

TECHNICAL GUIDE

SCHEMATIC - SMALL PARTS



2022
LEVO



INDEX

GEOMETRY 1

DROPPER HOUSING GUIDE TUBE2

DROPPER HOUSING GUIDE3

MOTOR HOUSING CABLE GUIDE & DROPPER POST STOPPER4

MOTOR MOUNTING HARDWARE5

MOTOR COVER6

CHAINSTAY - GUIDE TUBE ASSEMBLY7

MOTOR MAIN PIVOT ASSEMBLY8

MOTOR BOLTS9

CHAIN GUIDE10

SPEED SENSOR CABLE11

SPEED SENSOR HORST ASSEMBLY12

SPIDER & CRANK ASSEMBLY13

MOTOR BATTERY CABLE CLAMP & NDS MOTOR COVER.....14

SEATSTAY PROTECTOR & CHAINSTAY PROTECTOR15

MUDFLAP16

HEADSET17

HEADSET CUPS.....18

STEM19

ALLOY TRAIL STEM.....20

HORST FLIP CHIP21

ADJUSTABLE GEOMETRY GUIDE22

HEADTUBE ICR GUIDES23

TCU24

TCU - ERROR CODES & FACTORY RESET25

MASTERMIND TCU26

MASTERMIND TCU - ERROR CODES & FACTORY RESET.....27

MOTOR CONNECTORS28

BATTERY EXPANDER29

BATTERY ROCK GUARD & BATTERY CHARGE PORT DOOR30

BATTERY INSERTION.....31

SRAM UNIVERSAL DERAILLEUR HANGER.....32

SEATPOST CLAMP33

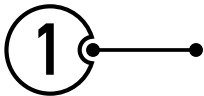
ADDITIONAL SERVICE PARTS & GUIDE TUBES.....34

TORQUE SPECIFICATIONS & GUIDE TUBE LENGTHS.....35

SYMBOLS LEGEND



PART NUMBER



ASSEMBLY PROCESS ORDER



INSERT PATH



ASSEMBLY DIRECTION



GREASE



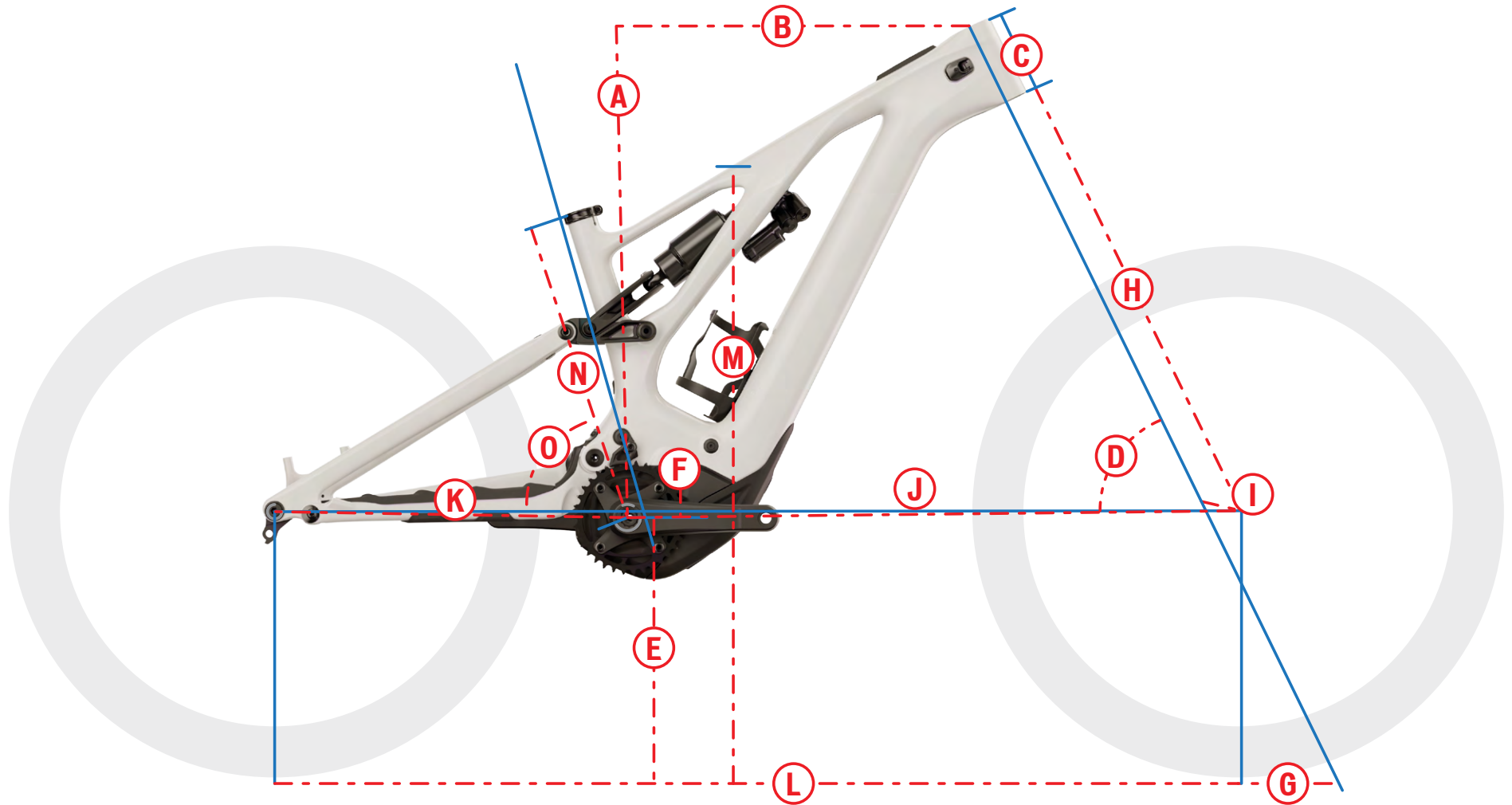
BLUE THREAD LOCK



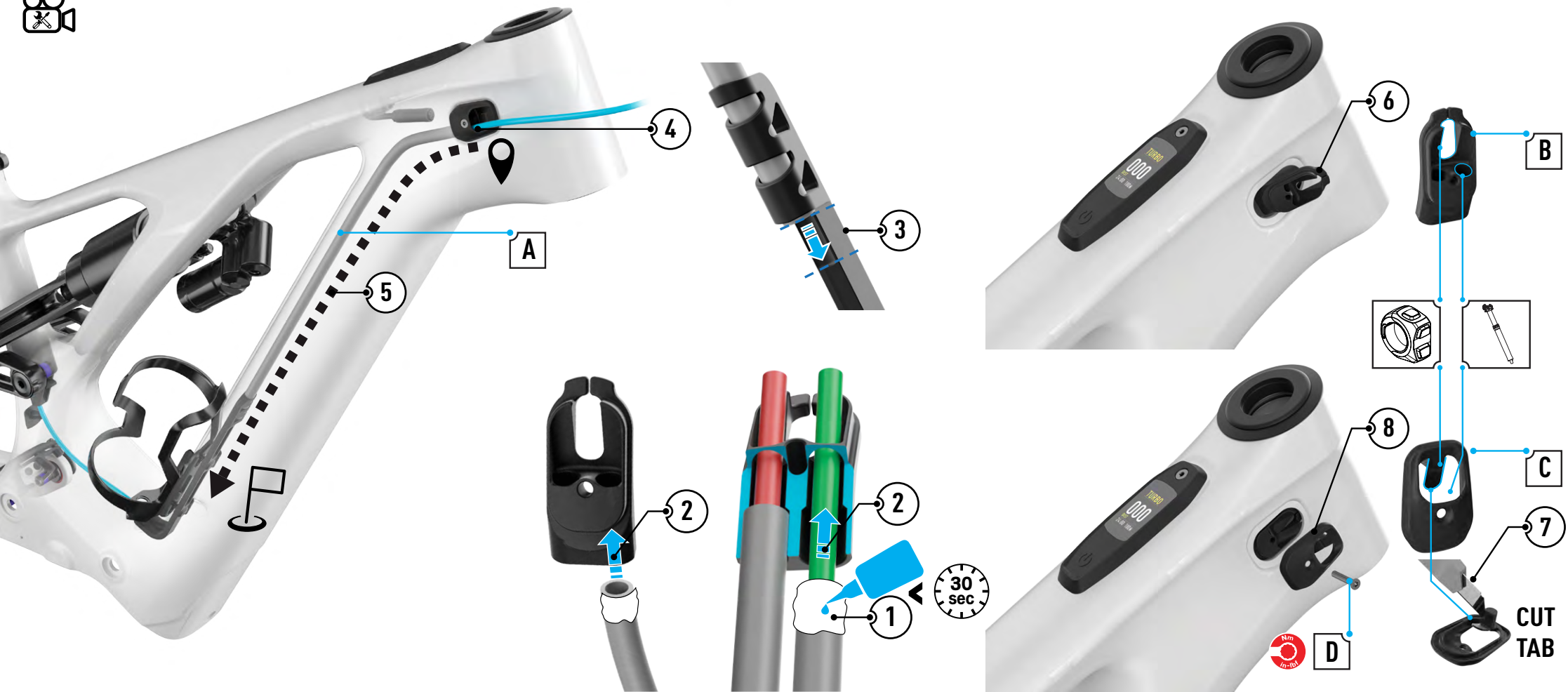
TORQUE REQUIRED



VIDEO GUIDE AVAILABLE



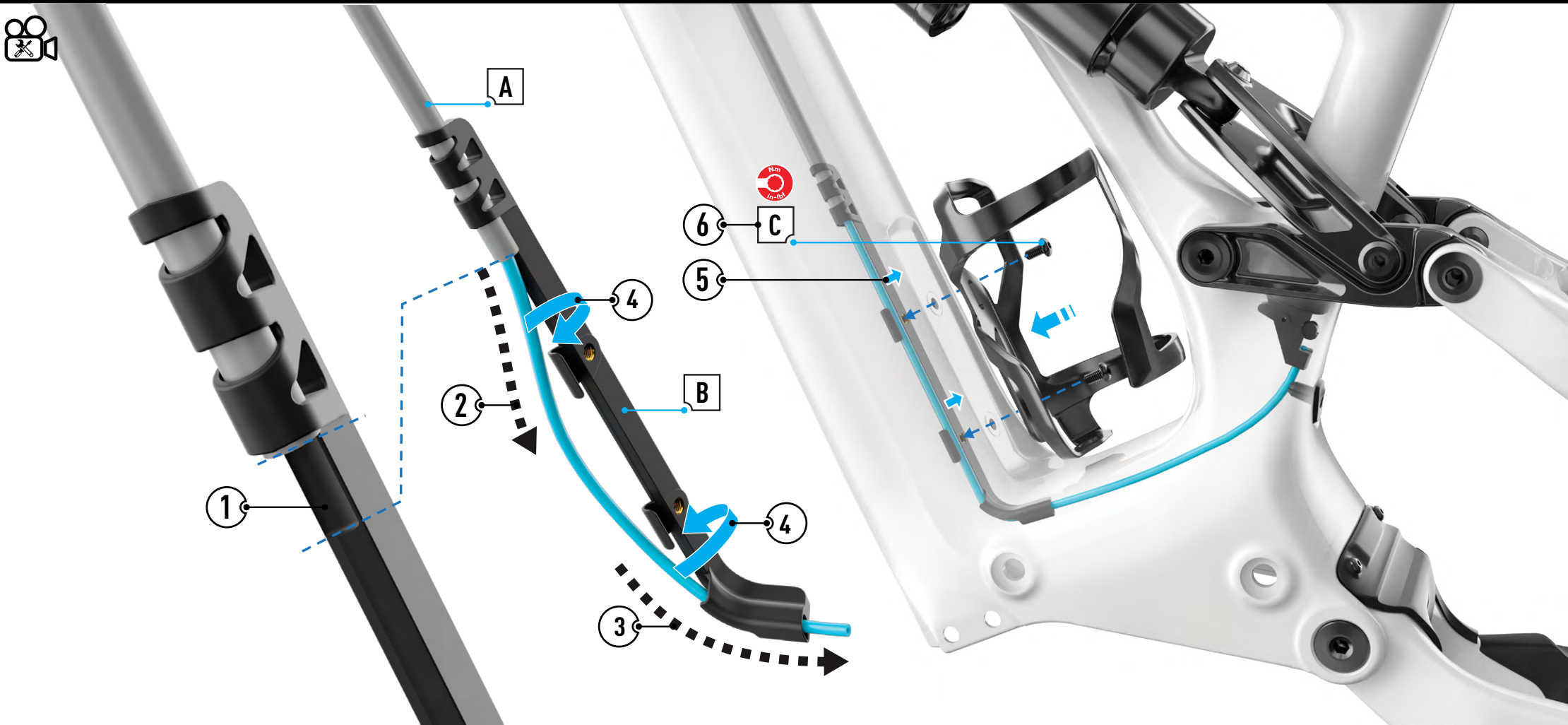
	FRAME SIZE	S1	S2	S3	S4	S5	S6		FRAME SIZE	S1	S2	S3	S4	S5	S6		FRAME SIZE	S1	S2	S3	S4	S5	S6
A	STACK (mm)	605	618	626	635	644	653	I	FORK RAKE/OFFSET (mm)	44							HANDLEBAR WIDTH (mm)	780					
B	REACH (mm)	412	432	452	477	502	532	J	FRONT CENTER (mm)	737	759	784	813	842	877		STEM LENGTH (mm)	35/40	35/40	50			
C	HEAD TUBE LENGTH (mm)	105	105	115	125	135	145	K	CHAINSTAY LENGTH (SHORT SETTING)	441							SADDLE WIDTH (mm)	155	155	143			
D	HEAD TUBE ANGLE (°)	64.5 °	64.7 °					L	WHEELBASE (mm)	1179	1200	1224	1254	1283	1381		SEAT POST MAX INSERTION (mm)	210	220	240	260	280	295
E	BB HEIGHT (mm)	352	350					M	BIKE STANDOVER HEIGHT (mm)	750	775	785		790			SEAT POST MIN INSERTION (mm)	100					
F	BB DROP (mm)	25	27					N	SEAT TUBE LENGTH (mm)	380	390	405	425	445	465		REAR RIM WIDTH (mm)	30					
G	TRAIL (mm)	131	129					O	SEAT TUBE ANGLE (°)	78	77.5	76.7	76.2				FORK SIZE (mm)	160					
H	FORK LENGTH (FULL) (mm)	557	567						CRANK LENGTH (mm)	160													



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Nylon Guide Tube	S216500007	1		N/A	N/A	N/A	S1 - 385 mm S2 - 395 mm S3 - 410 mm S4 - 430 mm S5 - 465 mm S6 - 480 mm
B	ICR Guide Base		1		N/A	N/A	N/A	
C	ICR Guide Cover, 2 Wires x 2 Cables		1	2 Wires 2 Cables	N/A	N/A	N/A	Cut the tab off of the guide cover to access the slot on the guide base for the remote connector insertion.
D	ICR Guide Screw			M3 x 18 mm x 0.5 mm p Steel	TX10	0.8	7	

- 1: Glue one end of the guide tube into the ICR guide base (B) with a small drop of glue (Loctite 416) to one end of the guide tube (1).
 - 2: Briefly allow the glue to spread around the guide tube, then quickly insert them into the ICR guide hole (2).
- TECH TIP:** Loctite 416 has a 20-30 second work time. Ensure the guide tube is completely inserted into the ICR guide. Failure to do so will cause housings to snag.
- 3: Insert the other end of the guide tube firmly into the end of the dropper housing guide . Make sure the tube is completely inserted into the dropper housing guide. Failure to do so will cause housings to snag.

- i** Orientate the ICR guide and the dropper housing guide 90 degrees to each other before gluing. The face of the ICR guide base should point to the right of the dropper housing guide.
- 4: Insert the dropper housing assembly through the ICR port located in the drive side head tube area.
 - 5: Slide the assembly down the down tube 6: Locate the ICR guide in the port in the drive side head tube.
 - 7: Cut the tab from the guide cover to allow for the remote cable to pass through.
 - 8: Place the ICR guide and cap into the frame. then torque to specification (7)

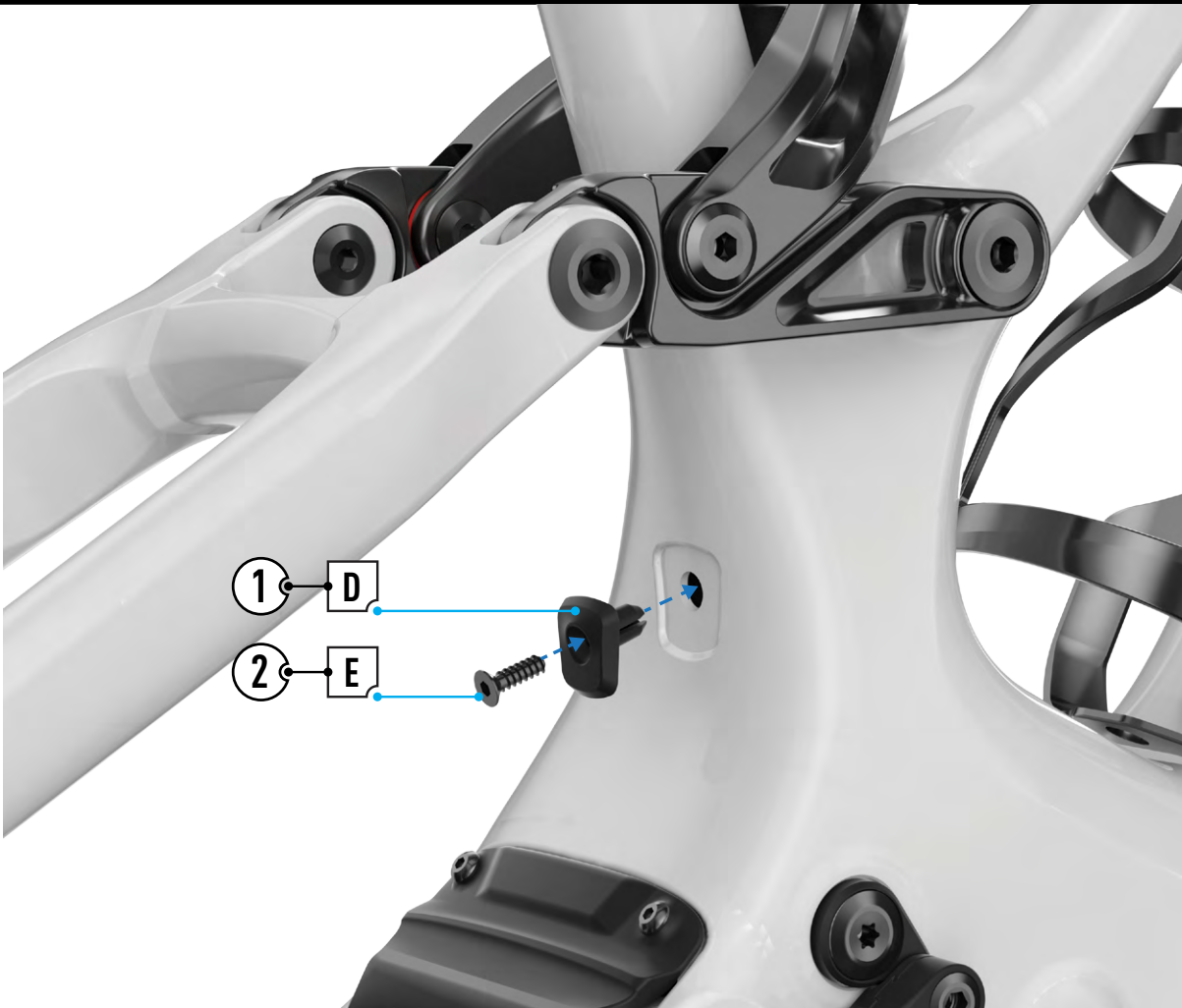
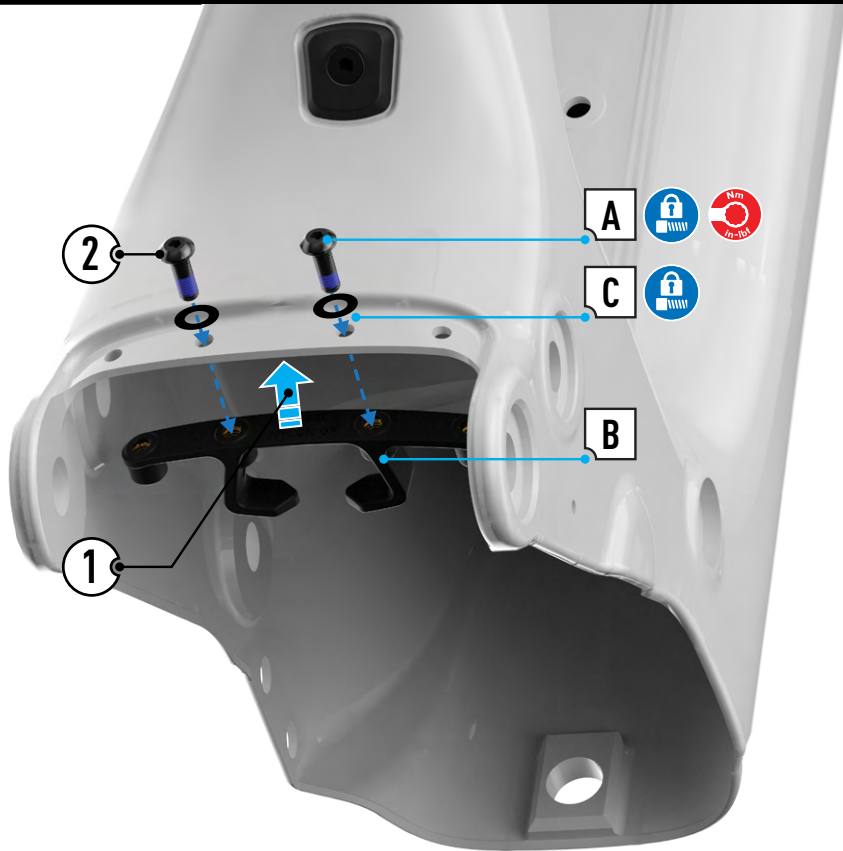


#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Nylon Guide Tube			Different lengths per size	N/A	N/A	N/A	S1 - 385 mm S2 - 395 mm S3 - 410 mm S4 - 430 mm S5 - 465 mm S6 - 480 mm
B	Dropper Guide	S216500005	1		N/A	N/A	N/A	
C	Dropper Guide Bolts		2	M5 X 10 mm x 0.8 mm P	3 mm hex	2.8	25	Insert bolts through the water bottle cage before inserting through the frame.

DROPPER HOUSING GUIDE ASSEMBLY

- 1: Make sure the tube is completely inserted into the dropper housing guide. Failure to do so will cause housings to snag.
- 2: Thread the dropper housing from the ICR guide through the guide tube exiting at the top of the dropper housing guide.
- 3: Guide the housing through the L-bend on the dropper housing guide first, then feed the housing up into the seat tube.
- 4: Hook the dropper housing over the two center hooks on the guide.
- 5: Place the dropper housing guide against the upper inside wall of the downtube, aligned with the bottle cage bolts.

- 6: Insert the bottle cage bolts through the cage and frame and into the dropper housing guide (6). Tighten the bottle cage bolts to specification.



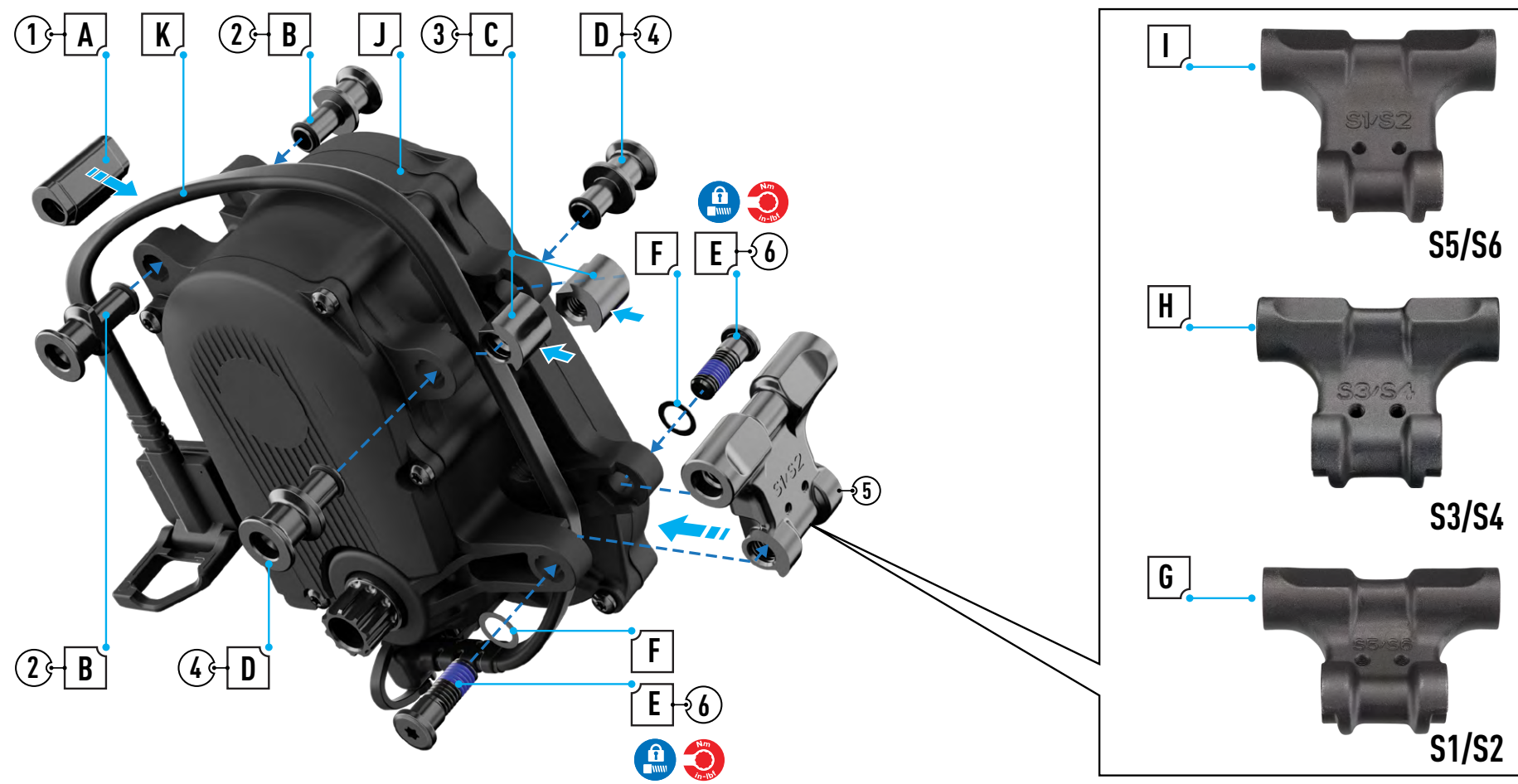
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	ICR Guide Bolt	S216500004	1	M4 x 12 mm x 0.7 mm P	2.5 mm hex	4	35.5	
B	ICR Motor Housing Guide		1		N/A	N/A	N/A	
C	Washers		2	M4 mm x 4.2 mm ID x 7 mm OD x 0.8 mm THK	N/A	N/A	N/A	
D	Seatpost Limiter	S219900041	1		N/A	N/A	N/A	
E	Seatpost Limiter Screw		1	Countersunk M4 x 14 mm Self tapping Screw	3 mm hex	N/A	N/A	The stopper is used to stop contact between the dropper post and the motor (do not overtighten)

MOTOR HOUSING CABLE GUIDE ASSEMBLY

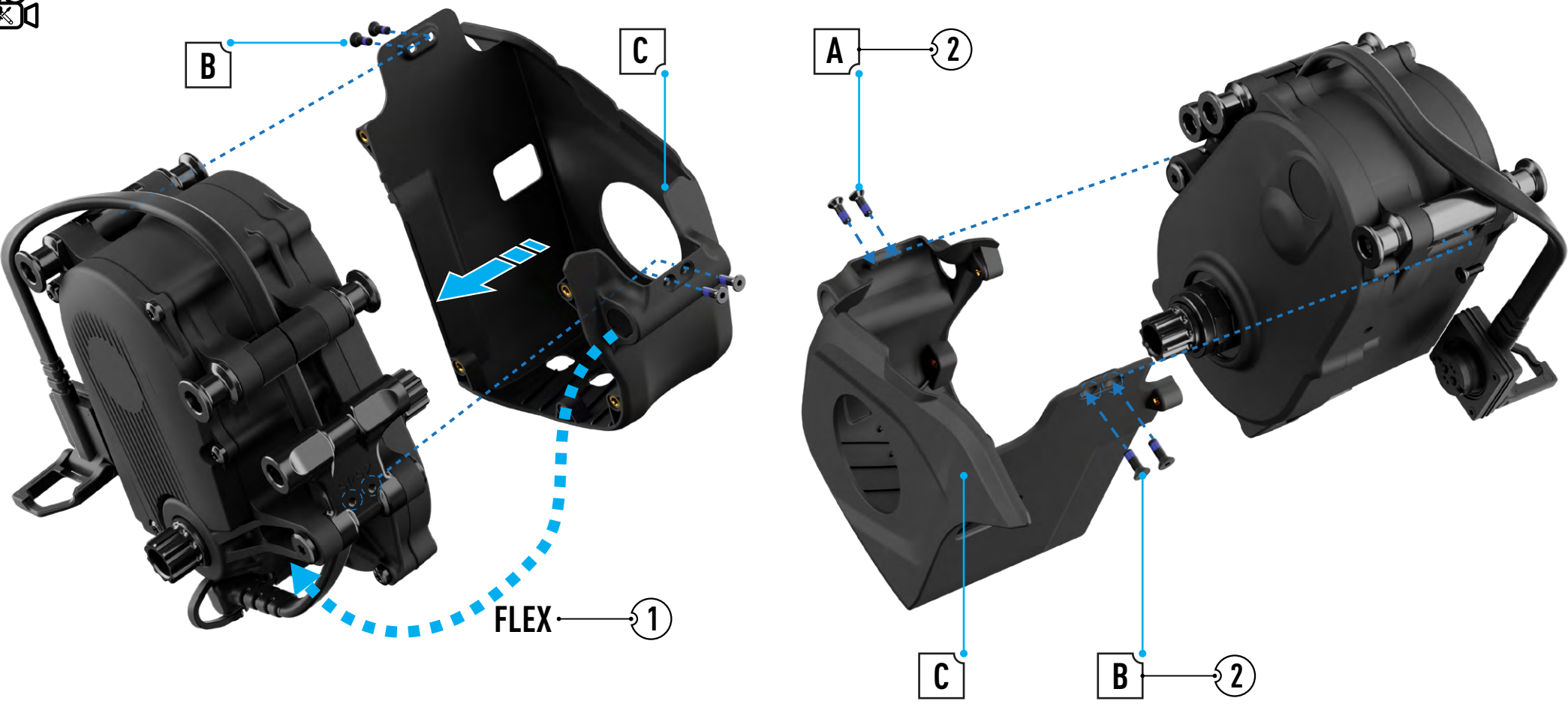
- 1: Place the ICR Guide against the frame with the holes aligned with the frame holes.
- 2: Insert the screws then torque to spec.

DROPPER STOPPER ASSEMBLY

- 1: Insert the expanding plug into the frame.
- 2: Insert the screw and tighten until the plug is firmly seated in the frame. DO NOT overtighten as this could strip the plastic insert.



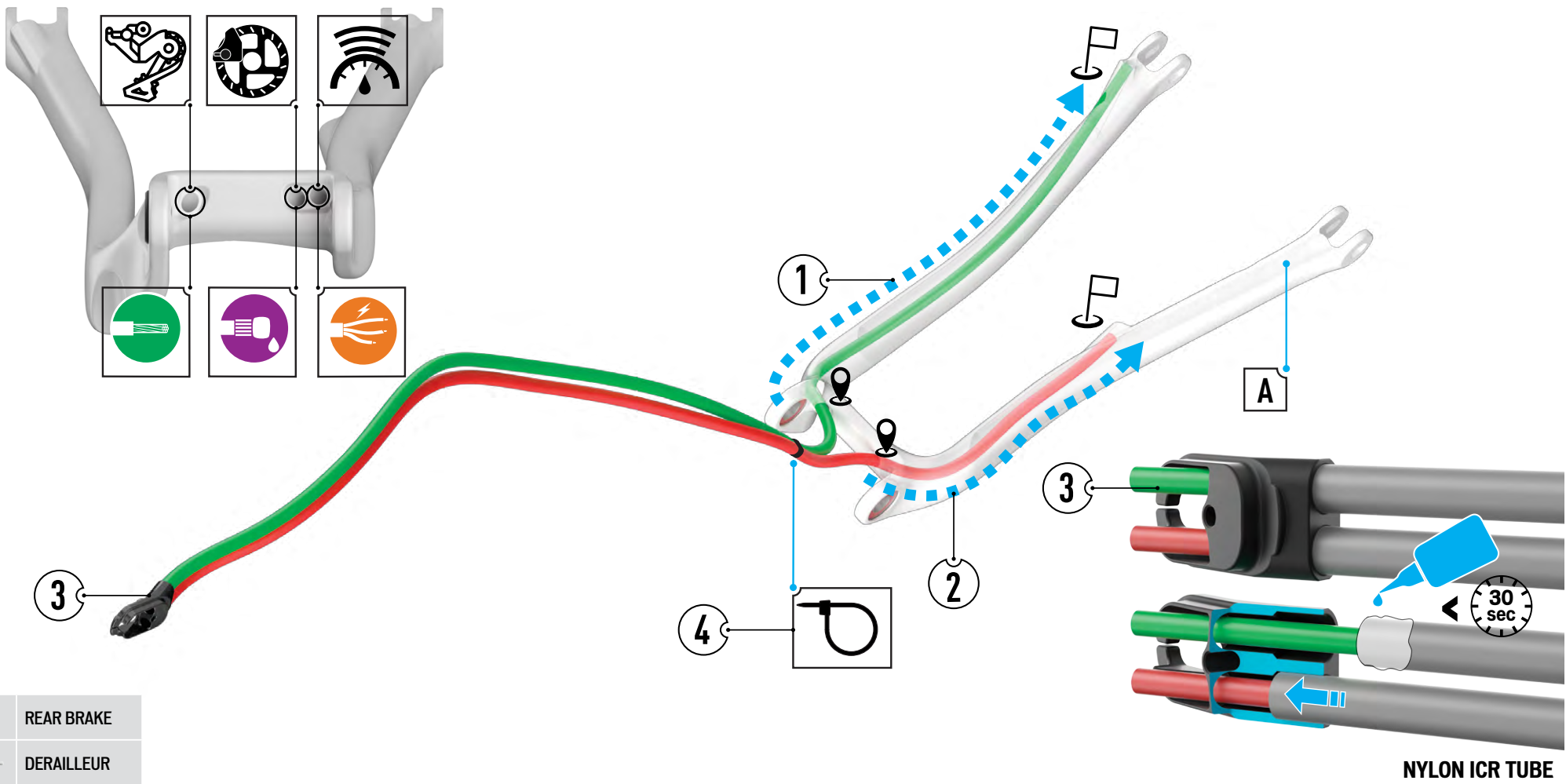
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Motor Wedge	Part Of Motor Mounting Bolt Kit S210500010	1		N/A	N/A	N/A	<ul style="list-style-type: none">■ This mounting hardware is reusable and does not need to be replaced if sending out a new motor.■ Motor battery cable must run under the custom nut in the center mount and the carrier.
B	Custom Spacer Nylon		2	8.2 mm ID x 20 mm OD x 17.6 mm W - Nylon	N/A	N/A	N/A	
C	Custom Motor Nut		2	M8 x 1.25 mm P	N/A	N/A	N/A	
D	Custom Spacer		2	8.2 mm ID x 20 mm OD X 17.6 mm W - Aluminium	N/A	N/A	N/A	
E	Motor Carrier Mounting Bolt		2	M10 x 28 mm x 1.5 mm P	T30 Torx	18	160	
F	Motor Carrier Mounting washer		2	10.6 mm ID x 15 mm OD x 0.2 mm THK - S Steel	N/A	N/A	N/A	
G	Motor Carrier S1 - S2	S219900031	1		N/A	N/A	N/A	For use on S1 and S2 Frames Only
H	Motor Carrier S3 - S4	S219900032	1		N/A	N/A	N/A	For use on S3 and S4 Frames Only
I	Motor Carrier S5 - S6	S219900033	1		N/A	N/A	N/A	For use on S5 and S6 Frames Only
J	Motor	S196800005	1	Specialized 2.2, Custom RX trail tuned	N/A	N/A	N/A	This is a shared motor part# between Levo Gen. 2 and Gen. 3.
K	Main Harness	S216800018	1		N/A	N/A	N/A	Spare lever available S216800045



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	DS Motor Cover mounting screws	Part Of Motor Cover Kit S219900034	2	Countersunk Bolt - M4 x 10 mm x 0.7 mm p - S-Steel	2.5 mm hex	2	18	
B	DS Motor Cover mounting screws		2	Countersunk Bolt - M4 x 10 mm x 0.7 mm p - S-Steel	2.5 mm hex	2	18	
C	DS Motor Cover		1		N/A	N/A	N/A	

DRIVE SIDE MOTOR COVER ASSEMBLY

- 1: Flex the drive side motor cover (C) over the motor and align the cover with the forward and rear motor cover mounting screw holes on the motor mounts.
- 2: Insert the motor cover bolts (A-B) and torque to specification.



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE	
						Nm	in-lbf
A	Chainstay Alloy (Satin Black)	S211500002	1		N/A	N/A	N/A
B	Bearing		2	12 mm ID x 24 mm OD x 6 mm W,DBL SLD	N/A	N/A	N/A
A	Chainstay Carbon (Gloss Carbon)	S211500003	1		N/A	N/A	N/A
B	Bearing		2	12 mm ID x 24 mm OD x 6 mm W,DBL SLD	N/A	N/A	N/A

CHAINSTAY GUIDE TUBE ASSEMBLY PROCESS:

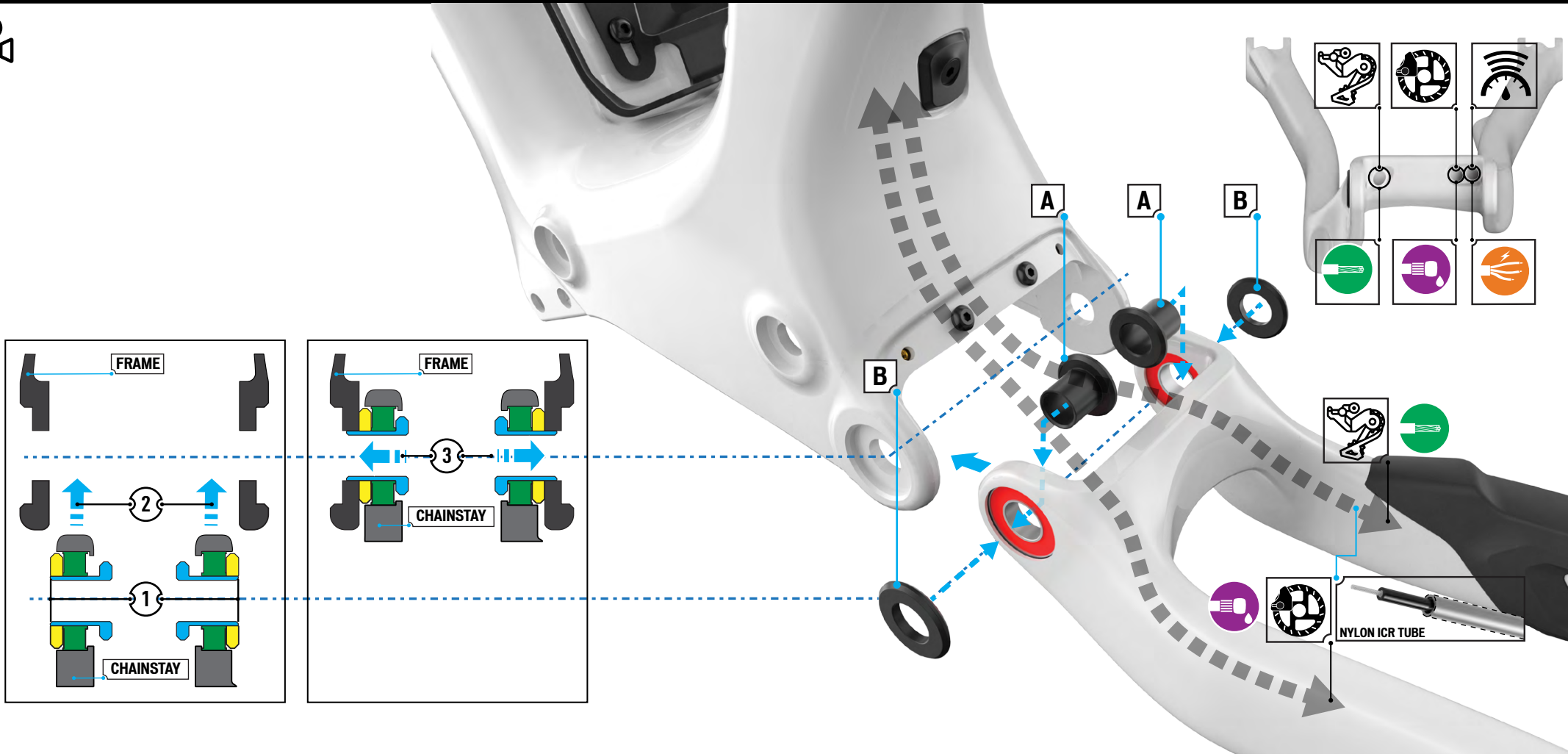
Before assembling the rear triangle, insert the guide tubes for the rear brake and the derailleur.

- 1: Insert the derailleur guide tube through the ICR port located in the drive side of the chainstay and route it to the rear port on the chainstay.
- 2: Insert the brake guide tube through the inner ICR port located in the non-drive side of the chainstay and route it to the mid port on the chainstay.

- 3: Glue one end of the guide tubes into the ICR guide base with a small drop of glue (Loctite 416). Briefly allow the glue to spread around the guide tube, then quickly insert them into the ICR guide hole.

TECH TIP: Loctite 416 has a 20-30 second work time. Ensure the guide tube is completely inserted into the ICR guide. Failure to do so will cause housings to snag.

TECH TIP: Secure the guide tubes 10 cm from the ICR ports on the chainstay with a cable tie.



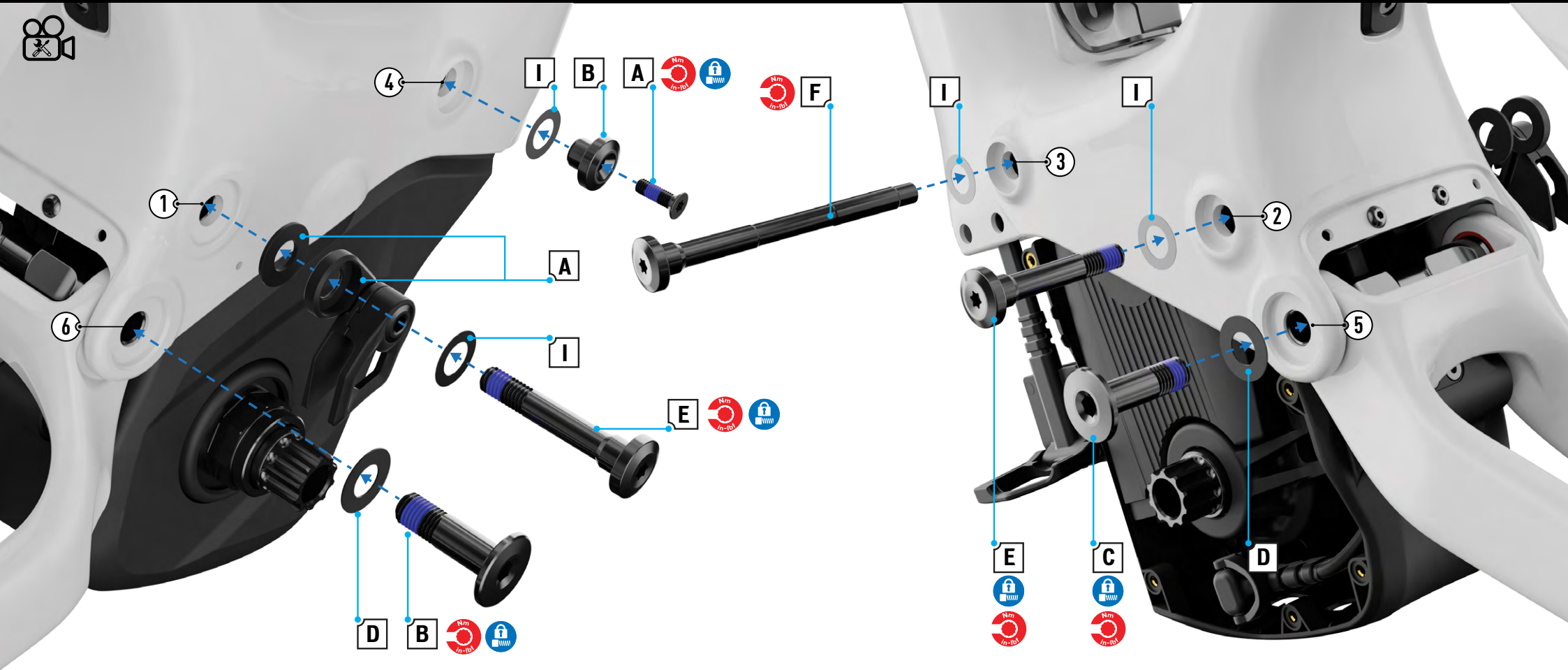
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Main Pivot Sleeve	S210500012	2	10 mm ID x 21 mm OD x 3 mm W, S-Steel	N/A	N/A	N/A	Part of Suspension Bolt Kit
B	Main Pivot Spacer		2	12 mm ID x 23 mm OD x 3 mm W, Alu	N/A	N/A	N/A	

ROUTE THE GUIDE TUBES INTO THE FRONT TRIANGLE

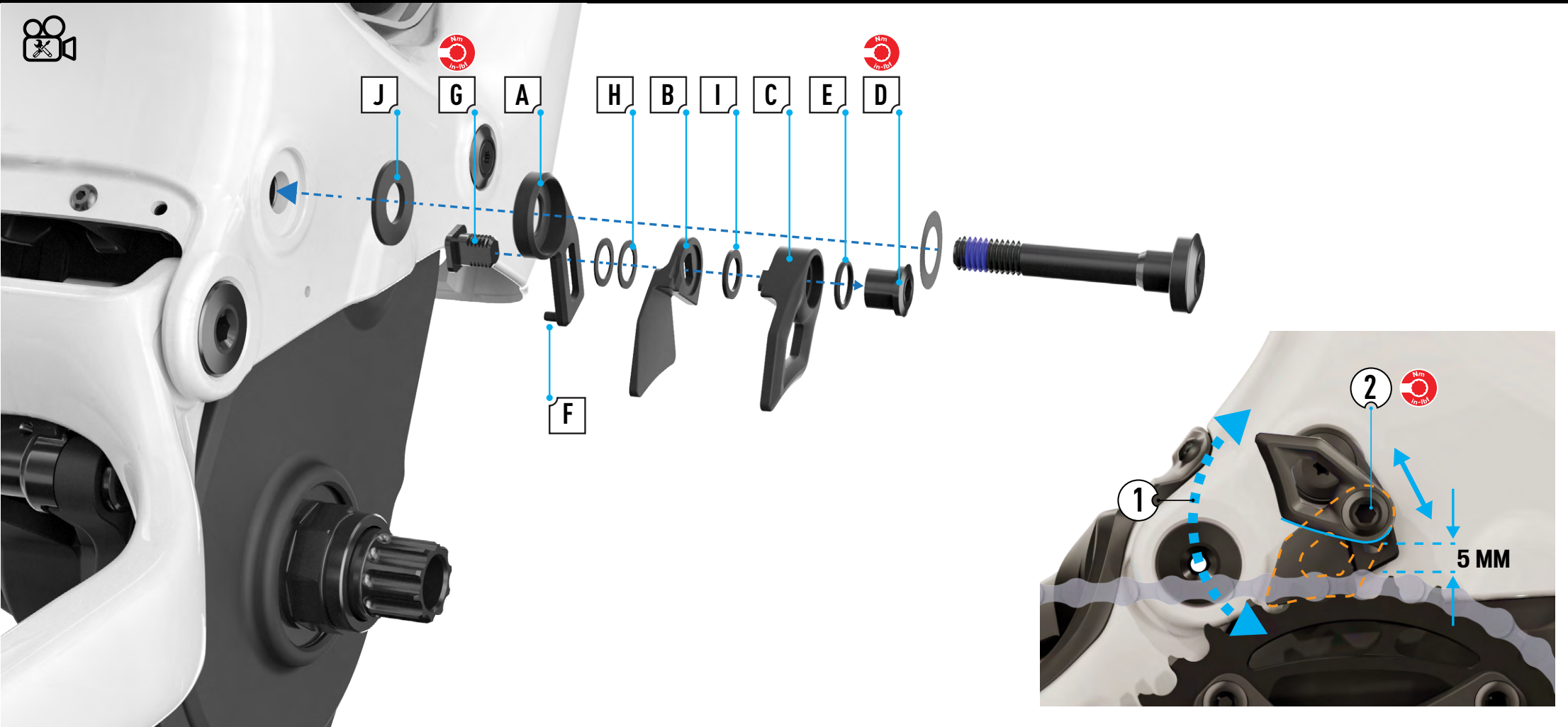
- Before installing the motor, assemble the rear triangle to the front triangle.
- Route the guide tube assembly from the motor housing, up though the side-arm exiting the non-drive side ICR port at the head tube.
 - Place the guide cover and insert the screw, then tighten to specification.
 - Place the spacers (B) against the bearings on the main pivot.

REAR TRIANGLE TO FRONT TRIANGLE ASSEMBLY

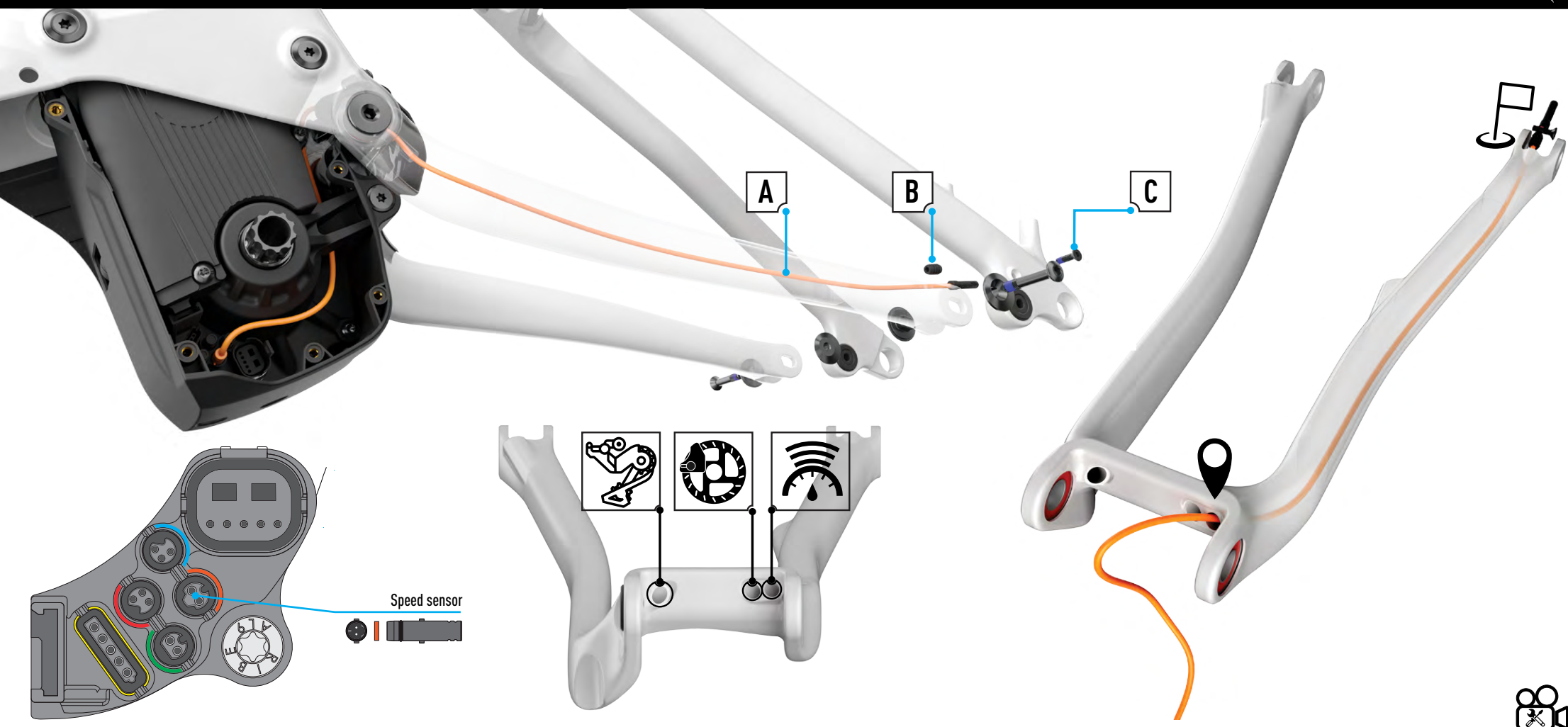
- 1: Insert the pivot sleeves (A) through the main pivot bearings and spacer.
 - 2: Insert the chainstay into the frame and align the pivot holes.
 - 3: Push the pivot sleeves through the frame to hold the rear triangle in place.
 - Assemble the motor into the frame.
- The main pivot sleeves can be inserted from the inside to hold the rear triangle in place while you install the motor.



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Chain Guide	S211200004	1			N/A	N/A	
B	DS - Main Pivot Bolt	Part of Suspension Bolt Kit S210500012	2	M10 mm x 35 mm x 1.25 mm P - S Steel		24	210	Custom left-hand thread
C	NDS - Main Pivot Bolt		2	M10 mm x 35 mm x 1.25 mm P - S Steel		24	210	Custom right-hand thread
D	Main Pivot Washers		2	10.6 mm ID x 21 mm OD x 0.5 THK - S Steel		N/A	N/A	
E	Center Mounting Bolt	Part of Motor Mounting Bolt Kit S210500010	2	M8 x 50 mm x 1.25 mm P - S Steel		18	160	
F	NDS Front Motor Axle Bolt		1	M8 x 100 mm - S Steel		6	53	
G	DS Front Motor Bolt		1	M5 x 16 mm - S Steel		6	53	
H	DS Front Motor Spacer		1	7.4 mm ID x 10.2 mm OD x 12.5 mm - Aluminium		N/A	N/A	
I	Motor Bolt Mounting Washer		4	10.6 mm ID X 18 mm OD x 0.2 THK - S Steel		N/A	N/A	



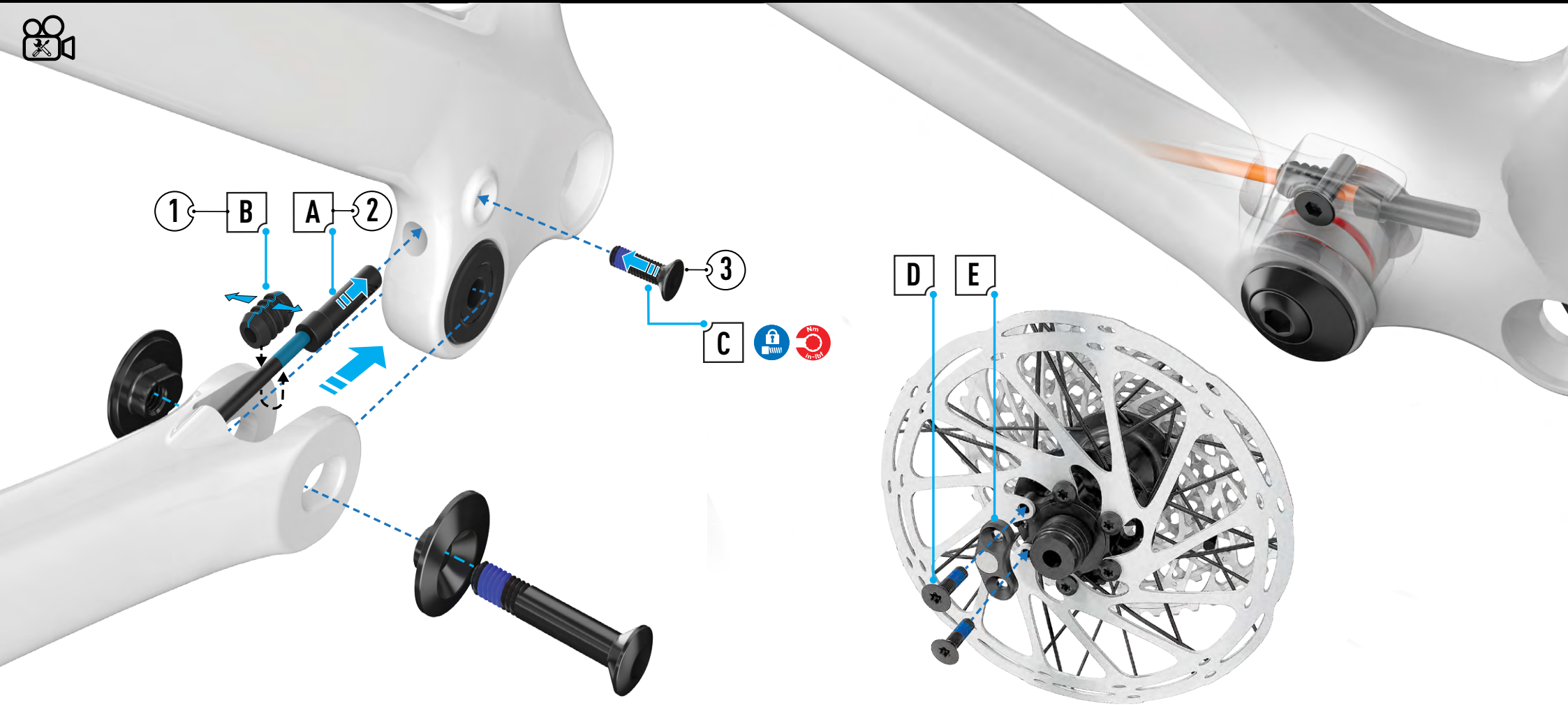
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Chain Guide - Back Plate	S211200004			N/A	N/A	N/A	SETTING THE CHAIN GUIDE POSITION: <ul style="list-style-type: none">Shift to the lowest gear.1: the outer chain guide face upwards.2: Loosen the chain guide bolt and align the lower edge of the inner chain guide face to 5 mm above the chain, then torque the chain guide bolt to specification.Rotate the outer chain guide face downward and locate it into position making sure the guide does not come in contact with the spider. <div><i>i</i> The Levo chainguide comes pre-aligned from the factory. Do not add or remove any spacers from the original build.</div>
B	Chain Guide - Inner Plate				N/A	N/A	N/A	
C	Chain Guide - Outer Plate				N/A	N/A	N/A	
D	Mounting Nut			M8 mm X 1.0 mm P	5 mm hex	4.5	40	
E	O-Ring			O-RING 9 mm ID X 1.5 mm W	N/A	N/A	N/A	
F	Back Plate Dowel Pin			PIN DOWEL, 2.5 mm OD X 6 mm	N/A	N/A	N/A	
G	Mouting Bolt			M8 x 1.0 mm P, SLOT	N/A	4.5	40	
H	Spacer Inner			8.2 mm ID X 12 mm OD X 0.5 mm W	N/A	N/A	N/A	
I	Spacer Outer			8.2 mm ID X 12 mm OD X 1 mm W	N/A	N/A	N/A	
J	Spacer Back			CUSTOM SPACER 10.2 mm ID X 21 mm OD X 2 mm W	N/A	N/A	N/A	




#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Speed Sensor Cable	S216800025	1		N/A	N/A	N/A	
B	Speed Sensor Grommet	S216800021	1		N/A	N/A	N/A	
C	Speed Sensor Bolt		1	M4 x 8 mm x 0.7mm p	3 mm hex	1	9	

- Thread the speed sensor cable from the main pivot end of the chainstay through the outer hole on the non-drive side, exiting the chainstay behind the horst pivot.
- When assembling the rear triangle to the front triangle, thread the speed sensor cable through the motor area and connect the speed sensor into the port on the motor.

CAUTION! When assembling the horst pivot, make sure not to pinch the speed sensor cable as this could damage the speed sensor causing it to malfunction.

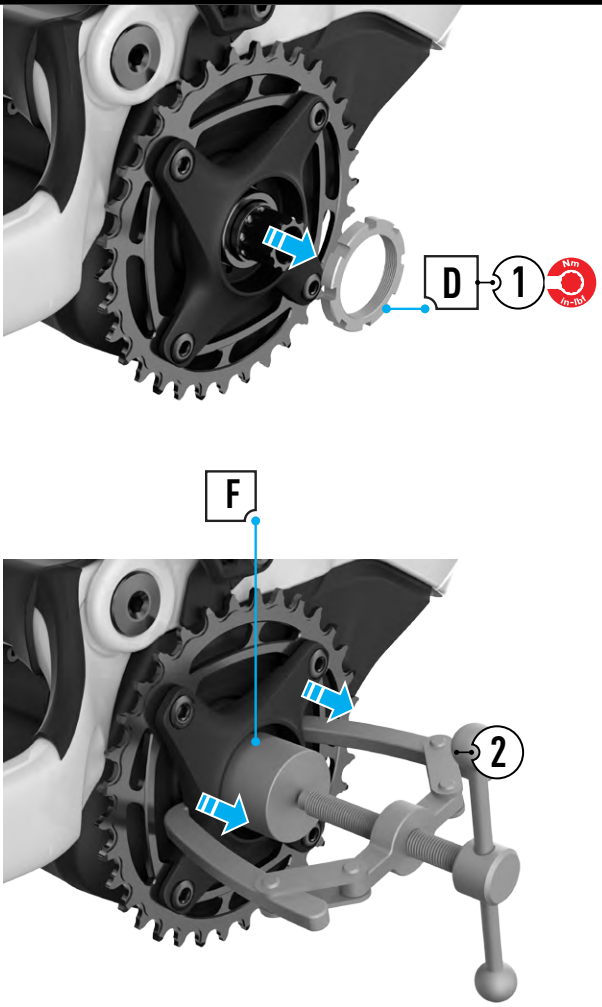
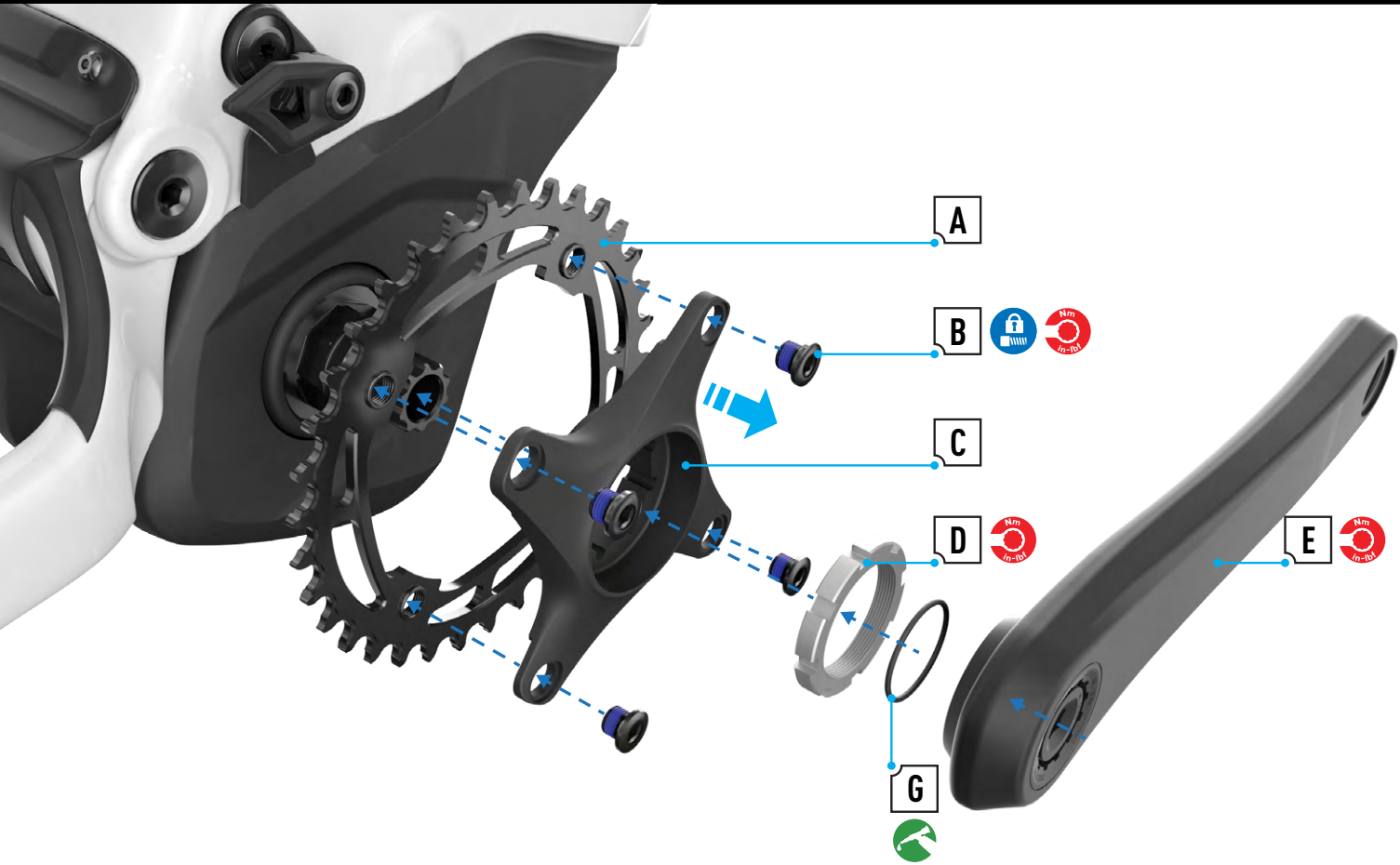


#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Speed Sensor Cable	S216800025	1		N/A	N/A	N/A	
B	Speed Sensor Grommet	S216800021	1		N/A	N/A	N/A	
C	Speed Sensor Bolt		1	M4 x 8 mm x 0.7mm p	3 mm hex	1	9	
D	Speed Sensor Magnet Bolt	S194200016	2	M5 x15 mm x 0.8 m p	T25 Torx	6.2	55	
E	Speed Sensor Magnet		1					

 **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.

- 1: Open the grommet and place it over the speed sensor cable.
- 2: Slide the speed sensor into the chainstay at the dropout.
- 3: Using a 3 mm hex key, tighten the screw, then torque to specification.
- When assembling the rear brake disc, the speed sensor magnet must be installed on the rotor. Four of the six bolts are standard rotor bolts. The remaining two bolts (M5 x 0.8 pitch x 15 mm length, with a countersunk flat head) attach the speed sensor magnet to the rotor.

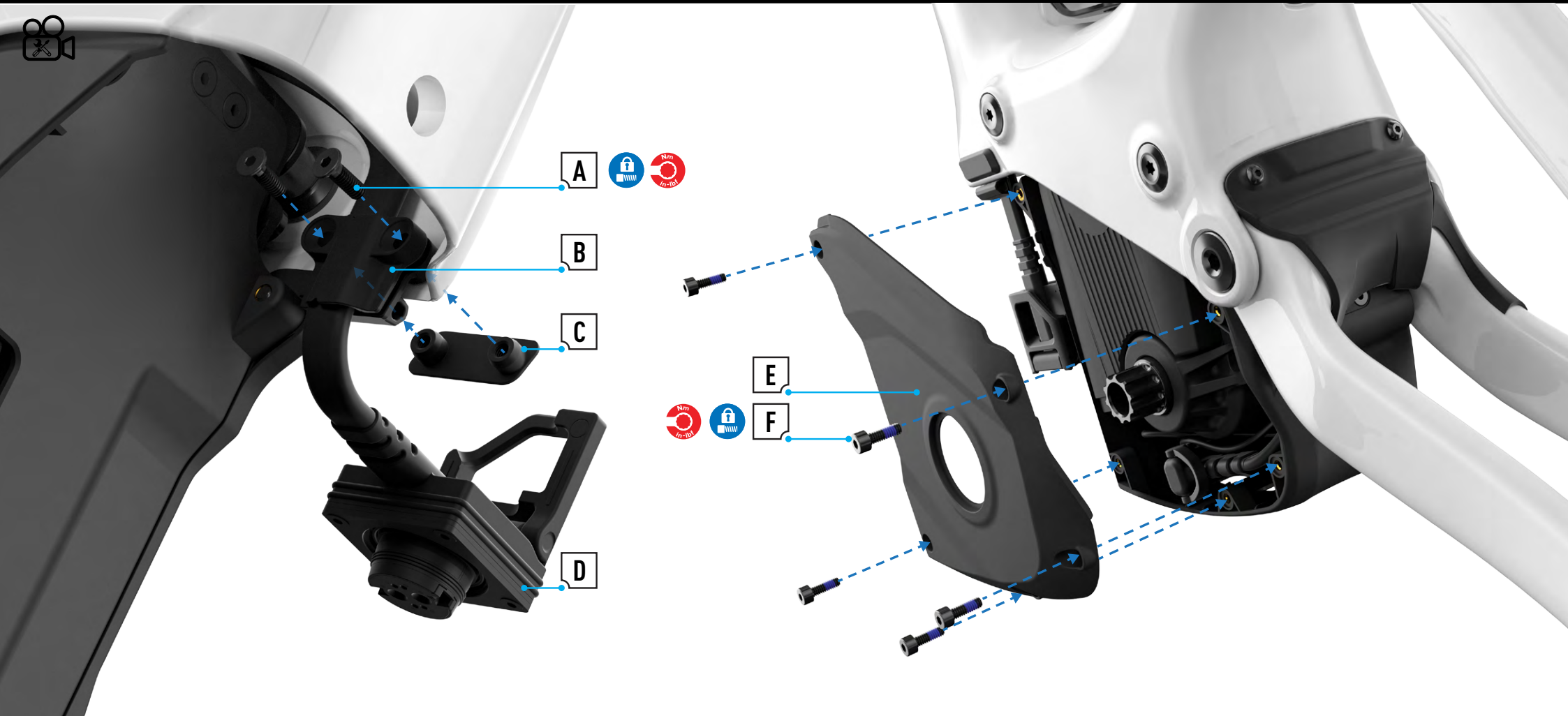
The speed sensor must be installed before assembling the horst pivot flip chip.



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Chain Ring	S211400009	1	SRAM EAGLE 34 Teeth 104 mm BCD STEEL EMTB W/BOLTS	N/A	N/A	N/A	
B	Chain Ring Bolts		4		5 mm hex	10	89	
C	Spider	S195100001	1	SPIDER,104 mm BCD	N/A	N/A	N/A	
D	Spider Groove Nut	S166800011	1	Levo ISIS Groove Nut	ParkTool BBT-18 or Shimano TL-UN96	50	443	
E	Crank	VARIOUS		Carbon & Alloy 160 mm	8 mm hex	40	354	Compatible with Levo Gen2; 165 mm Cranks
F	Brose Cap Puller	S175300006	1		N/A	N/A	N/A	
G	O-Ring	S221600011	1	O-RING, 23.5 mm ID x 2.4 mm OD, Drive Side	Grease	N/A	N/A	

- 1: Remove the spider groove nut from the spindle.
- 2: Place the Brose cap puller over motor spindle
- 3: Locate the jaws of the 2-jaw puller under the spider with the screw tip located on the cap.
- 4: By turning the handle on the 2-jaw puller, slowly remove the spider from the spindle.

CRANK CARBON NDS 160 mm	S211600021	CRANK CARBON NDS 165 mm	S211600008
CRANK CARBON DS 160 mm	S211600020	CRANK CARBON DS 165 mm	S211600007
CRANK ALLOY NDS 160 mm	S211600019	CRANK ALLOY NDS 165 mm	S201600022
CRANK ALLOY DS 160 mm	S211600018	CRANK ALLOY DS 165 mm	S201600021



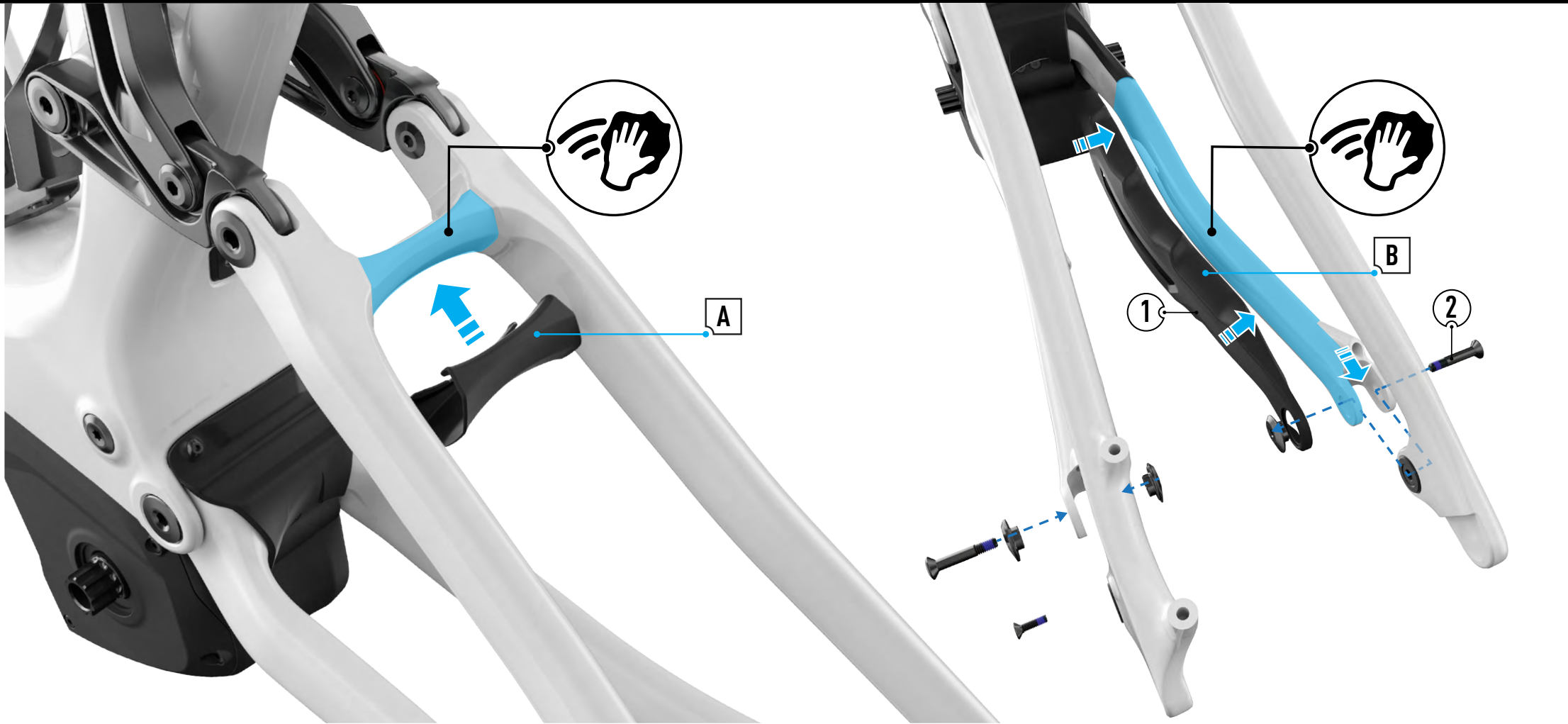
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Main Harness Bracket Bolts	S216500006	2	M4 x 12 mm x 0.7 mm, S-Steel	2.5 mm hex	4	35	
B	Main Harness Clamp		1		N/A	N/A	N/A	
C	Main Harness Bracket		1		N/A	N/A	N/A	
D	Main Harness	S216800018	1		N/A	N/A	N/A	Spare lever available S216800045
E	Non-Drive Side Cover	Part Of Kit S219900034	1		N/A	N/A	N/A	
F	Non-Drive Side Cover Bolts		5	M4 x 12 mm x 0.7 mm - Steel	3 mm hex	1	9	

MAIN HARNES CLAMP ASSEMBLY:

- Slide the clamp (B) over the main harness cable (D) and place it against the frame from the inside.
- Place the main harness bracket (C) on the outside and insert the mounting bolts from the inside (A), then torque to specification.

MOTOR COVER ASSEMBLY:

- Slide the leading edge of the motor cover (E) under the rim of the frame.
- Insert the screws (F) and then torque to specification



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Seatstay Bridge Protector	S219900036	1	PROTECTOR,SS,PA TRAIL FSR F1, PLASTIC	N/A	N/A	N/A	
B	Chainstay Protector	S206900006	1	CSP MY21 SJ EVO CARBON AND SJ ALLOY CHAINSTAY PROTECTOR	N/A	N/A	N/A	Shared with Stumpjumper Evo

SEATSTAY PROTECTOR ASSEMBLY:

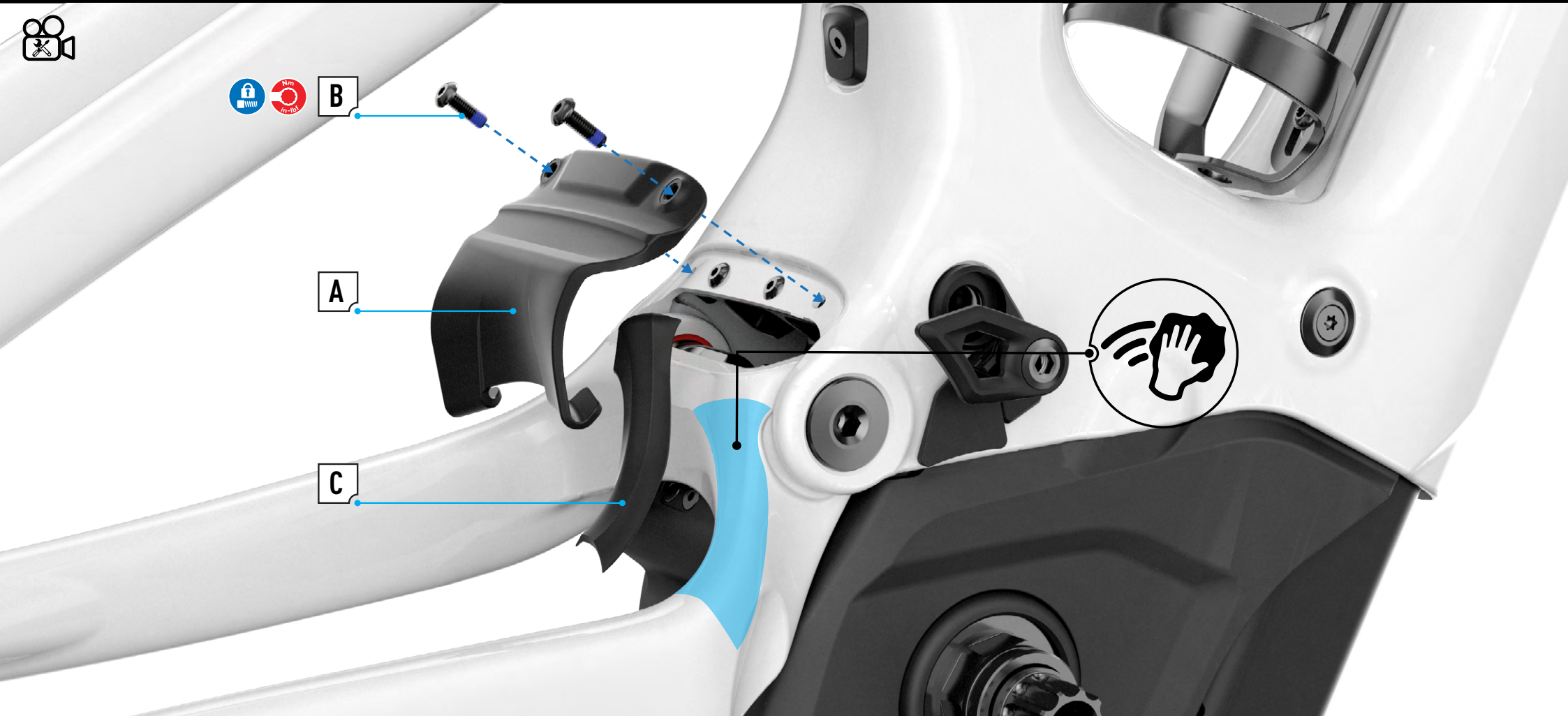
- Clean the seatstay bridge before assembling the protector, then clip the protector onto the bridge (A)

Chainstay Protector Assembly

This assembly keeps mud and debris from collecting in the gap between the main frame and chainstay.

- Clean the chainstay, then attach the chainstay protector to the drive side chainstay with the protector over the flip chip pivot hole (B).

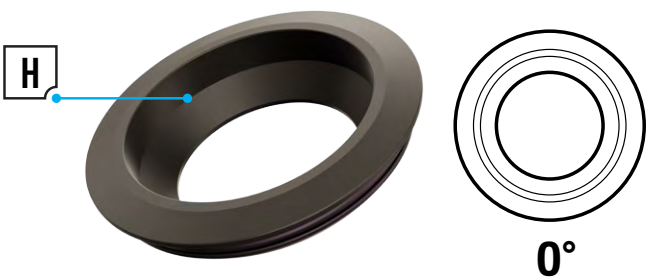
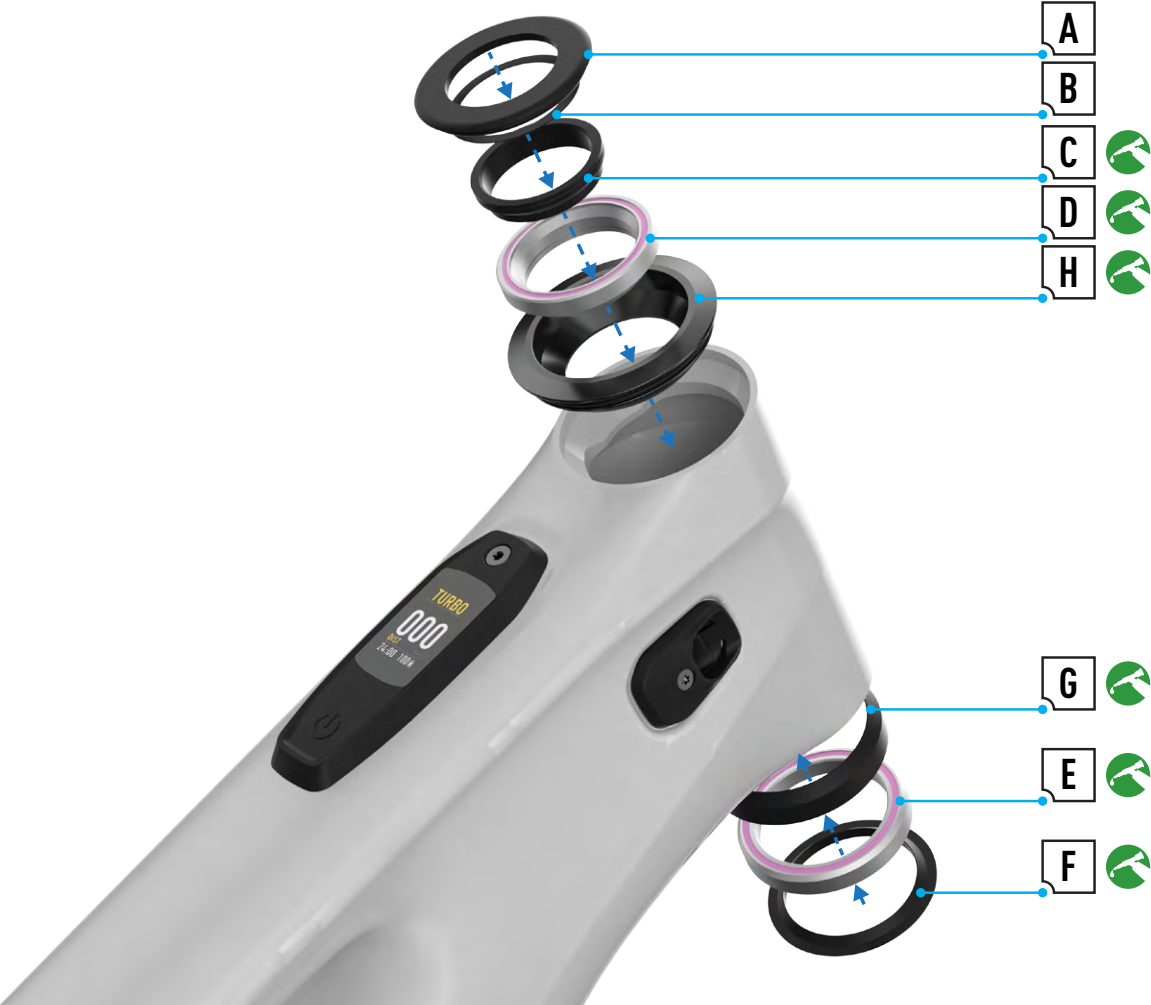
INFO: Always assemble the protector before assembling the horst pivot flip chips and bolts (2).



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Mud Flap	S219900035	1		N/A	N/A	N/A	
B	Mud Flap Bolt		2	M4 x 12 mm x 0.7 p S-Steel	2.5 mm hex	4	35	Use threadlock
C	Chainstay Protector		1		N/A	N/A	N/A	Clean chainstay before applying

MUDFLAP AND PROTECTOR ASSEMBLY:

- Clip the mud flap arms under the chainstay bridge and rotate the mud flap into position (A).
- Align the holes and insert the bolts (B), then tighten to specification.
- Clean the chainstay before installing the chainstay protector (C).



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Headset Cap	S182500005	1		N/A	N/A	N/A	<div><div><div>i</div><div>Make sure the head tube and headset cup are free of dirt and debris when changing the upper cup angle. Lubricate all the parts with high-quality waterproof grease.</div></div><div><div>i</div><div>The bottom headset cup is universal for all headset cups. The cup has a spherical interface with the head tube and will move with the angle of the steerer tube.</div></div></div>
B	Cone Spacer		1	Spring Steel	N/A	N/A	N/A	
B	Compression Ring		1		N/A	N/A	N/A	
D	Upper Bearing		1	1 1/8" (42 mm x 30.5 x 8 mm, 45°)	N/A	N/A	N/A	
E	Lower Bearing		1	1.5" (52 mm x 40 x 7 mm, 45°)	N/A	N/A	N/A	
F	Crown Race		1		N/A	N/A	N/A	
G	Lower Bearing Cup	S212500015	1	Spherical Adapter 1.5" 45° - 54 mm OD x 52 mm ID	N/A	N/A	N/A	
H	Upper Zero Offset Bearing Cup		1	Headtube Angle Adjust 0° 1-1/8" - 41.8 mm ID, 46 X 52.5	N/A	N/A	N/A	
I	Upper +/-1° Offset Bearing Cup		1	Headtube Angle Adjust 1° 1-1/8" - 41.8 mm ID, 46 X 52.5	N/A	N/A	N/A	

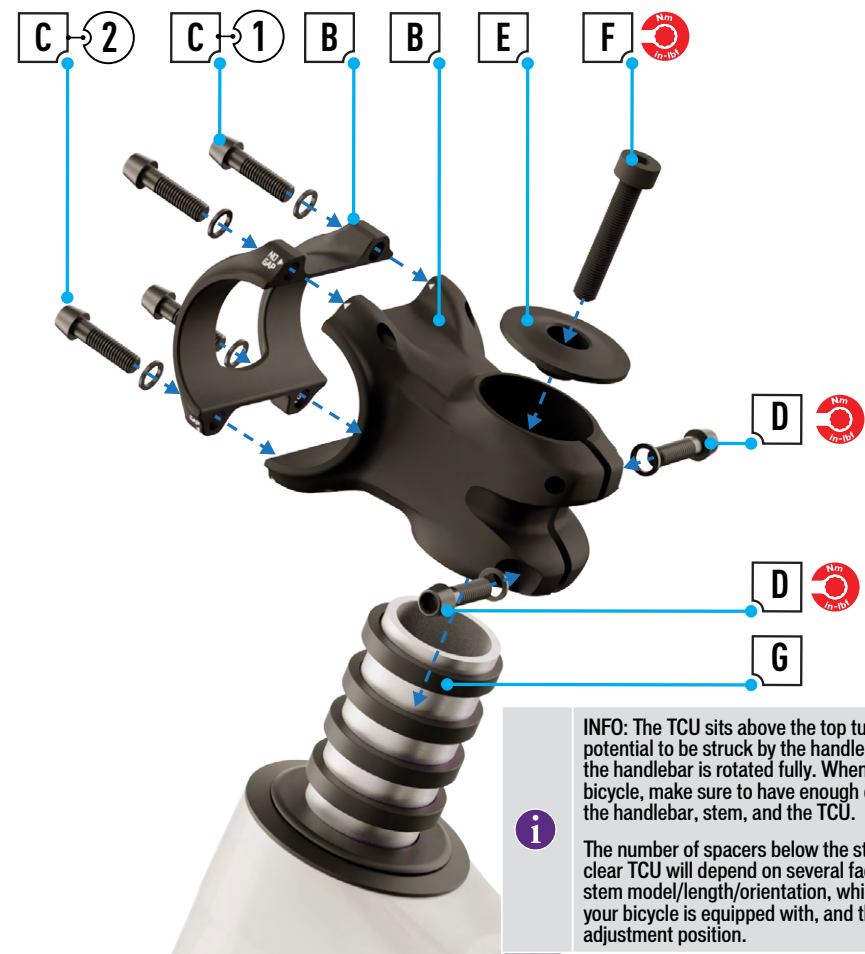
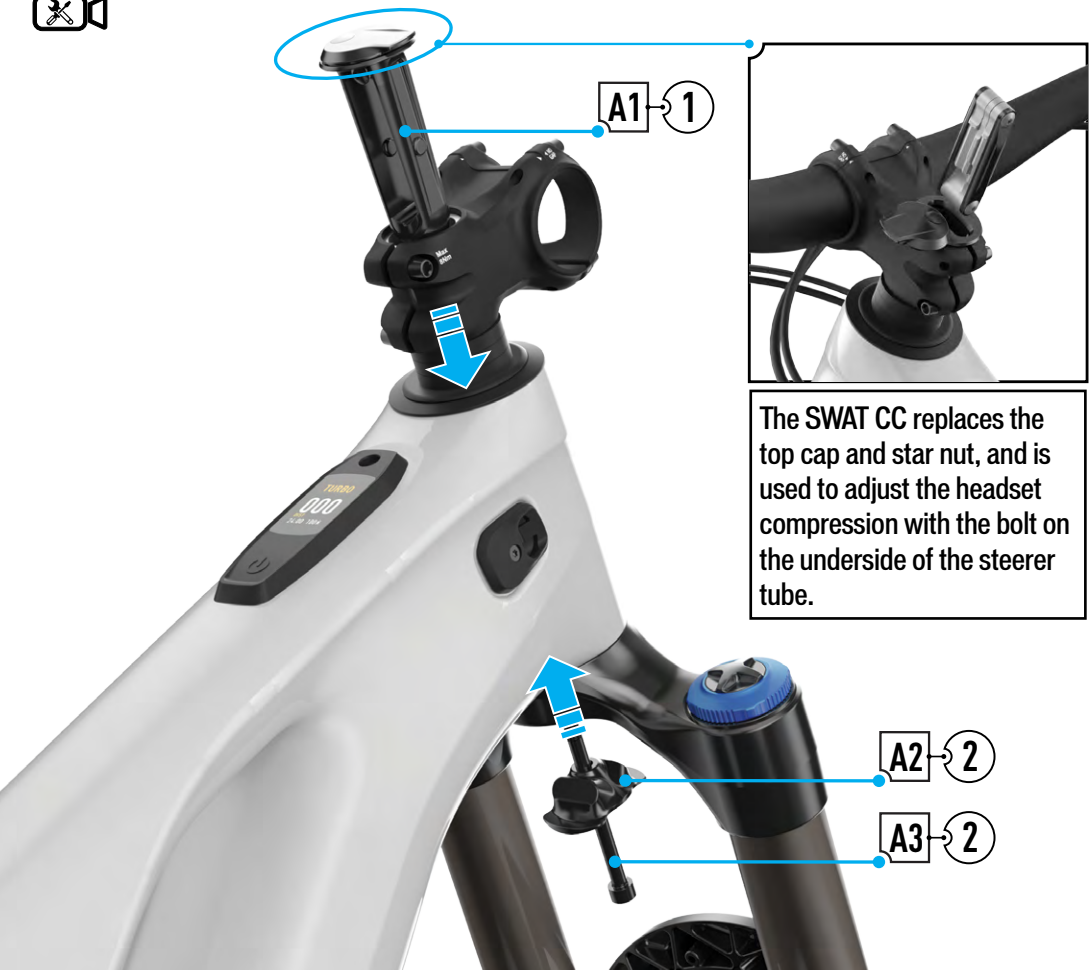


#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Lower Bearing Cup	S212500015	1	Spherical Adapter 1.5" 45° - 54 mm OD x 52 mm ID	N/A	N/A	N/A	NOT SHOWN
B	Upper Zero Offset Bearing Cup		1	Headtube Angle Adjust 0° 1-1/8" - 41.8 mm ID, 46 X 52.5	N/A	N/A	N/A	
C	Upper +/-1° Offset Bearing Cup		1	Headtube Angle Adjust 1° 1-1/8" - 41.8 mm ID, 46 X 52.5	N/A	N/A	N/A	

ADJUSTABLE HEADSET CUP REPLACEMENT.

- Remove the zero offset cup from the head tube and replace it with the +/- 1-degree headset cup.
- Install the headset parts, bearings, and cups into the frame.
- When aligning the headset cup, the etching facing the front of the bicycle indicates the desired setting.

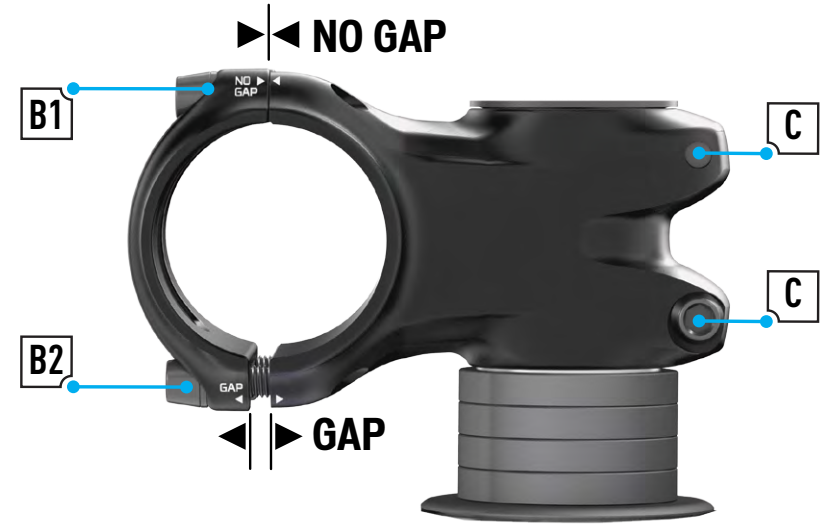
- i** Make sure the head tube and headset cup are free of dirt and debris when changing the upper cup angle. Lubricate all the parts with high-quality waterproof grease.
- i** All models are shipped with the zero offset cup installed. Switching the headset cup steepens or slackens the head tube angle by +/-1 degree.
- i** The bottom headset cup is universal for all headset cups. The cup has a spherical interface with the head tube and will move with the angle of the steerer tube.



i INFO: The TCU sits above the top tube and has the potential to be struck by the handlebar or stem when the handlebar is rotated fully. When assembling the bicycle, make sure to have enough clearance between the handlebar, stem, and the TCU.

The number of spacers below the stem necessary to clear TCU will depend on several factors. These include stem model/length/orientation, which TCU version your bicycle is equipped with, and the head tube angle adjustment position.

#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	SWAT™ Conceal Carry MTB Tool	LINK	1	90 mm S185300020 105 mm S185300016 120 mm S185300017	5 mm hex	N/A	N/A	On certain models only (S1/S2 90 mm S3 105 mm S4/S5 120 mm bolt)
B	Alloy Trail Stem		1	35 mm x 40 mm / 50 mm	N/A	N/A	N/A	S1 - S2 40 mm / S3 - S6 50 mm
C	Alloy Trail Stem Faceplate Bolt		4	M5 x 18 mm x 0.8 mm p / Includes Spring Washer	5 mm hex	6	53	
D	Alloy Trail Stem Steerer Bolt		2	M6 x 20 mm x 1 mm p / Includes Spring Washer	5 mm hex	8	71	
E	Top Cap		1		N/A	N/A	N/A	On certain models only
F	Top Cap Bolt		1		5 mm hex	N/A	N/A	
G	Headset Spacer		1	34 mm OD x 28.6 mm ID x 5 mm	N/A	N/A	N/A	
H	Stem Deity Coperhead (Not Shown)		1	Deity Stem, Copperhead, 35 mm / 50 mm	N/A	N/A	N/A	S1 - S2 35 mm / S3 - S6 50 mm
I	Stem Deity Coperhead Bolts (Not Shown)		4	M6 x 18 mm x 1.0 mm p	5 mm hex	4 - 6	35.5 - 53	



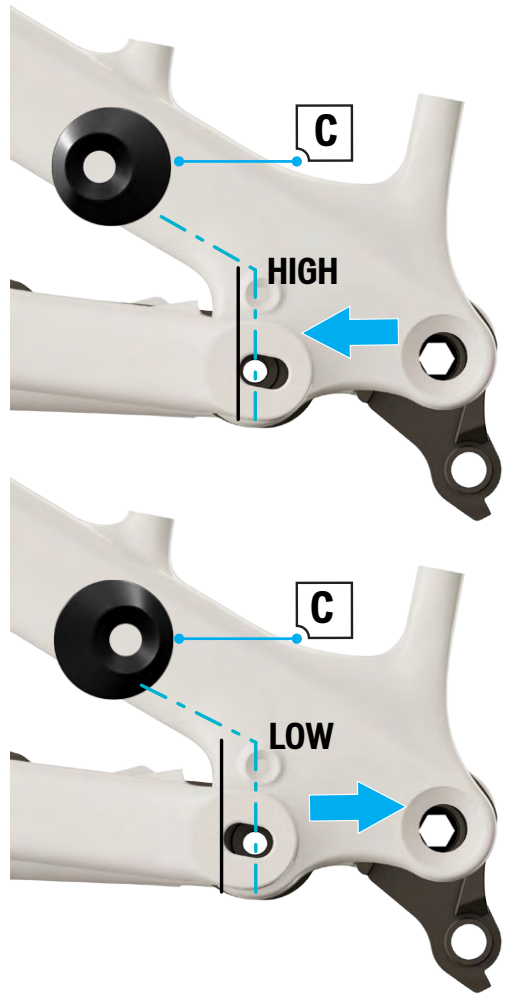
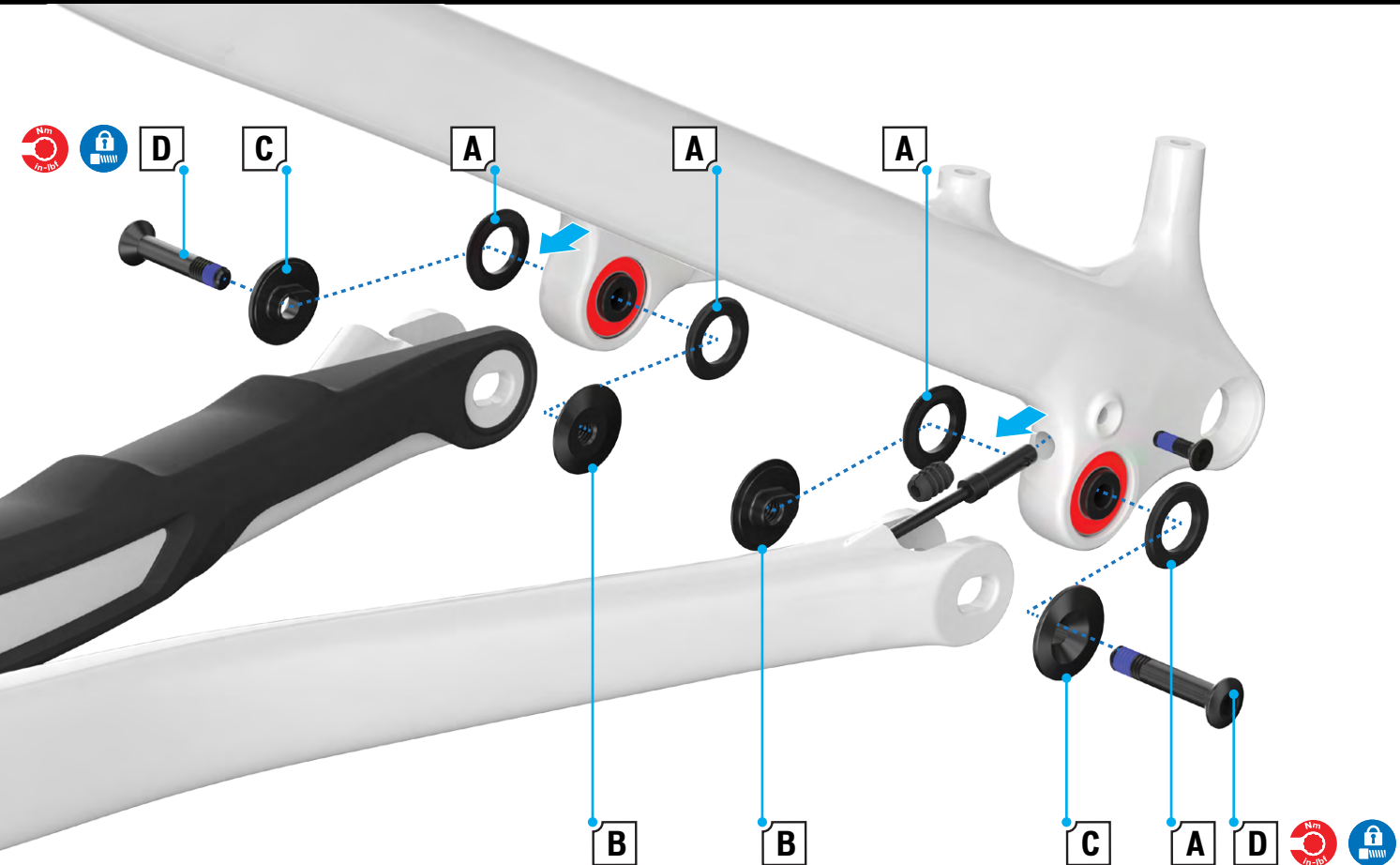
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
	Alloy Trail Stem		1	35 mm x 40 mm / 50 mm	N/A	N/A	N/A	S1 - S2 40 mm / S3 - S6 50 mm
A	Alloy Trail Stem Steerer Bolt		2	M6 x 20 mm x 1 mm p / includes spring washer	5 mm hex	8	71	
B	Alloy Trail Stem Faceplate Bolt		4	M5 x 18 mm x 0.8 mm p / includes spring washer	5 mm hex	6	53	

Some Levo models are equipped with an Alloy Trail Stem.

WARNING! The stem is designed with no gap between the stem body and the faceplate at the upper bolt area. The upper bolts must be tightened such that the faceplate bottoms out against the stem body before being torqued. Failure to bottom out the faceplate against the stem body can result in structural damage to the handlebar.

- Install the stem on the steerer tube, followed by the top cap and bolt (A), then tighten the top cap bolt.
- Align the stem with the front wheel and torque the rear stem bolts (A) to specification.


- Loosely thread the stem bolts through the faceplate and into the stem body.
- 1: Position the handlebar in the desired position and gradually torque the upper bolts (B1) to specification alternating from the left to right the right bolt, so as to evenly increase the torque until the specification is reached.
- 2: Gradually torque the lower bolts (B2), alternating from the left to the right bolt, so as to evenly increase the torque until the specification is reached.
- Check that the handlebar is installed correctly by rotating the handlebars up and down, then twisting the handlebar side to side while holding the front wheel. If there is any movement, the stem is not sufficiently tightened and should be re-torqued.




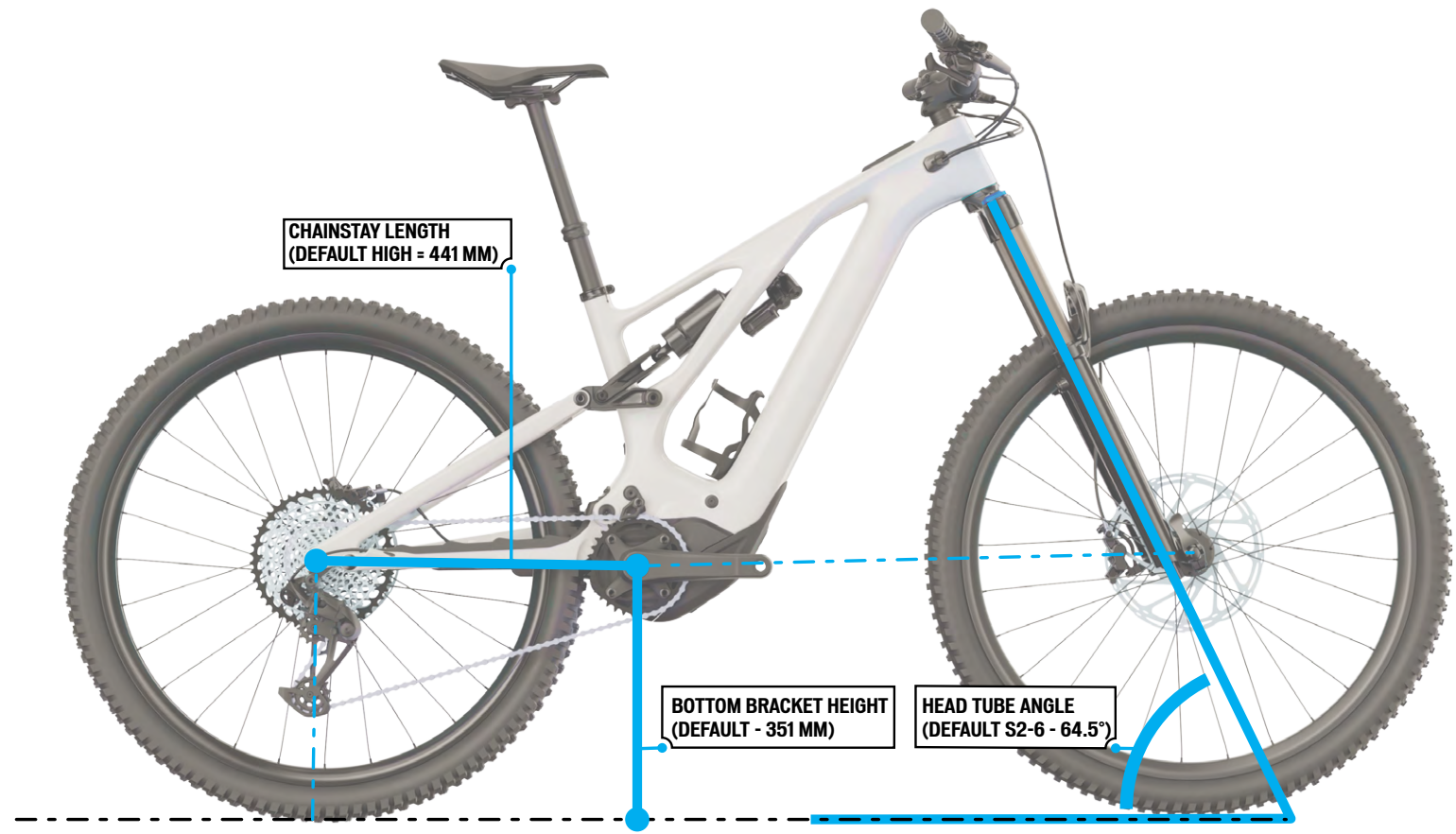
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Pivot Spacers	Part Of Suspension Bolt Kit S210500012	4	12 mm ID x 21 OD mm x 2.5 mm thk	N/A	N/A	N/A	
B	Geo Adjust Pivot Spacer Nut		2	Inside Spacer M6 x 1.0 mm p	N/A	N/A	N/A	
C	Geo Adjust Pivot Space		2	Outside Spacer 6mm ID	N/A	N/A	N/A	
D	Pivot Bolt		2	M6 x 32.5 mm x 1.0 mm p Steel BLK	5 mm hex	10	90	

INSTALLATION PROCESS:

- Place the pivot spacers against the bearing with the tapered side against the bearing.
- Align the chainstay pivot hole with the seatstay pivot hole.
- Insert the flip chips located in either the high or low position.
- Grease the non-threaded surfaces of the bolts, insert them, then torque to specification.

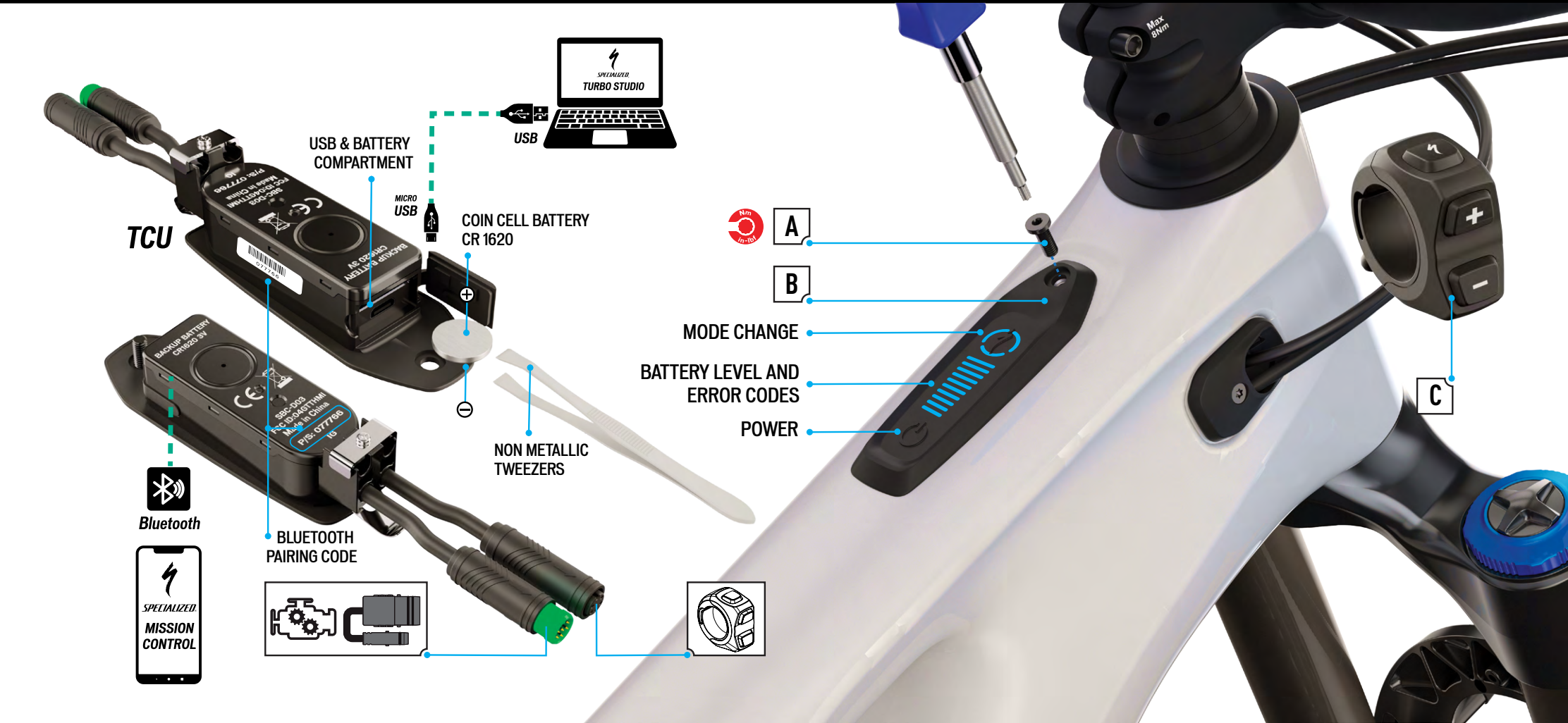
**WARNING:** The drive side and non-drive side Horst flip chips must both be aligned in the same high or low position. Improperly installed Horst flip chips can damage the frame and can also cause you to lose control and fall.

**Info:** All models are assembled with the flip chips in the high position. Switching to the low position lowers the bottom bracket height by approximately 7 mm and slackens the head tube angle by approximately 0.5 degrees.



i This table reflects head angle values and bottom bracket heights, as a result of different flip chip/head set cup(s) configurations. Note that these are rounded values which vary slightly with frame size.

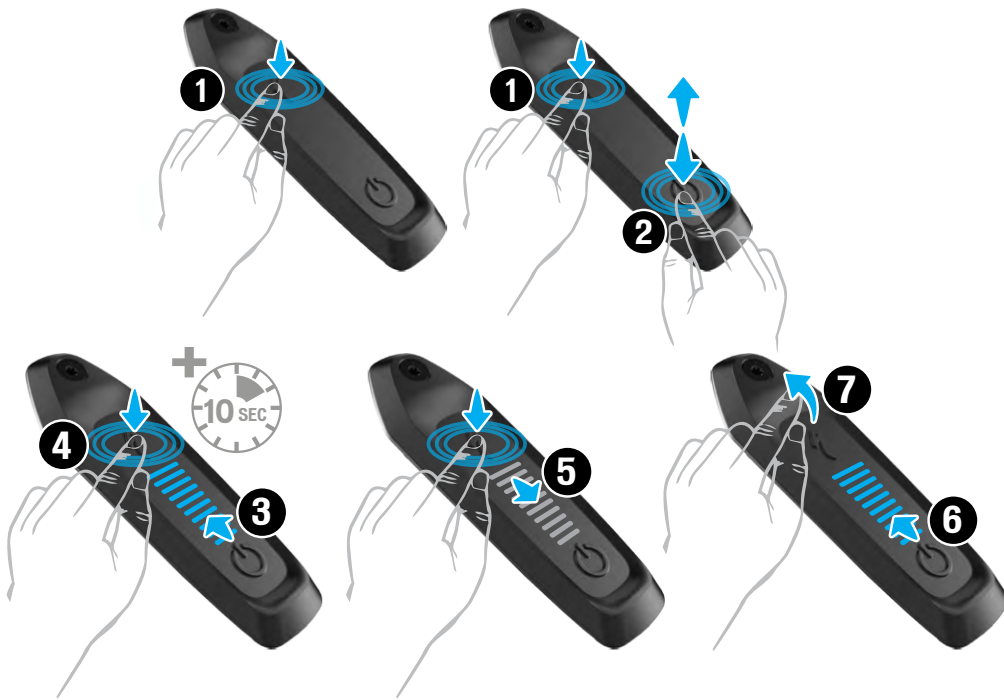
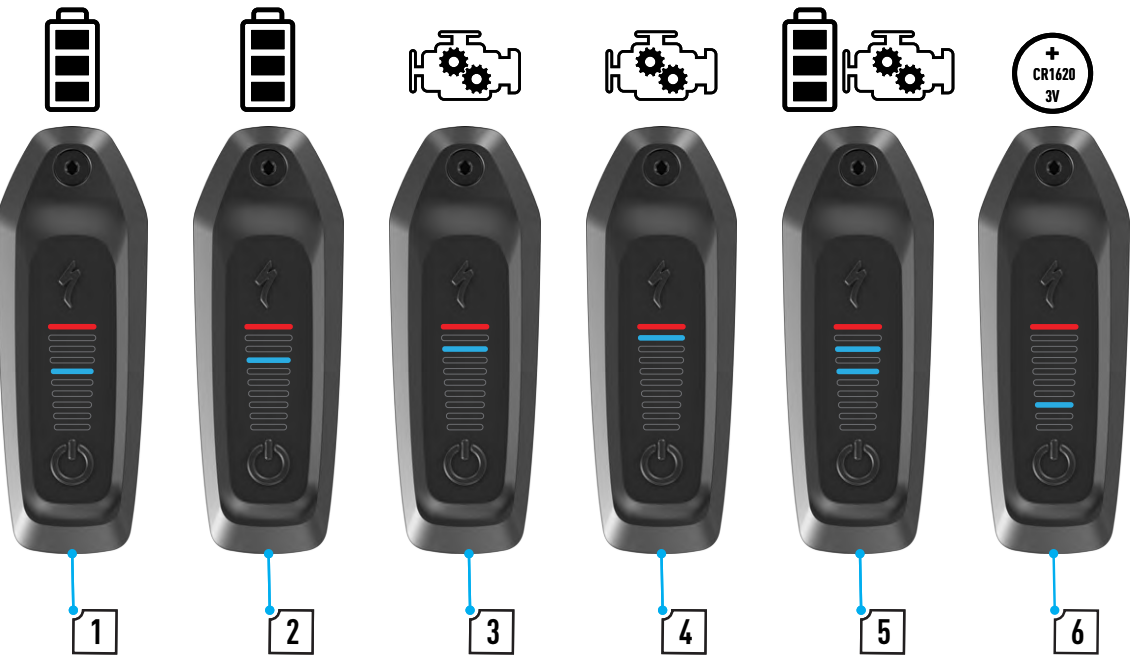
FLIP CHIP @ HORST LINK /DROPOUT	HEADSET CUP		
	NEUTRAL	(+) 1°	(-) 1°
High / Short (WB)	Head Tube Angle: Approx. 64.5° (Default) Bottom Bracket Height: Approx. 350 Mm (Default)	Head Tube Angle: Approx. 65.5° Bottom Bracket Height: Approx. 352 Mm	Head Tube Angle: Approx. 63.5° Bottom Bracket Height: Approx. 348 Mm
Low / Long (WB) (- 0.5° Head Tube Angle)	Head Tube Angle: Approx. 64° (Default) Bottom Bracket Height: Approx. 343 Mm (Default)	Head Tube Angle: Approx. 65.5° Bottom Bracket Height: Approx. 352 Mm	Head Tube Angle: Approx. 63.5° Bottom Bracket Height: Approx. 348 Mm



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
1	Turbo Connect Unit (TCU) Screw	S216800009	1	M4 x 10 mm 0.7 mm P Torx	T10 Torx	0.8	7	DO NOT OVERTIGHTEN MAX 0.8 Nm. (Optional Replacement Screw S210500022)
2	Turbo Connect Unit (TCU)		1	ELE TURBO CONNECT UNIT DISPLAY (A1.2) WITH GITEKI MARK	N/A	N/A		Update firmware via USB data cable and Turbo Studio.
3	Turbo Connect Battery		1	CR 1620	N/A	N/A		Replacement battery: CR 1620, remove with a non metallic tweezers.
4	Trail Remote	S216800019	1		2 mm hex	0.8	7	DO NOT OVERTIGHTEN MAX 0.8 Nm (Use mm TCU 2 remote as replacement)

CAUTION: The TCU sits above the top tube and has the potential to be struck by the handlebar or stem when the handlebar is rotated fully. When assembling the bicycle, make sure to have enough clearance between the handlebar, stem, and the TCU.

The number of spacers below the stem necessary to clear TCU will depend on several factors. These include stem model/ length/orientation, which TCU version your bicycle is equipped with, and the head tube angle adjustment position.

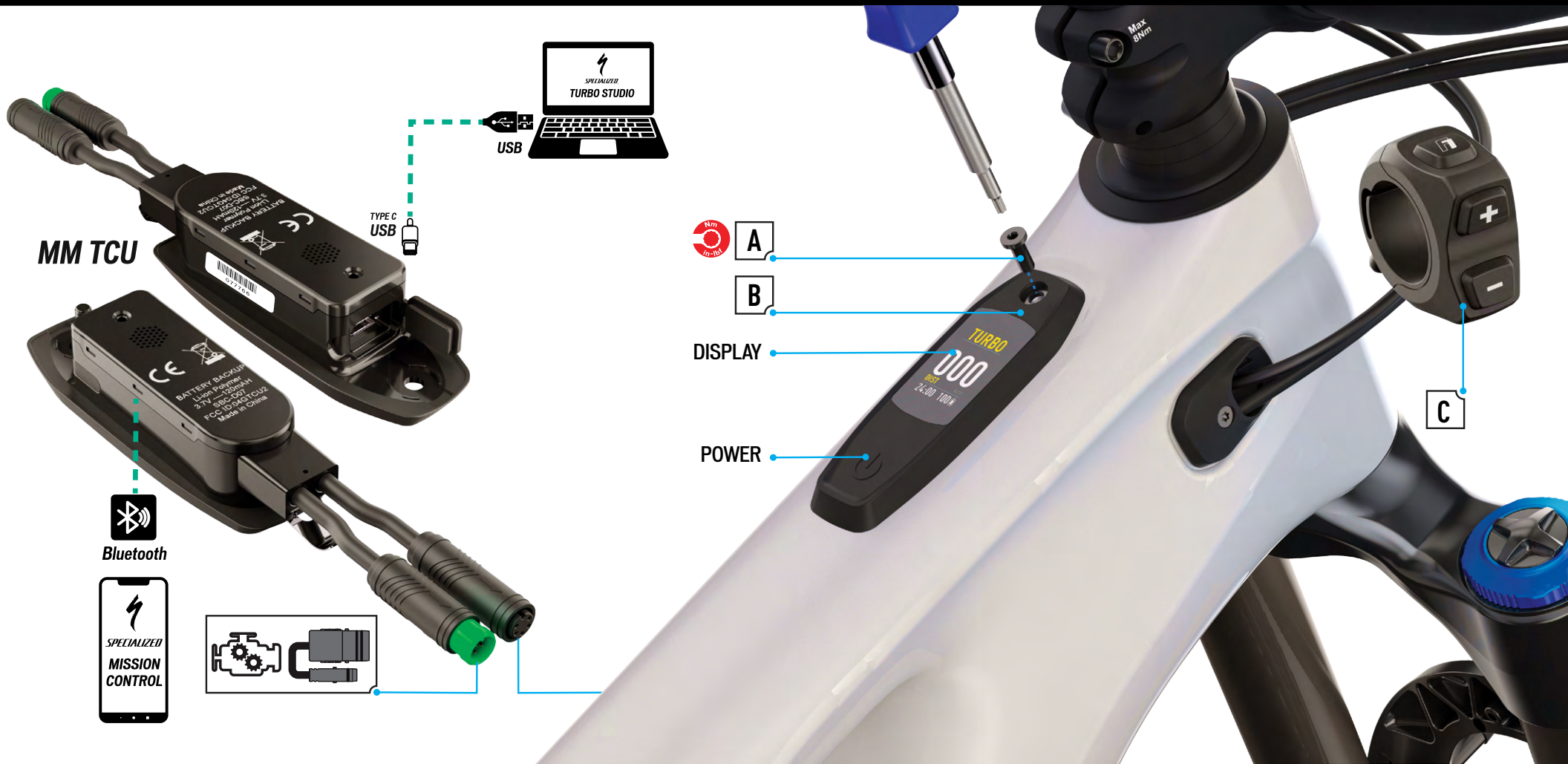


#	PART NAME	RIDER ACTION
1	Battery error	SEE APP For Error Codes 1-4 try the following solutions. <ul style="list-style-type: none">• Reboot your bicycle.• Check Mission Control App for more information.• If the problem persists, contact your Authorized Specialized Retailer.
2	Battery not found	
3	Motor error	
4	Motor not found	
5	Battery & motor error	SEE APP - Contact your Authorized Specialized Retailer.
6	TCU coin cell battery low	SEE APP - Replace the coin cell battery in the TCU.
7	Range extender error	SEE APP - • Check the RE plug is inserted correctly into the charge port and locked. • Disconnect the Range Extender and check for water in the plug. • If the problem persists, contact your Authorized Specialized Retailer. • Check the RE LED indicator for errors.

FACTORY RESET PROCESS

A factory reset should be performed before a new or used bicycle is handed over to a new rider. Factory Reset restores the system to factory Settings, also clearing and resetting previous BLE pairings.

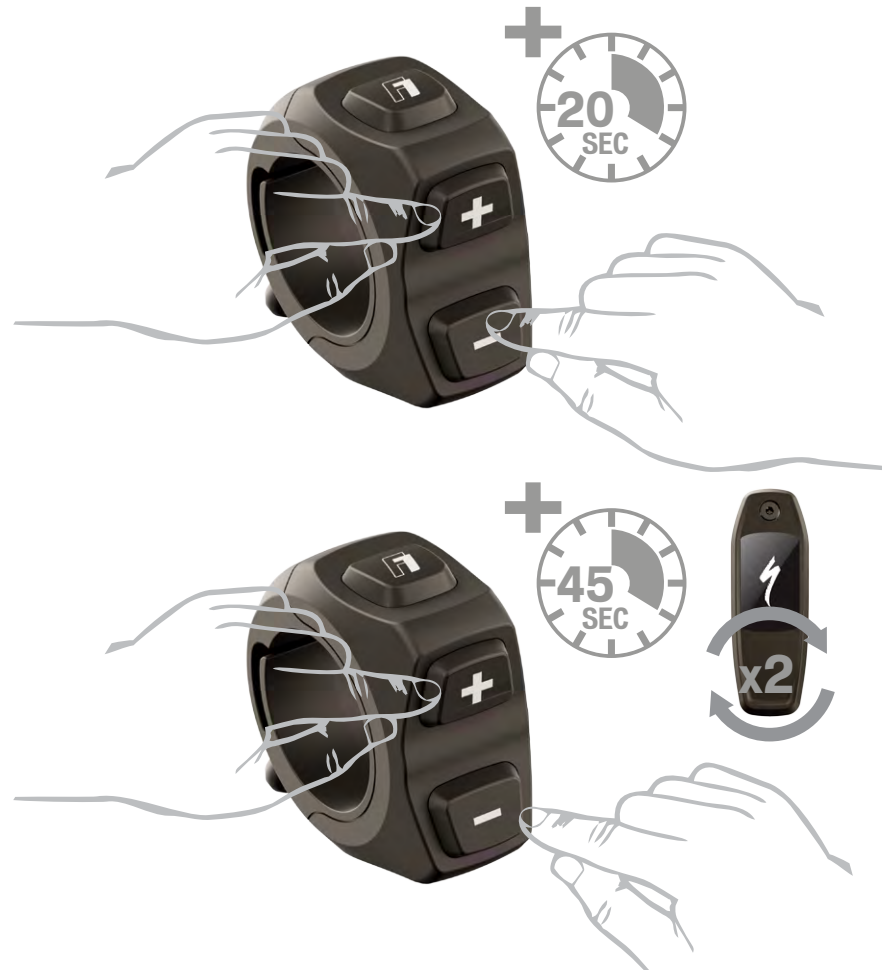
- Long-press the Mode button (1).
- Press and release the Power button (2) while continuing to press the Mode button (1). LEDs will light up (3).
- Continue to long-press the Mode button for 10 seconds (4) until the LEDs turn off (5) then turn back on (6).
- Release the Mode button (7).



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Display Mounting Screw	S216800020	1	M4 x 10 mm 0.7 mm P Torx	TX 10	0.8	7	DO NOT OVERTIGHTEN MAX 0.8 Nm. (Optional Replacement Screw S210500022)
B	MasterMind TCU		1		N/A	N/A	N/A	Update Firmware Via Type C USB Data Cable And Turbo Studio.
C	MasterMind Trail Remote	S216800019	1		2 mm hex	0.8	7	DO NOT OVERTIGHTEN; MAX 0.8 Nm

CAUTION: The TCU sits above the top tube and has the potential to be struck by the handlebar or stem when the handlebar is rotated fully. When assembling the bicycle, make sure to have enough clearance between the handlebar, stem, and the TCU.

The number of spacers below the stem necessary to clear TCU will depend on several factors. These include stem model/length/orientation, which TCU version your bicycle is equipped with, and the head tube angle adjustment position.



MasterMind TCU equipped models have a built-in diagnostic system to automatically check and identify the functionality of the system. If the system detects an error, the MasterMind TCU will show the error on the display. In some cases, the error message can be dismissed by pushing any button on the remote.

Depending on the type of error message, the system may be switched off automatically. If you receive an error message, please restart the system. If the error message continues to display, please contact your Authorized Specialized Retailer for further instructions. In any case, the bicycle can be ridden without motor support with the system turned off.

Mission Control supports the rider with User Actions for errors and diagnostic reports which can be shared with retailers who can give further advice based on the bicycle serial number.

MASTERMIND TCU RESET PROCESS:

Standard Reset

Standard reset is the first troubleshooting step if an odd bike or display behavior occurs, such as failing to connect to MC after a previously successful connection.

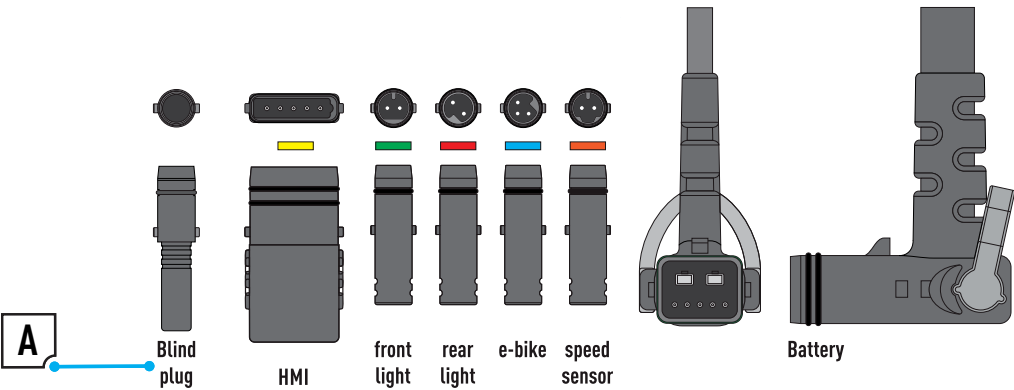
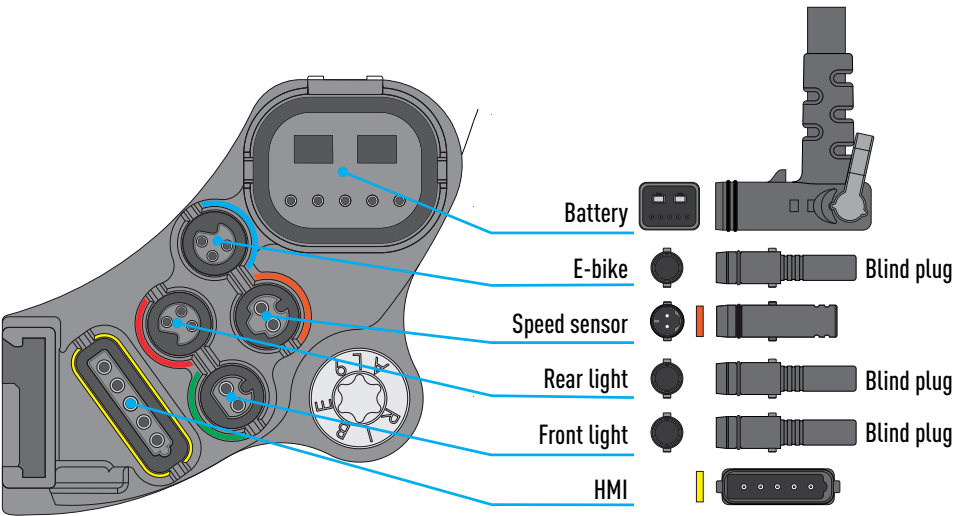
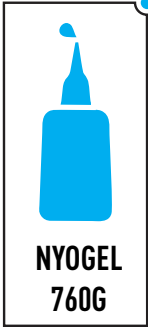
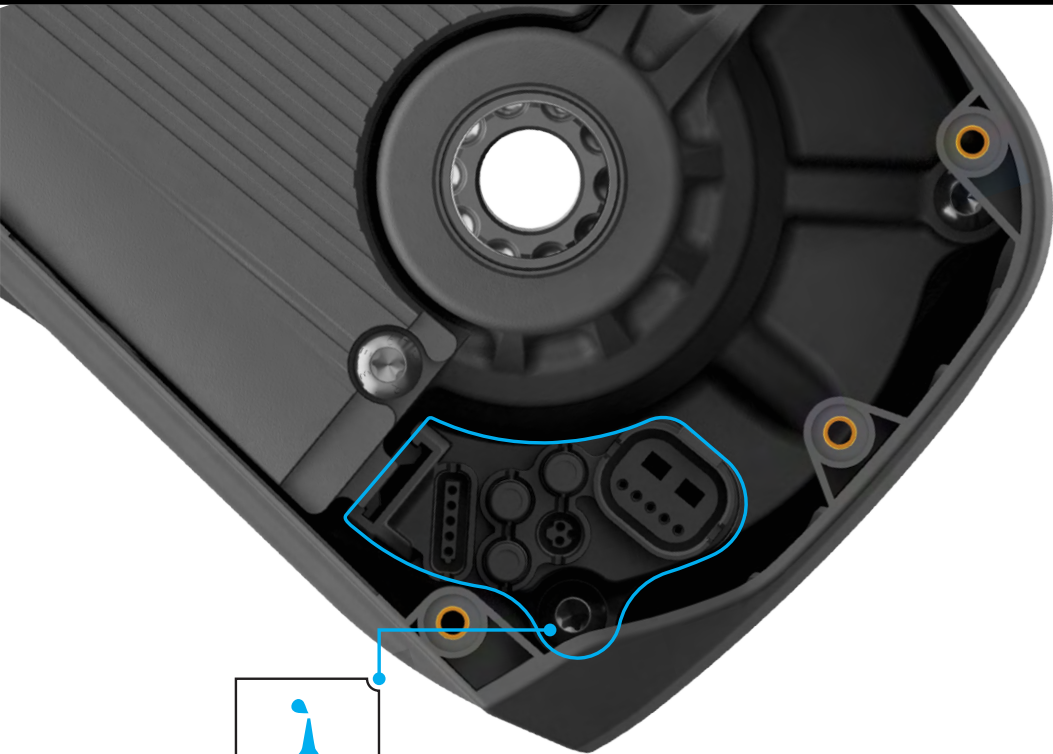
Standard reset restores the default Tune settings, including Acceleration Response and Shuttle.

- Dual press and hold the (+) and (-) buttons for 20 seconds.
- Release the buttons when the MasterMind TCU reboots.


Factory Reset


A factory reset should be performed before a new or used bicycle is handed over to a new rider. Factory Reset restores the system to factory Settings, also clearing and resetting previous BLE pairings.

- Dual press and hold the (+) and (-) buttons for 45 seconds. During this process, the MasterMind TCU will reboot twice.
- Release the buttons when the MasterMind TCU reboots for the second time.

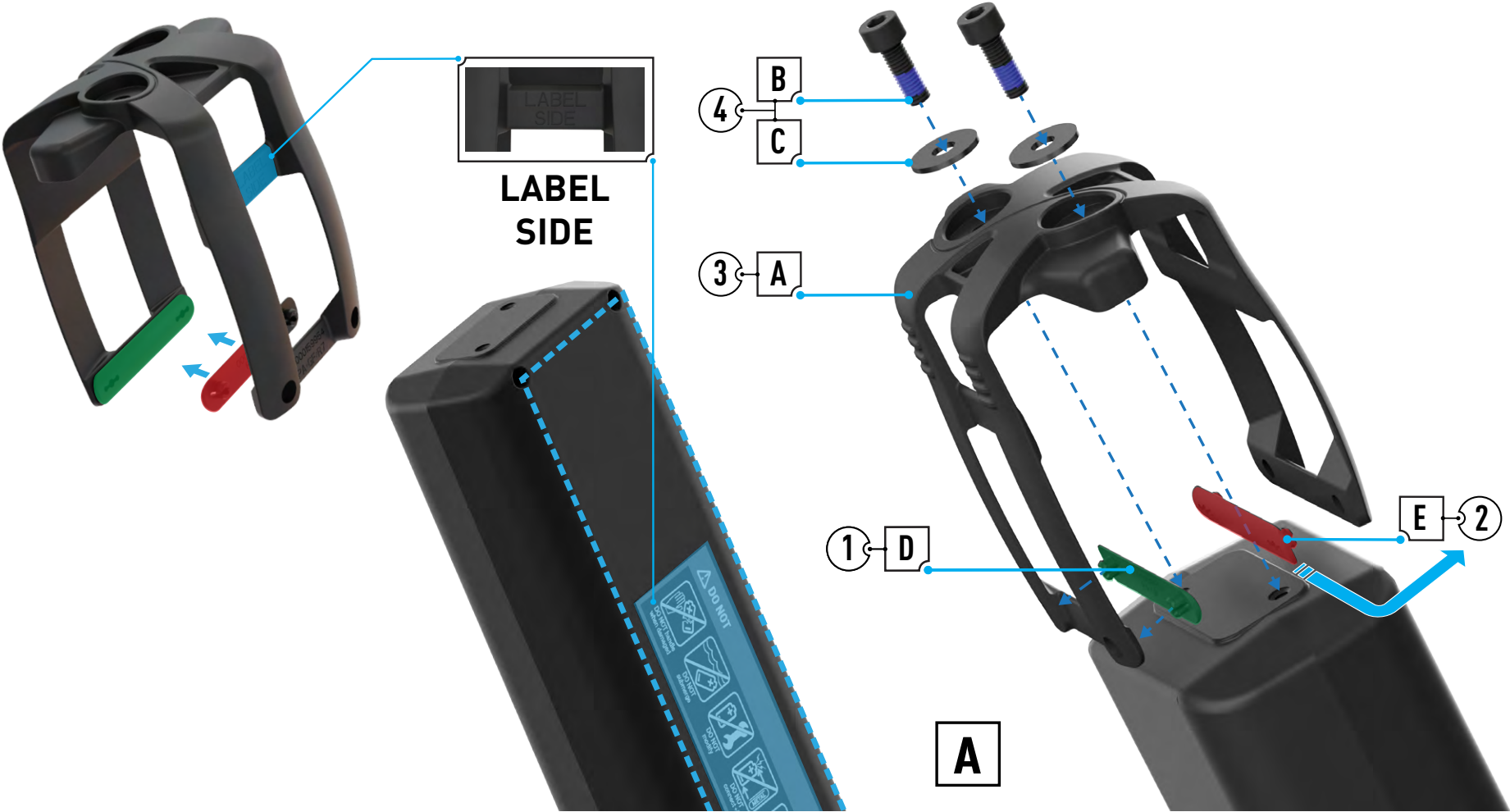


#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Blind Plug	S216800024	1		N/A	N/A	N/A	
B	Motor	S196800005	1	Specialized 2.2	N/A	N/A	N/A	This is a shared motor between Gen. 2 and Gen. 3 Levo

- 

It is also recommended that Nyogel 760G (special electrical contact grease) be applied to all ports at the motor.
- 

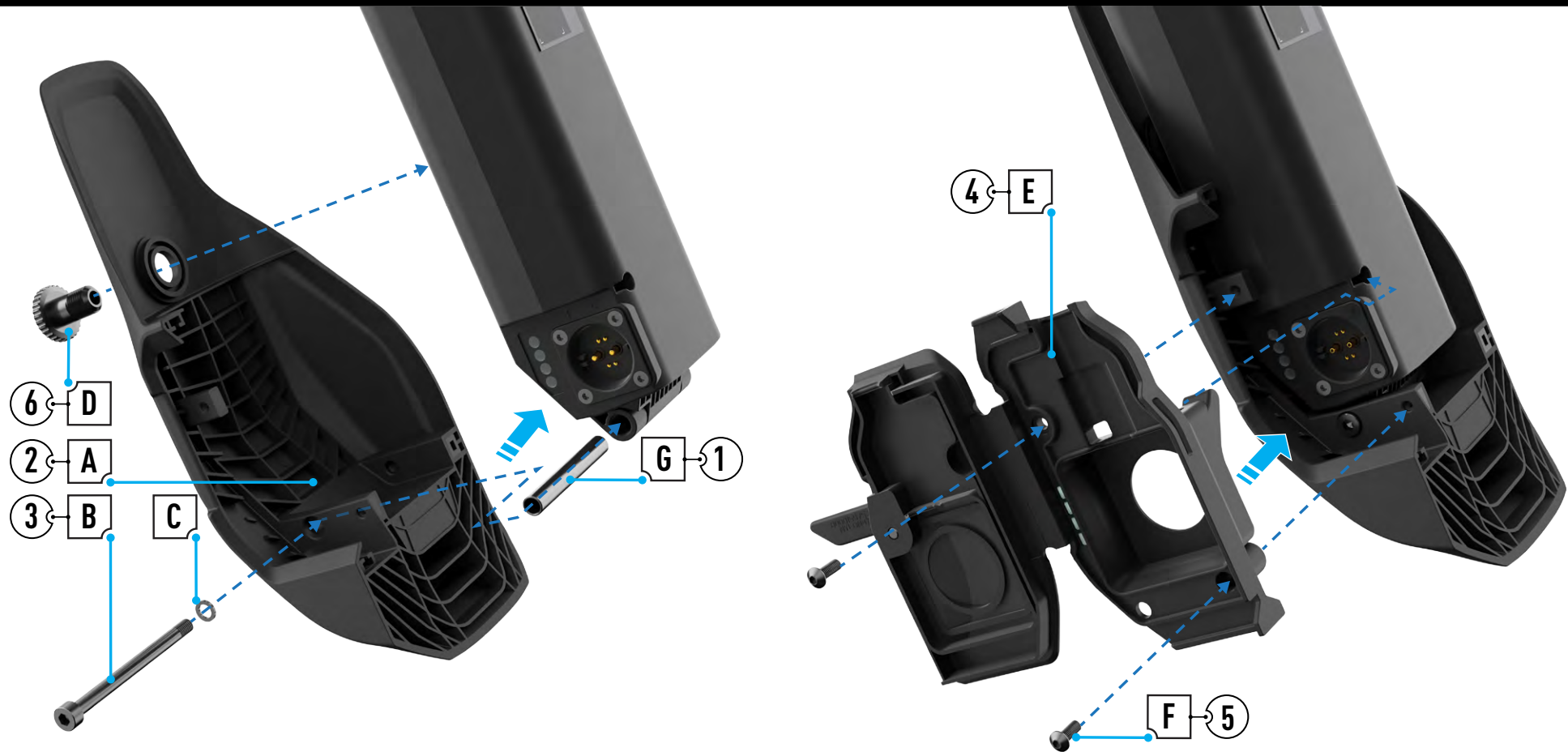
CAUTION: Make sure all ports not used are sealed with a blind plug.



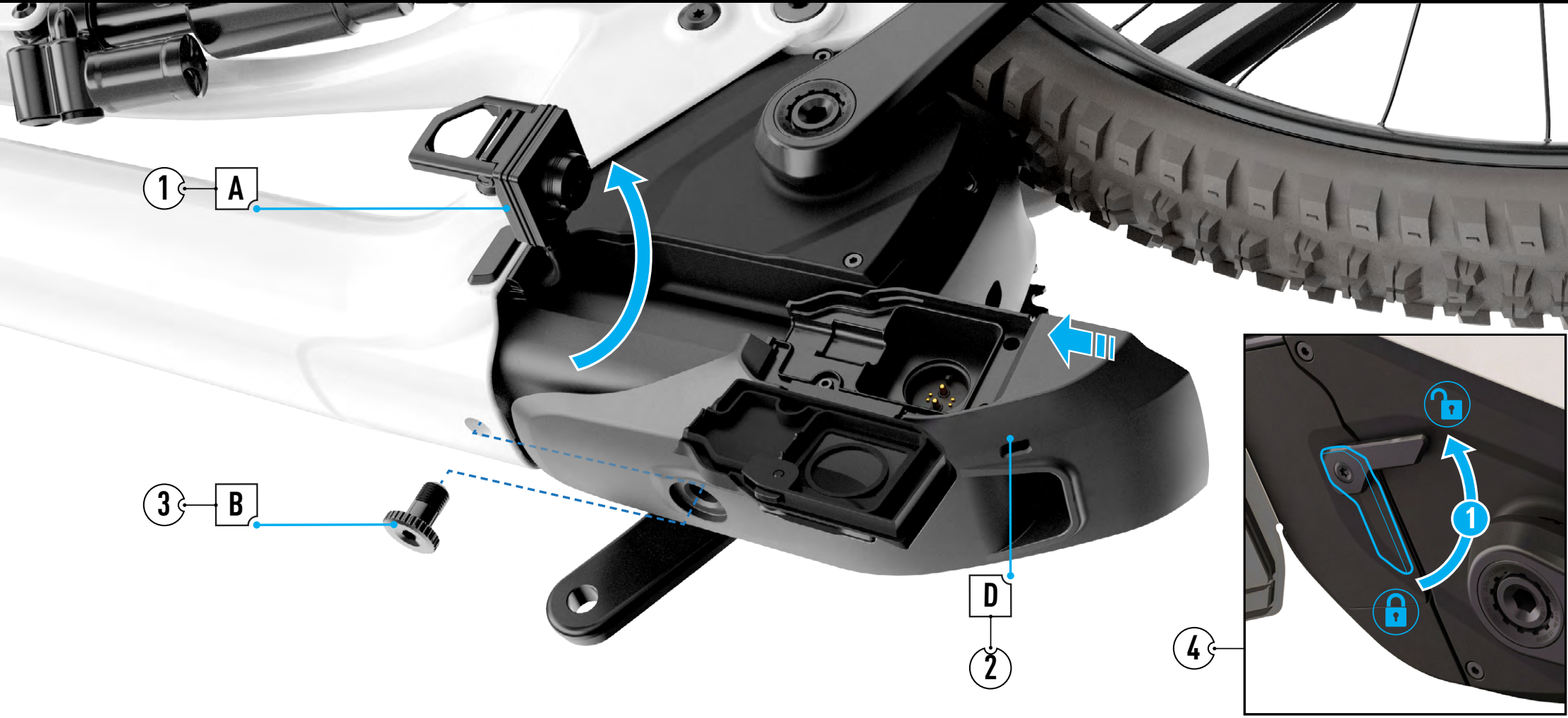
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
A	Battery Expander	S214200032	2		N/A	N/A	N/A	
B	Battery Expander Bolt		2	M5 x 14 mm x 0.8 mm alu	4 mm hex	4	35	
C	Battery Expander Washer		1	M5 x 5.2 mm ID x15 mm OD x 1.25 thk alu	N/A	N/A	N/A	
D	Battery Expander Spacer Lower	S224200009	1		N/A	N/A	N/A	SEE BELOW
E	Battery Expander Spacer Upper		1		N/A	N/A	N/A	SEE BELOW

The spacers (D & E) are used to ensure a good fit inside the frame. The Levi is supplied standard with the lower spacer (D) installed in the factory. Frame thicknesses may vary, and the second spacer (E) can be used to ensure a tighter fit in the frame. The upper spacer (E) can be found in the small parts box supplied with your bicycle.

Make sure to reinstall the expander correctly positioned with the lable side of the expander on the lable side of the battery.



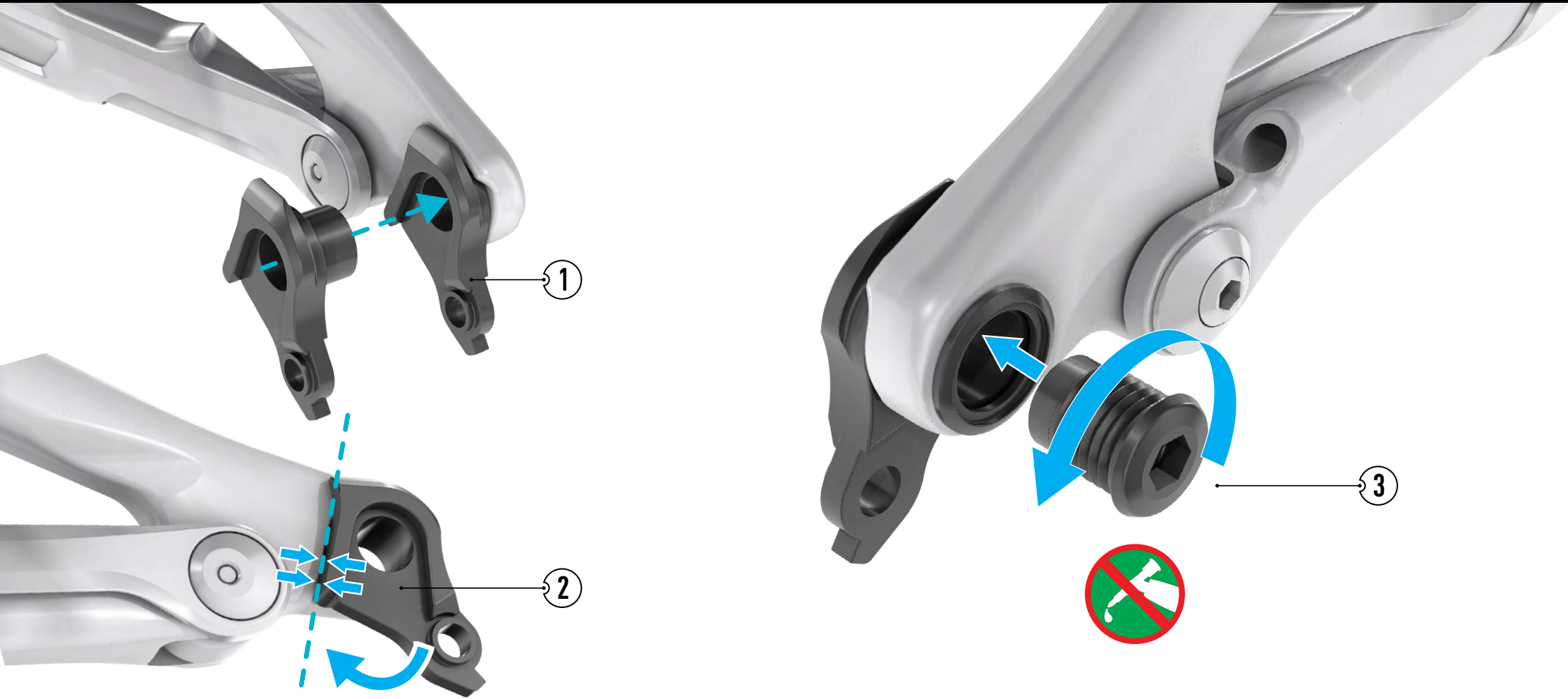
#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-Lbf	
A	Rock Guard	S214200033	1		N/A	N/A	N/A	ROCK GUARD AND CHARGE PORT DOOR ASSEMBLY PROCESS: ■ 1: Insert the battery sleeve into the hole at the base of the battery. ■ 2: Assemble the rock guard onto battery. ■ 3: Insert the rock guard mouting bolt and washer, then torque to specification. ■ 4: Assemble the battery door on the battery making sure it is located in the hole on the top of the battery. ■ 5: Insert the battery screws and torque to specification. NOTE: The lower battery screw will need a 3 mm long reach hex bit to torque the bolt correctly. Battery bolt is available as a standalone part S220500003
B	Rock Guard Mouting Bolt		1	M5 x 65 mm x 0.8 mm p,Alu	3 mm hex	3	26	
C	Rock Guard Mouting Washer		1	M5 x 5.2 mm ID x 8 mm OD x 1 mm Thk, Alu	N/A	N/A	N/A	
D	Battery Bolt		1	M12 x 20 mm x 1.25	6 mm hex	6.2	177	
E	Charge Door		1	Charger Door Kit: S216800026	N/A	N/A	N/A	
F	Charge Door Bolts		2	M3 x 8 mm x 0.5 mm p - S-Steel	2.5 mm hex	0.8	7	
G	Battery Sleeve		1		N/A	N/A	N/A	
H	Battery	98921-5614	1	700 Wh (Includes Rock Guard)	N/A	N/A	N/A	




#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-Lbf	
A	Main Harness	S216800018	1		N/A	N/A	N/A	
B	Battery Bolt	S220500003	1	M12 x 20 mm x 1.25 mm p, ALLOY	6 mm hex	6.2	177	
C	Battery Door Kit	S216800026	1		2.5 mm hex	0.8	7	
D	Battery	98921-5614	1	700 Wh (Includes Rock Guard)	N/A	N/A	N/A	The Gen. 2 Levo 500Wh battery (98919-5611) is compatible with Gen. 3 Levo bicycles for riders wanting a lighter battery.

CAUTION: Installation or removal of the battery should be done with the bicycle on a repair stand so the battery can slide out at the bottom. Alternatively, if a repair stand is not available, the bicycle can be carefully placed on its side or turned upside down. If placed on its side, the bicycle should be on even ground and leaned toward the non-drive side. Due to its increased weight, turning the bicycle upside down may require more effort than with a regular bicycle. Be careful not to damage any components when turning the bicycle. Place it on soft ground or protective material.


- REMOVAL AND INSTALLATION PROCESS:**
- 1: Move the main harness (A) out of the way before inserting the battery (D).
 - 2: Slide the battery/rock guard assembly into the frame. Be careful not to drop the battery as this may damage the battery.
 - 3: Insert the battery mounting screw (B) in the rock guard using a 6 mm hex key, then torque to specification
 - 4: Close the charge port door (C) on the non-drive side of the battery near the motor housing then lock the door.



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
	SRAM Universal Derailleur Hanger	S202600002	1		8 mm hex	25	221	




WARNING! Correct grease application is critical to rider safety. **ONLY** apply grease as instructed.



The hanger must be completely seated in the hanger pocket or against the frame stop tab when tightened to the specified torque.


INSTALLATION PROCESS:

- 1: Install the UDH hanger assembly into the frame dropout.
- 2: Rotate the UDH hanger forward until it is completely seated in the hanger pocket or contacts the rotational stop tab.



Apply grease **ONLY** to the thru-axle threads. Do **NOT** apply grease to the frame, UDH hanger, or UDH bolt threads.

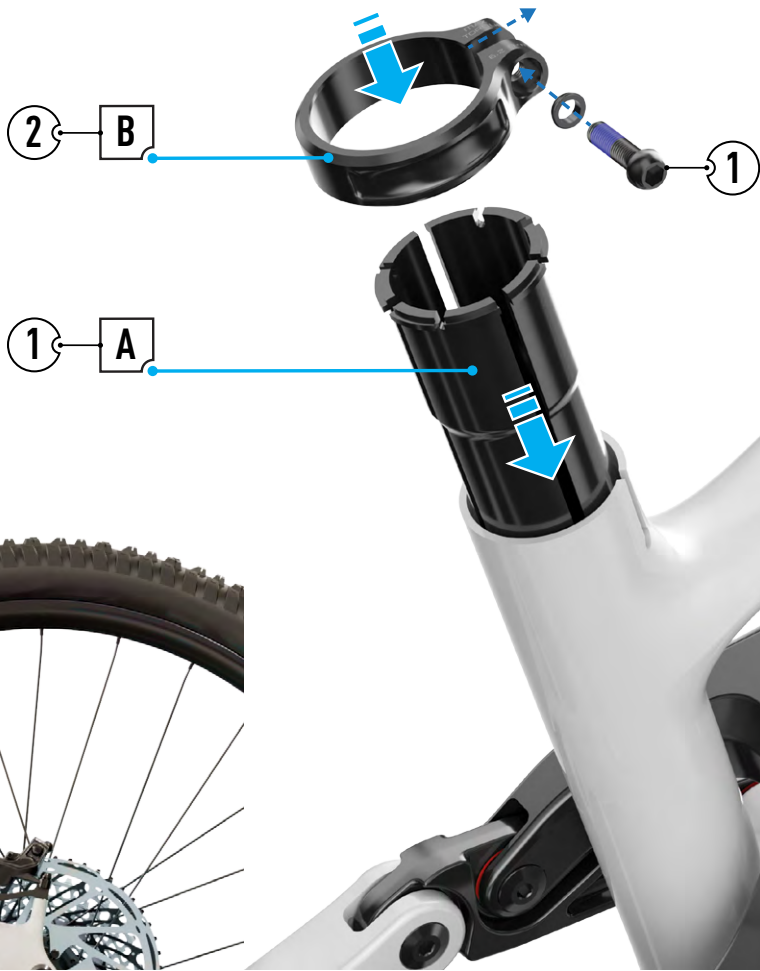
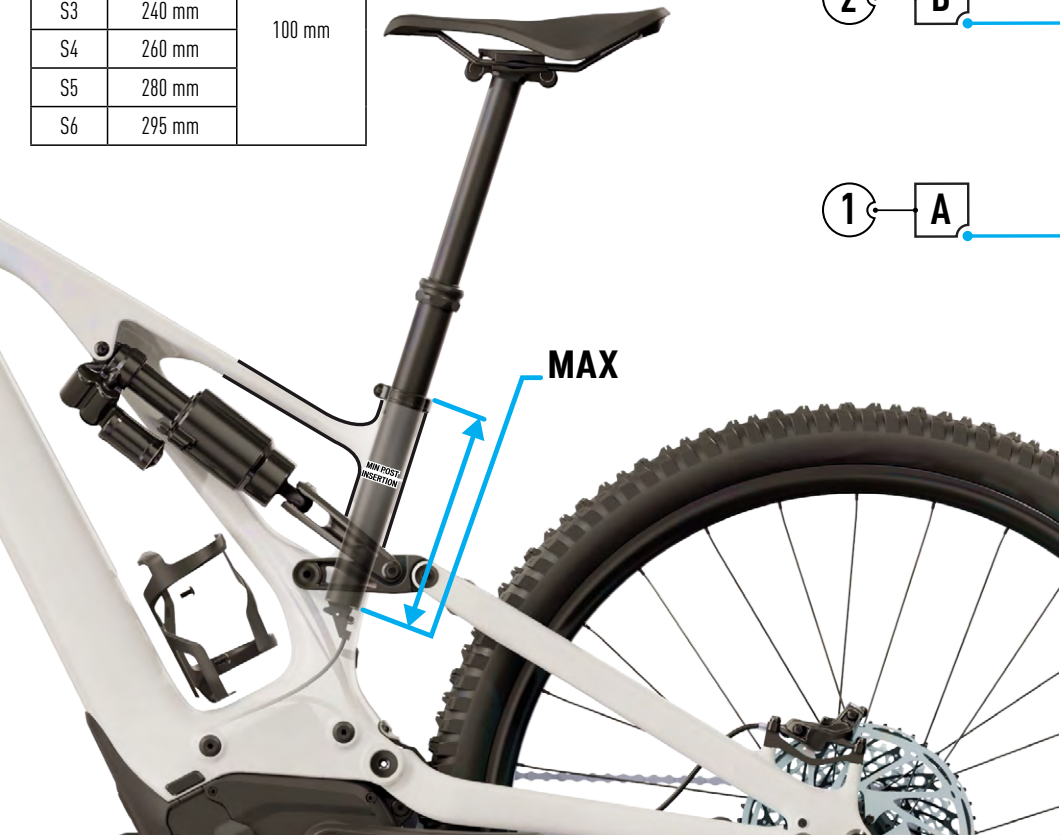
- 3: Install the UDH washer, then thread the UDH bolt through the washer and into the hanger.
- Torque the bolt to specification. The UDH hanger bolt is left-hand threaded.



A reversible (left-hand and right-hand thread) torque wrench **MUST** be used to ensure proper left-hand thread bolt torque.



SIZE	MAX INSERTION	MIN INSERTION
S1	210 mm	100 mm
S2	220 mm	
S3	240 mm	
S4	260 mm	
S5	280 mm	
S6	295 mm	



#	PART NAME	PART NUMBER	QTY	SPEC	TOOL	TORQUE		COMMENT
						Nm	in-lbf	
	Seatpost Shim	S174900001	1	34.9 mm / 30.9 mm Seatpost Shim	N/A	N/A	N/A	
	Seatpost Collar	S184700004	1	38.6 mm Seatpost Collar	4 mm	6.2	55	Align with the bolt facing forwards

SEATPOST MINIMUM 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 into the frame deep enough so the minimum insertion/maximum extension (min/max) mark on the seatpost is not visible. The frame requires a minimum of 100 mm of insertion.
- 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 table in Fig.6.1.

- 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.

- i** The Levo is equipped with a seat post stopper located on the rear of the seat tube. The stopper is designed to stop the seatpost from being inserted too far and impacting the motor.
- i** The seat tube is designed for a 34.9 mm post but a smaller diameter seatpost can be used with a shim.



PART NAME	NUMBER	PART SPECIFICATION	PART DESCRIPTION	QTY
Chainstay Alloy (Satin Black)	S211500002		CS,MTB,PA TRAIL FSR F1.1,ALY	1
Bearing		12 mm ID x 24 mm OD x 6 mm W,DBL SLD	BRG,BALL,12mm ID X 24mm OD X 6mm W,DBL SLD	2
Chainstay Carbon (Gloss Carbon)	S211500003		CS,MTB,PA TRAIL FSR F1.2	1
Bearing		12 mm ID x 24 mm OD x 6 mm W,DBL SLD	BRG,BALL,12mm ID X 24mm OD X 6mm W,DBL SLD	2
Seatstay Alloy (Satin Black)	S215000002		STS MY22 LEVO ALLOY, STN BLK	
Seatstay			SS,MTB,PA TRAIL FSR F1.1,ALY	1
Bearing Horst		12 mm ID x 21 mm OD x 5 mm W DBL SLD	BRG,BALL,12mm ID X 21mm OD X 5mm W,DBL SLD	4
Bearing Spacer		12.1mm ID x 23 mm OD x 3 mm W	SPCR,CUST, 12.1 ID X 23 OD X 3 W,FSR,AL7075-T73	2
Seatstay Carbon (Gloss Carbon)	S215000003		STS MY22 LEVO CARBON, GLS BLK	
Seatstay			SS,MTB,PA TRAIL FSR F1.2,CRBN	1
Bearing Horst		12 mm ID x 21 mm OD x 5 mm W DBL SLD	BRG,BALL,12mm ID X 21mm OD X 5mm W,DBL SLD	4
Bearing Spacer		12.1mm ID x 23 mm OD x 3 mm W	SPCR,CUST, 12.1 ID X 23 OD X 3 W,FSR,AL7075-T73	2
Bearing Suspension Kit	S210600002		BRG MY22 LEVO SUSPENSION BEARING KIT	
Bearings		12 mm ID x 21 mm OD x 5 mm W,DBL SLD	BRG,BALL,12mm ID X 21mm OD X 5mm W,DBL SLD	12
Bearing - Main Pivot		12 mm ID x 24 mm OD x 6 mm W,DBL SLD	BRG,BALL,12mm ID X 24mm OD X 6mm W,DBL SLD	2
Shock Link	S214300006		SHL MY22 LEVO SHOCK LINK ASSEMBLY	
Right Link			LINK,PA TRAIL FSR F1,ALY,RIGHT	1
Left Link			LINK,PA TRAIL FSR F1,ALY,LEFT	1
Bearings		12 mm ID x 21 mm OD x 5 mm W,DBL SLD	BRG,BALL,12mm ID X 21mm OD X 5mm W,DBL SLD	8
Bearing Spacer		12 mm ID x 18 mm OD x 2 mm W	SPCR,12mm ID X 18mm OD X 2mm W,7075-T6	2
Shock Extension	S216300003		SHK EXT MY22 LEVO SHOCK EXTENSION	
Extension 96.5 mm		96.5 mm LENGTH, ALLOY	EXTN,PA TRAIL FSR F1,96.5mm LENGTH,ALLOY	
Suspension Bolt Kit	S210500012		BLT MY22 LEVO SUSPENSION BOLT KIT	
Horst Pivot Outer Bearing Spacer		12 mm ID x 21 mm OD x 2.5 mm W	HORST PIVOT OUTER SPACER ASSY 12X21X2.5	4
Link Ø Seat Tube Bearing Spacer		12.1 mm ID x 19.5 mm OD x 3 mm W	SPCR,12.1 ID X 19.5 OD X 3 W,FSR,AL7075-T6	2
Speed Sensor Retaining Bolt		M4 x 14 mm x 0.7 mm p	SCR,SKT FLT HD,M4X0.7 X 14,7075-T73,BLK	1
Link Ø Seatstay Bolt Female		M6 x 22.34 mm x 1 mm p FEM	BOLT,CUST,M6 X1FEM X 22.34,7075,BLK	2
Horst Flip Chip Outer			DO PIVOT SPACER,GEO ADJ,6.0 ID, FLAT	2
Horst Flip Chip Inner			DO PIVOT SPACER,GEO ADJ,M6 X 1	2
Horst Pivot Inner Bearing Spacer		6 mm ID x 16 mm OD x 16 mm W	SPCR,STEP,6mm ID X 16mm OD X 16mm W,7075-T6	2
Horst Pivot Bolt		M6 x 32.5 mm x 1.0 mm p	SCR,CUST,M6X1.0 X 32.5,STL,BLK	2
Link Ø Seat Tube Bolt		M12 x 24 mm x 1.0 p	SCR ASSY,M12 X 1.0 X 24,PA TRAIL FSR F1	2
Link Spacers		10 mm ID x 18.5 mm OD x 2.5 mm W	SPCR,CUST, 10 ID X 18.5 OD X 2.5 W,FSR,AL7075-T73	8
Link Ø Extension Axle			AXLE,SS PIVOT,MTB,TRAIL FSR L1	2
Link Ø Seat Stay Bolt Male		M6 x 8 mm x 1.0 mm p S-Steel	SCR,CUST,M6X1.0 X 8,SST 302	4
Main Pivot Bolt RHT		M10 x 35 mm x 1.25 mm p, RH, S-Steel	SCR,CUST,M10 X 1.25 X 35,RH,SST 302	1
Main Pivot Spacer		12.1 mm ID x 23 mm OD x 3 mm W	SPCR,CUST, 12.1 ID X 23 OD X 3 W,FSR,AL7075-T73	2
Main Pivot Sleeve		10 mm ID x 21 mm OD x 3 mm W, S-Steel	SLEEVE,CUST,10 ID X 21 OD X 3 W,SST 302	2
Main Pivot Washer		10.6 mm ID x 21 mm OD x 0.5 mm S-Steel	WSHR,10.6 ID X 21 OD X 0.5 THK,304 SST	2
Main Pivot Bolt LHT		M10 mm x 35 mm x 1.25 mm p,LH, S-Steel	SCR,CUST,M10 X 1.25 X 35,LH,SST 302	1

Rear Shock Mounting Hardware	S210500011		BLT MY22 LEVO REAR SHOCK MOUNTING HARDWARE KIT	
Rear Shock Mounting Washer		M8 x 8.3 ID X 13 OD X 0.5 mm S-Steel	WSHR,FLAT,M8,8.31DX13ODX0.5THK,304SST	1
Rear Shock Mounting Bolt		M8 x 27 mm x 1.25 mm,CHOMOLY	SCR,CUST,M8X1.25 X 27,CHOMOLY	1
Shock Eyelet Spacers		19 mm X 8.1 mm X 0.6 mm,S-Steel	SPACER.SHOCK, 19X8.1X0.6,SST 304	2
Forward Shock Mounting Bolt		M8 x 42 mm x 1.0 mm p	SCR,CUST,M8X1.0 X 42,STL,BLK,LCK	1
SRAM Universal Derailleur Hanger	S202600002		HGR SRAM AC UDH DERAILLEUR HANGER AL BLACK	1



LOCATION	TOOL	TORQUE	
		Nm	in-lbf
SEAT COLLAR	4 mm hex	6.2	55
STEM @ STEERER TUBE (TRAIL STEM)	5 mm hex	8	71
STEM @ HANDLEBAR (TRAIL STEM)	5 mm hex	6	53
SPIDER LOCK-RING	Shimano BB-UN 98 / Park Tool BBT-18	50	443
CRANK BOLTS	8 mm hex	40	354
CHAINRING BOLTS	5 mm hex	10	89
WATER BOTTLE CAGE BOLT	3 mm hex	2.8	25
12 mm REAR AXLE	6 mm hex	15	133
DERAILLEUR HANGER	8 mm hex	25	221
HEAD TUBE ICR GUIDE SCREW	T10 Torx	0.8	7
TCU DISPLAY 1 & 2	T10 Torx	0.8	7
MOTOR MOUNT BOLTS REAR	T30 Torx	18	160
MOTOR MOUNT BOLTS CENTER	T30 Torx	18	160
MOTOR MOUNT BOLT FRONT DS	T25 Torx	6	53
MOTOR MOUNT BOLT FRONT NDS	T30 Torx	6	53
MOTOR COVER BOLTS DRIVE SIDE	2.5 mm hex	2	18
MOTOR COVER BOLTS NON DRIVE SIDE	3 mm hex	1	9
SPEED SENSOR BOLT (@HORST PIVOT)	3 mm hex	1	9
SPEED SENSOR MAGNET HOLDER (6 BOLT VERSION)	T25 Torx	6.2	55
REMOTE	2 mm hex	0.8	7
BATTERY BOLT	6 mm hex	6.2	177
BATTERY ROCK GUARD THRU-BOLT	4 mm hex	3	26
BATTERY EXPANDER BOLT	4 mm hex	4	35
BATTERY ROCK GUARD BOLTS	2.5 mm hex	0.8	7
REAR BRAKE GUIDE (NON-DRIVE SIDE SEATSTAY)	2.5 mm hex	0.8	7
MAIN HARNESS CLAMP	2.5 mm hex	4	35
MUD FLAP BOLTS	2.5 mm hex	4	35
MOTOR HOUSING CABLE GUIDE BOLTS	2.5 mm hex	4	35
CHAIN GUIDE	5 mm hex	4.5	40

LOCATION	TOOL	TORQUE	
		Nm	in-lbf
MAIN PIVOT (DS - LEFT HAND THREAD)	6 mm	210	24
LINK @ SEAT-TUBE	6 mm	185	21
LINK @ SEAT-STAY	4/6 mm	70	8
LINK @ EXTENSION	4/5 mm	70	8
DROPOUT (HORST LINK)	5 mm	90	10
FORWARD SHOCK EYE	6 mm	90	10
REAR SHOCK EYE	5 mm	185	21

2022 LEVO F1 CARBON NYLON TUBE LENGTH			
SIZE	SHIFT (mm)	BRAKES (mm)	DROPPER POST (mm)
S1	1090	945	385
S2	1105	960	395
S3	1125	980	410
S4	1145	1000	430
S5	1190	1045	465
S6	1205	1060	480

2022 LEVO F1 ALLOY NYLON TUBE LENGTH			
SIZE	SHIFT (mm)	BRAKES (mm)	DROPPER POST (mm)
S1	780	660	385
S2	780	660	395
S3	780	660	410
S4	780	660	430
S5	780	660	465
S6	780	660	480

BRAKE ROTOR			
	Max	Min	Info
Brake rotor rear	220 mm	180 mm	Post mount standard

CHAINRING			
	Max	Min	Info
Chainring	34 T	32 T	36 T can be used without the chain guide

SEATPOST		
SIZE	MAX INSERTION	MIN INSERTION
S1	210 mm	100 mm
S2	220 mm	
S3	240 mm	
S4	260 mm	
S5	280 mm	
S6	295 mm	