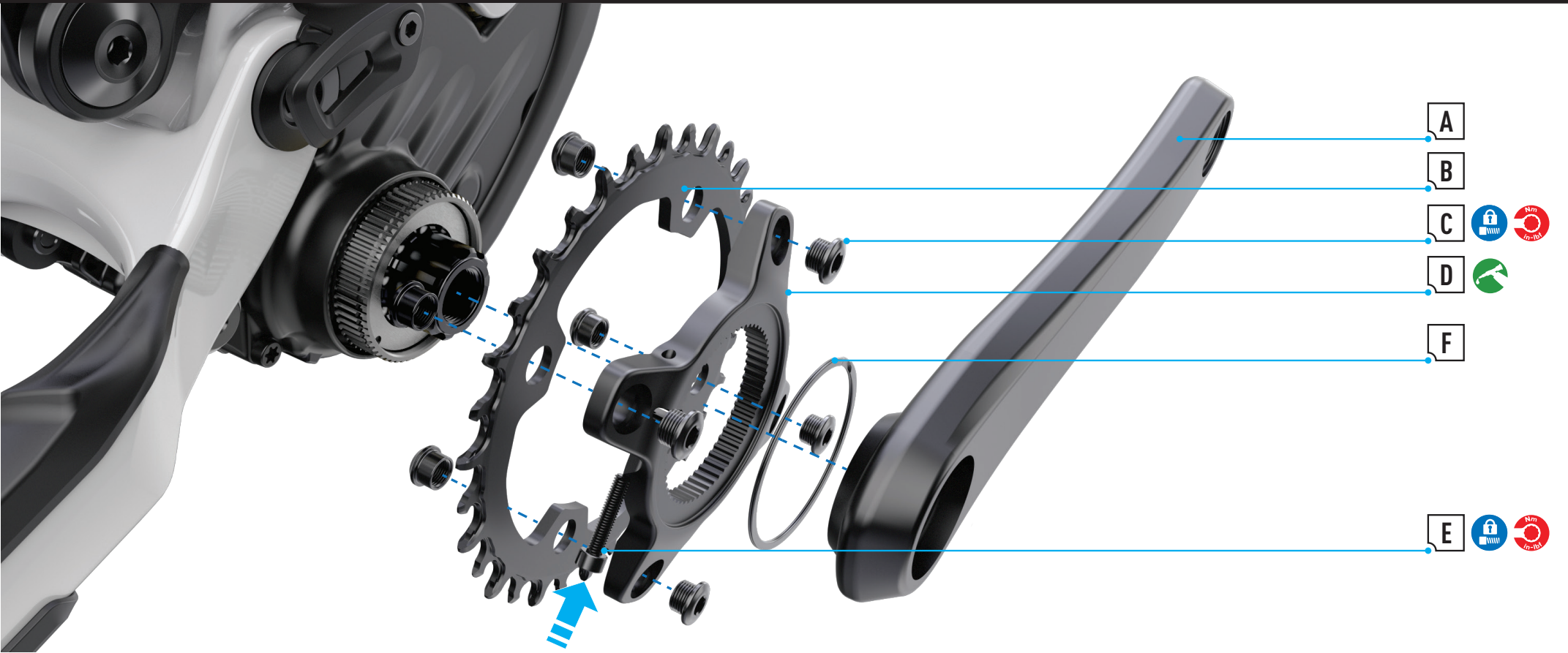
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Rock guard base	<a href="#">S214200031</a>	1		N/A	N/A	N/A	
B	Rock guard latch		1		N/A	N/A	N/A	
C	Rock guard pivot bolt		1	M6 x 9 mm x 1 mm p	4 mm hex	2.4	21.3	



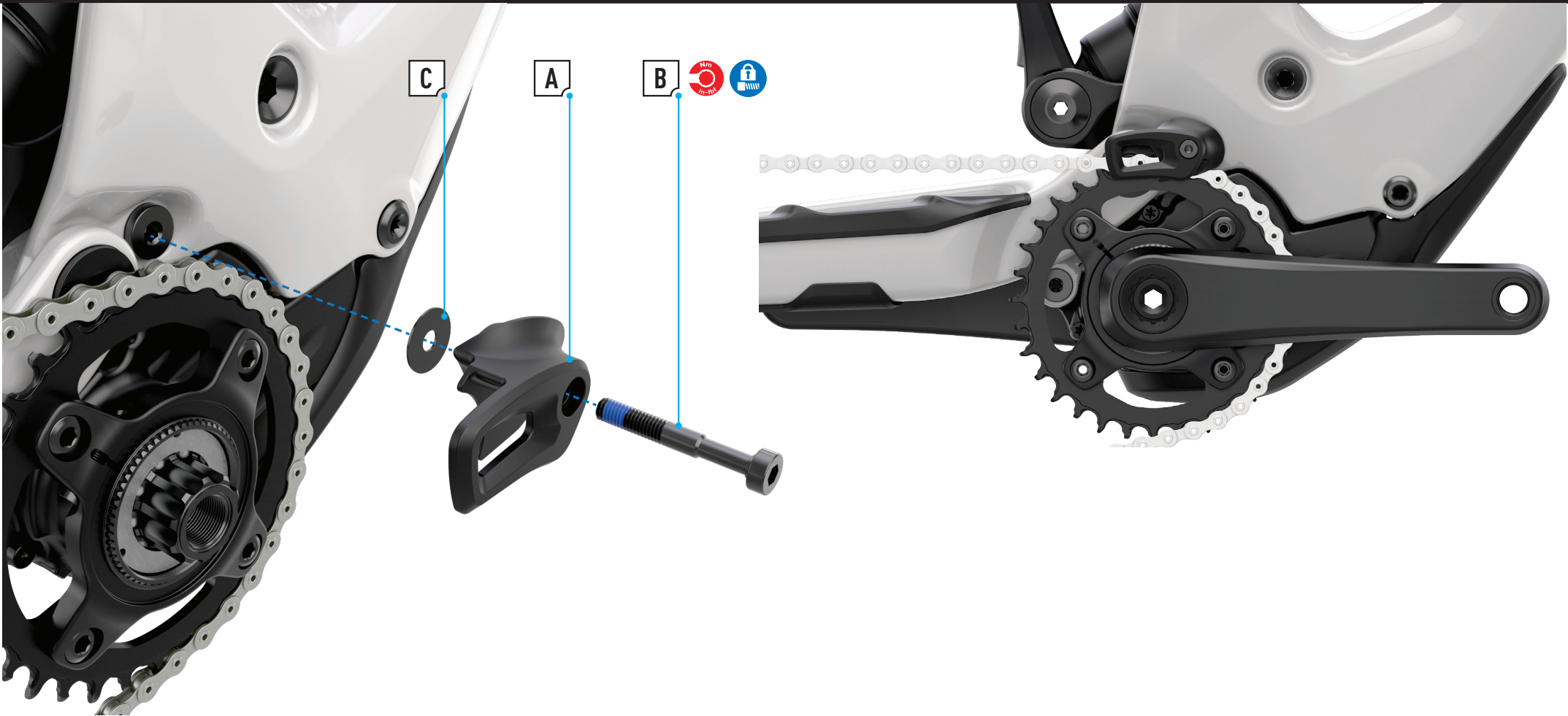


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#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENTS
						Nm	in-lbf	
A	Motor mount bolt NDS	S210500008	3	M6 x20 mm x 1 mm p	5 mm hex	17.3	150	
B	Motor mount washer NDS		3	6.4 mm ID x 16 mm OD x 4mm T	N/A	N/A	N/A	
C	Motor mount bolt DS		3	M10 x 4 mm x 1 mm p	T30 Torx	10	90	
D	Motor mount washer DS		3	11 mm ID x 16 mm OD x 0.5 mm THK	N/A	N/A	N/A	



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENTS
						Nm	in-lbf	
A	Crank	Various sizes	2	Frame size S2/S3 165 mm crank   Frame size S4/S5 170 mm crank	8 mm hex	50	443	
B	Chainring	S191400002	1	Sram X-sync Eagle 32T EMTB with bolts	N/A	N/A	N/A	
C	Chainring bolts		4	M8.5 x 5 mm x 1 mm p	5 mm hex	9	80	Pre-treated with threadlocker
D	Spider	S199900074	1	Spider,94 mm BCD with bolt	N/A	N/A	N/A	Grease the interface between the motor and spider.
E	Spider bolt		1	M8 x 20 mm x 0.7 mm p	3 mm hex	5	44.5	Pre-treated with threadlocker
F	Spider retaining ring	S191600013	1	50 mm 48.5 mm x 1.5 mm	N/A	N/A	N/A	Use a flat head screwdriver or a pick to remove the retaining ring.
Crank CARBON R+L 165 mm		S211600009	Crank CARBON R+L 170 mm		S211600010			
Crank ALLOY R+L 165 mm		S201600001	Crank ALLOY R+L 170 mm		S201600002			

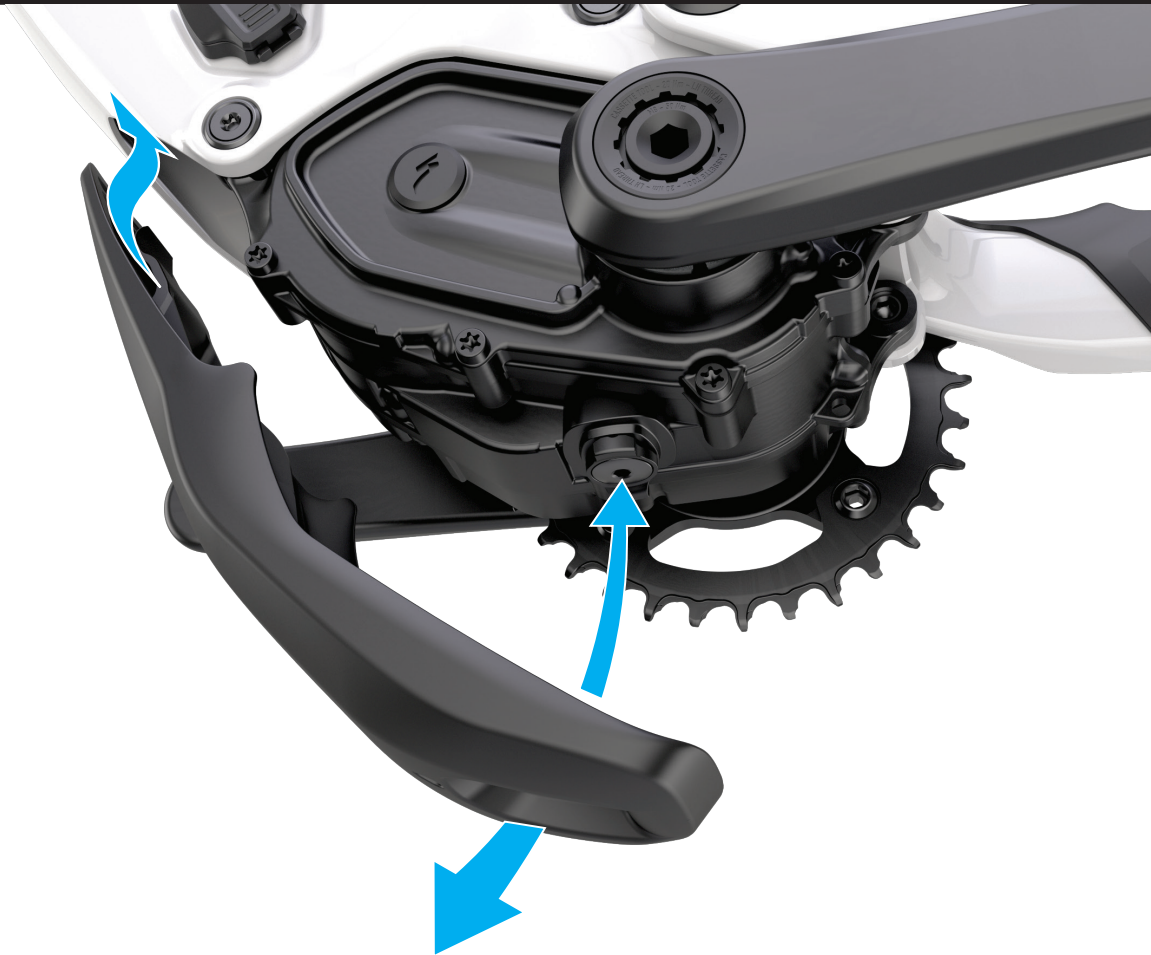
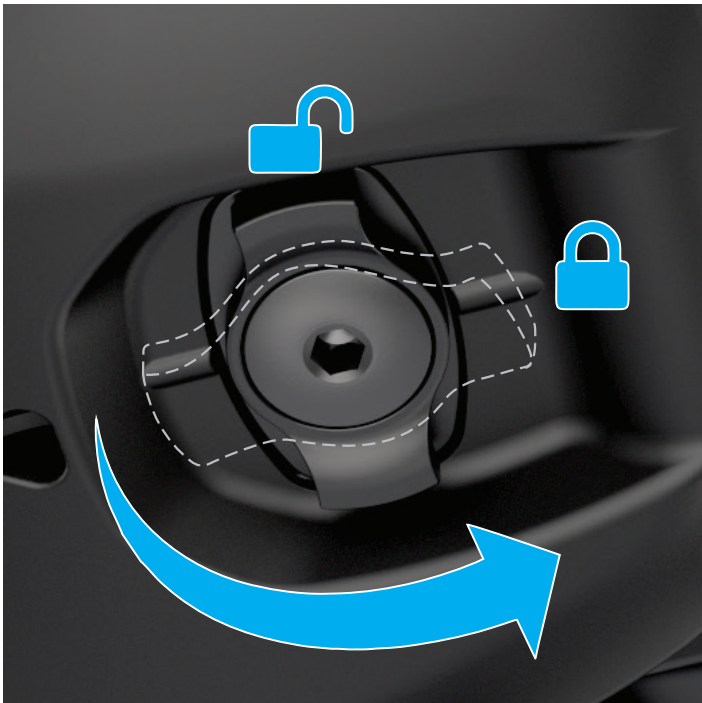


#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Chain guide	<a href="#">S211200003</a>	1		N/A	N/A	N/A	
B	Chain guide bolt		1	M5 x 35 mm x 0.8mm P	4 mm hex	3.5	30	
C	Washer		1	M10,5 ID x16 mm OD X 0.5 mm thk	N/A	N/A	N/A	

CHAIN GUIDE INSTALLATION

- Align the chain guide onto the frame. Make sure to use the same amount of washers from the original installation in order to retain adequate alignment with the chain.
- Grease all the non-threaded surfaces of the bolt and insert the chain guide bolt through the chain guide and into the drive side center motor mounting bolt.
- Using a 4 mm hex key, torque the bolt to specification.





#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Rock guard	<a href="#">S214200031</a>	1	Trail FSR rock guard	N/A			

REMOVE THE ROCK GUARD

- Rotate the latch on the underside of the rock guard 90 degrees to release it.
- Pull the rock guard down and back to clear the forward hook of the down tube.

REPLACE THE ROCK GUARD

- Insert the forward hook under the lip of the down tube and locate the rock guard on the underside of the motor.
- Rotate the latch on the underside of the rock guard 90 degrees to lock it in place.



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## BATTERY REMOVAL

### 1. REMOVE THE CRANK ARMS

- Using an 8 mm hex key, remove the crank arms from the motor spindle

#### 1.1 REMOVE THE CHAIN GUIDE

- NOTE: The Kenevo SL chain guide is pre-aligned during the production process. When removing the chain guide, take note of the exact position and amount of washers used to assist with re-installation and alignment.
- Using a 4 mm hex key, remove the chain guide bolt and remove the guide from the frame.
- NOTE: Take care not to drop the washers behind the chain guide

#### 1.2 REMOVE THE SPIDER AND CHAINRING

- Remove the chain from the chainring.
- Loosen and remove the cranks using an 8 mm hex key.
- Remove the spider retaining ring with a pick or a small flat head screwdriver.
- Loosen the spider pinch bolt with a 3 mm hex key and remove the spider and chainring from the motor spindle.

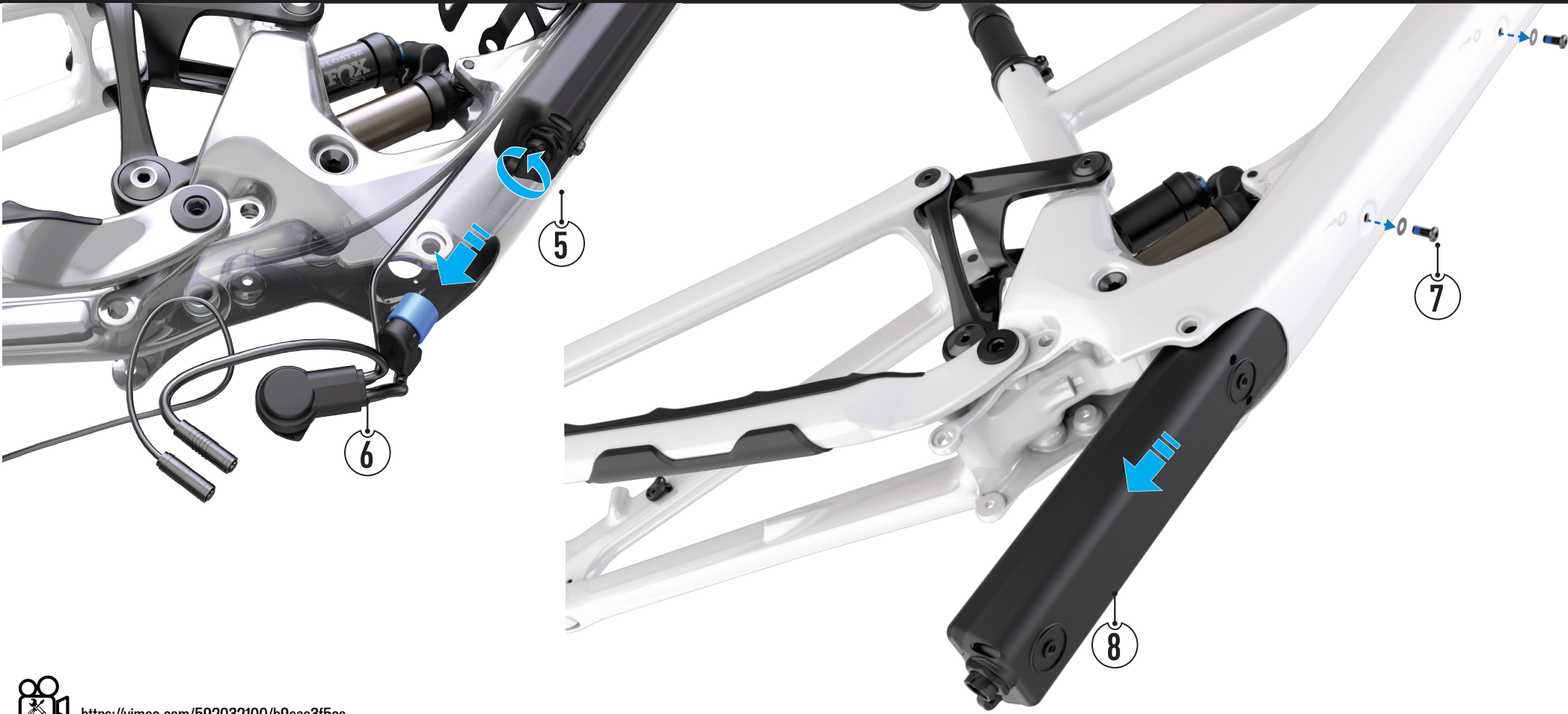
### 2. REMOVE THE ROCK GUARD

- Twist the latch on the underside of the rock guard 90 degrees to release it.
- Pull the cover down and back until the forward hook clears the end of the down tube.

### 3. REMOVE THE MOTOR

- Loosen and remove the middle and rear drive-side motor mount bolts using a 5 mm hex key.
- Loosen and remove the middle and rear non-drive-side motor mount bolts using a T30 Torx key.
- Loosen but do not remove the remaining forward motor mounting bolts using 5 mm hex and a T30 Torx key.
- While holding the motor, gently rotate it downward
- and remove the motor's speed sensor and main harness connectors.
- While holding the motor, remove the drive side and non-drive side motor bolts, then remove the motor.
- To remove the battery from the frame, you will need to remove the main harness and charge port from the inside of the frame.





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**4/5/6. REMOVE THE MAIN HARNESS**

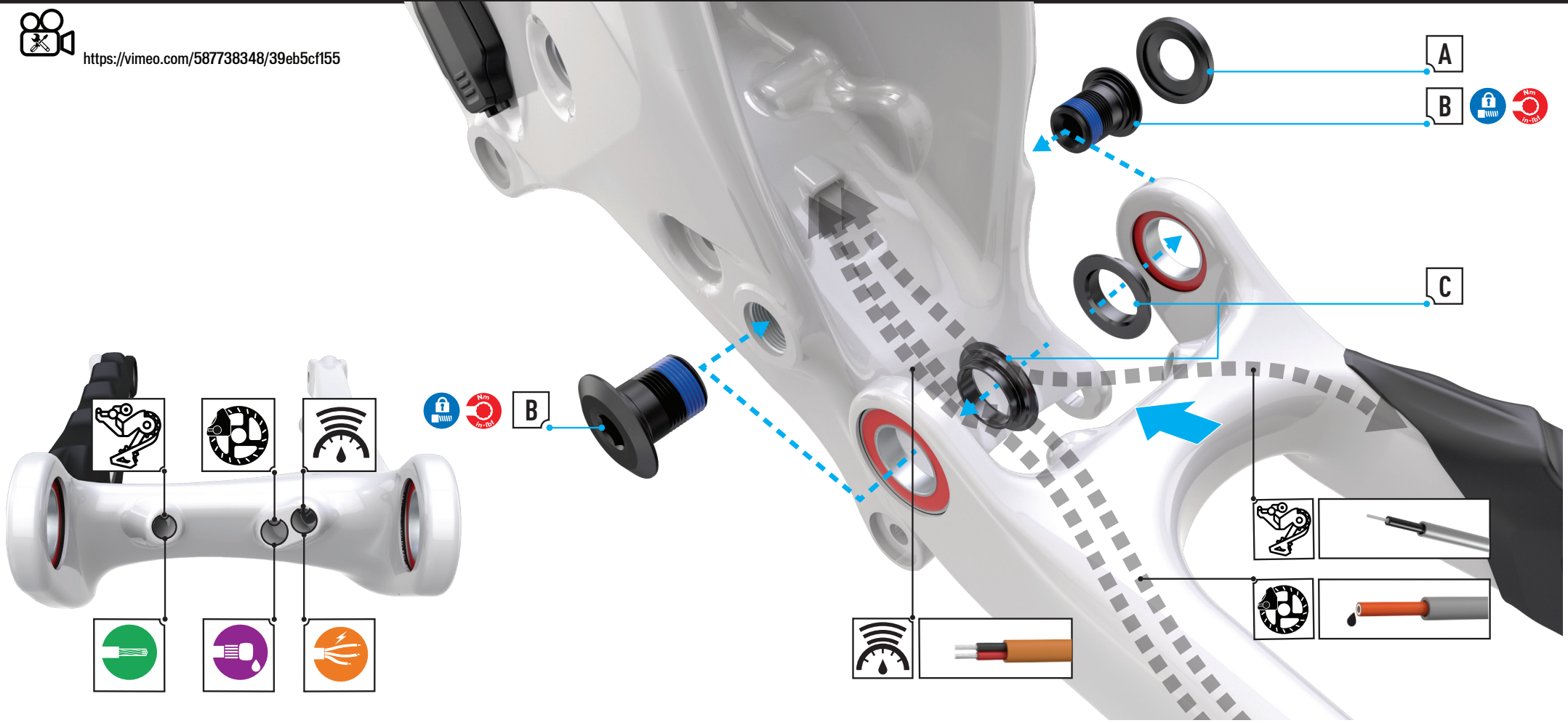
- Rotate the battery twist-lock connector counterclockwise and unplug it from the battery
- Open the charge port door to access the mounting screws.
- Holding the charge port base in place from the inside of the frame, carefully remove the four screws using a T8 Torx key.
- Remove the main harness and charge port from the frame.

**7.REMOVE THE BATTERY**

- Loosen and remove the battery mounting bolts located on the front of the down tube using a T25 Torx key.
- Insert the short end of a hex key into the eyelet on the battery casing end. Use the key to pull the battery out of the frame.
- Be careful not to drop the battery as this could damage it.



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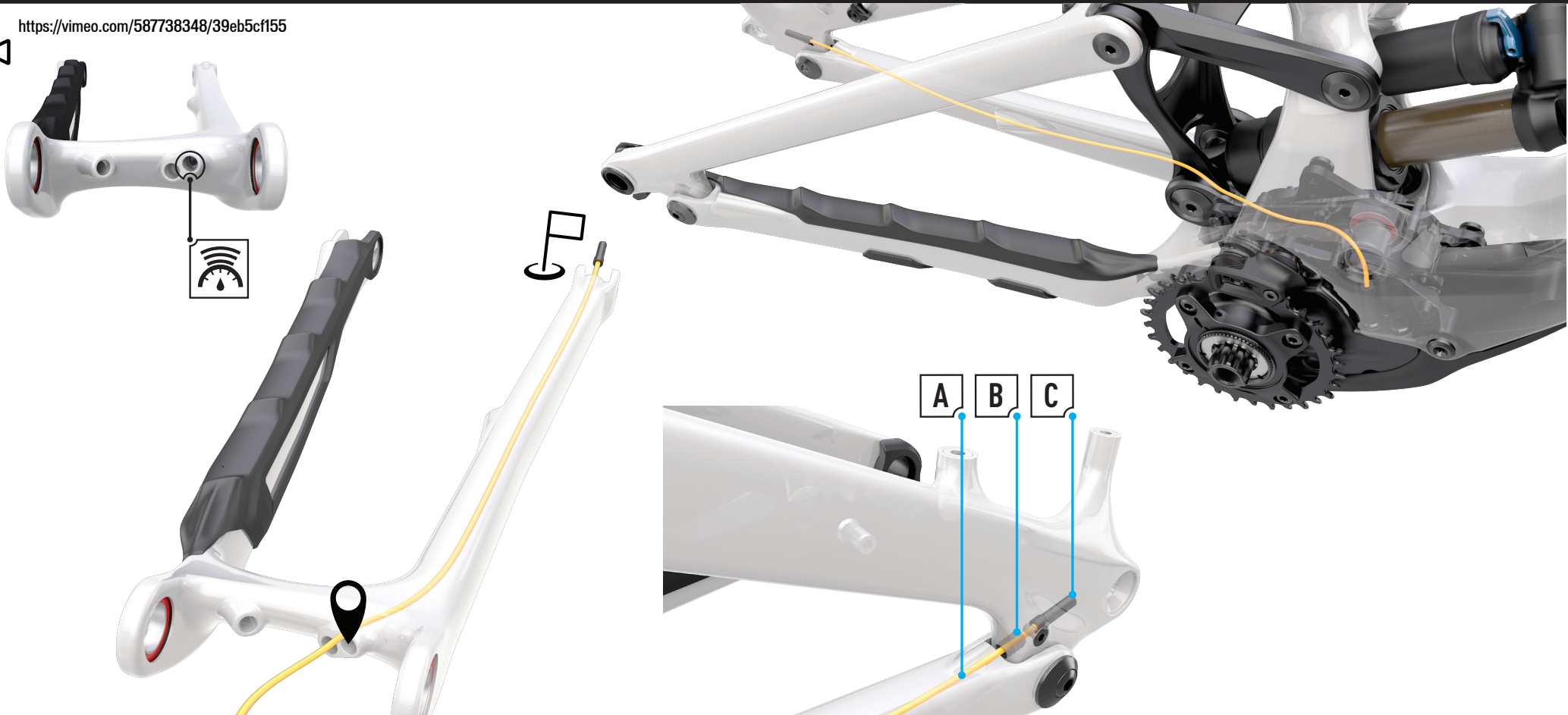
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Chain bolt cover		1		N/A	N/A	N/A	
B	Pivot bolt	S210500009	2	M15 x 19,7 mm x 1 mm P	8 mm hex	25	220	
C	Pivot spacer		2	17 mm ID x 23 mm OD x 2.5 mm W	N/A	N/A	N/A	

MAIN PIVOT ASSEMBLY

- Grease and insert the spacers from the inside of the chainstay into the bearings. The reduced edge must face toward the bearing.
- Align the chainstay pivot holes with the frame.
- Grease the non-threaded surfaces then using an 8 mm hex key, insert the bolts, then torque the bolts to specification.
- Place bolt cap over the drive-side motor bolt to protect it from chain rub.



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#	PART NAME	PART NUM-BER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Speed sensor cable	S196800019			N/A	N/A	N/A	
B	Speed sensor bolt			M4 x 8 mm x 0.7mm p	3 mm hex	1	9	
C	Speed sensor grommet				N/A	N/A	N/A	

- The speed sensor must be installed before assembling the Horst pivot flip chip.
- Align the chainstay close to the Horst link pivot.
  - Insert the speed sensor into the hole on the front of the dropout, feeding it as far as it will go into the chainstay, past the bolt hole.
  - Using a 3 mm hex key, insert the speed sensor bolt into the hole, then torque the bolt to specification.
  - Split the grommet open and place it over the speed sensor cable behind the sensor.
  - Slide the rubber grommet up into the speed sensor hole to secure it.



**CAUTION:** Ensure the speed sensor cable is free from the Horst pivot so it will not get pinched and damage the cable.



**WARNING!** Dirt and/or metal debris may accumulate on the speed sensor magnet. Too much accumulation may result in interruptions in motor support and/or inaccurate speed readings. Regularly check your speed sensor magnet for an accumulation of dirt and/or metal debris, and clean accordingly. The frequency of the cleaning depends on your riding conditions, ride frequency and/or brake pad material. Removing metal debris may require the use of a magnet stronger than the speed sensor magnet.