Schematic

TURBO LEVO SL

Electric Mountain Bike: Carbon frame

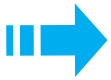
INDEX

SYMBOLS LEGEND

PART NUMBER

ASSEMBLY PROCESS ORDER

INSERT PATH



ASSEMBLY DIRECTION

BLUE THREAD LOCK

GREASE

BOLT TORQUE REQUIRED

LEFT HAND THREAD

VIDEO GUIDE LINK

SPECIALIZED BICYCLE COMPONENTS
15130 Concord Circle, Morgan Hill, CA 95037 (408) 779-6229
0000193160_SC_R4, 4/23

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Info: www.specialized.com

1. INTRODUCTION

1.1. IMPORTANT

THIS ASSEMBLY INSTRUCTION CONTAINS IMPORTANT INFORMATION. PLEASE READ CAREFULLY AND STORE IN A SAFE PLACE.

This manual was drafted in English (original instructions) and may have been translated into other languages as applicable (translation of original instructions).

This document is specific to your Turbo Levo SL bicycle and referred to in this manual as the Levo SL.

This manual should be read in addition to the Turbo Levo SL User Manual supplied with your bicycle, and the two documents should be kept together for future reference. They contain important safety, performance, and technical information specific to your Levo SL, which you should read before your first ride and keep for reference.

The Levo SL user manual is designed as a reference for a complete bicycle, including the Declaration of Conformity document at the back of each language section. Since a frame up build requires the assembly of components (suspension fork, seat post, saddle, drivetrain assembly, cockpit assembly, wheels), the information contained herein is intended to supplement the Levo SL User Manual in order to provide you with the necessary information required to complete the assembly and eventually use your Levo SL. For assembly, only compatible and e-bike approved components should be used. Please refer to a component manufacturers' documentation for assembly instructions.

You should also read the entire Specialized Bicycle Owner's Manual ("Owner's Manual") because it has additional important general information and instructions which you should follow. If you do not have a copy of this document, you can download them at no cost at www.specialized.com or obtain them from your nearest Authorized Specialized Retailer or Specialized Rider Care.

1.2. WARNING SYMBOLS

When reading this assembly instruction, note various important symbols and warnings explained below:

	WARNING! The combination of this symbol and word indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death. Many of the Warnings say "you may lose control and fall." Because any fall can result in serious injury or even death, we do not always repeat the warning of possible injury or death.
	CAUTION: The combination of the safety alert symbol and the word CAUTION indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury, or is an alert against unsafe practices.
	The word CAUTION used without the safety alert symbol indicates a situation that, if not avoided, could result in serious damage to the bicycle or the voiding of your warranty.
	This symbol alerts the reader to information that is particularly important.
	This symbol means that high quality grease should be applied as illustrated.
	This symbol means that carbon assembly paste should be applied as illustrated to increase friction.
	This symbol highlights the correct torque value for a specific bolt. In order to achieve the specified torque value, a quality torque wrench must be used.
	Tech tips are useful tips and tricks regarding installation and use.

1.3. ASSEMBLY SETUP AND PREPARATION

This document guides you through the complete assembly of the 2023 Turbo Levo SL Carbon frame bicycles.

- TURBO LEVO SL COMP CARBON
- TURBO LEVO SL EXPERT CARBON
- TURBO LEVO SL PRO CARBON
- TURBO LEVO SL SW CARBON
- TURBO LEVO SL SW CARBON FRMSET
- TURBO LEVO SL SW LTD

TOOLS REQUIRED

- Stable repair stand
- Hex keys: 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm
- Torx keys: T8, T10, T25, T30
- Cable routing tools
- Torque wrenches covering 0.8-50 Nm.
- High-quality grease
- High-quality carbon assembly paste
- Loctite 603
- Loctite 242

ASSEMBLY GUIDE VIDEOS

- To access video content relating to the assembly process of the Turbo Levo SL Carbon, click on the links below to go directly to the assembly video.
- Use your smartphone camera to scan the QR codes on the opposite page.
- You can also manually enter the web addresses below.

COMPLETE ASSEMBLY GUIDE VIDEO

https://vimeo.com/706376453/01fd3163c2

MOTOR AND BATTERY ASSEMBLY GUIDE VIDEO

https://vimeo.com/788453392/a945eb33bf

ASSEMBLY GUIDE VIDEOS QR CODE

Use your smartphone camera to scan the QR code to access the assembly instruction videos of the 2023 Turbo Levo SL Carbon.

- Open the camera app on your phone.
- Focus the camera on the QR code by gently tapping the code.
- Follow the instructions on the screen to complete the action.

COMPLETE BUILD ASSEMBLY GUIDE

SCAN ME

MOTOR AND BATTERY ASSEMBLY GUIDE

SCAN ME

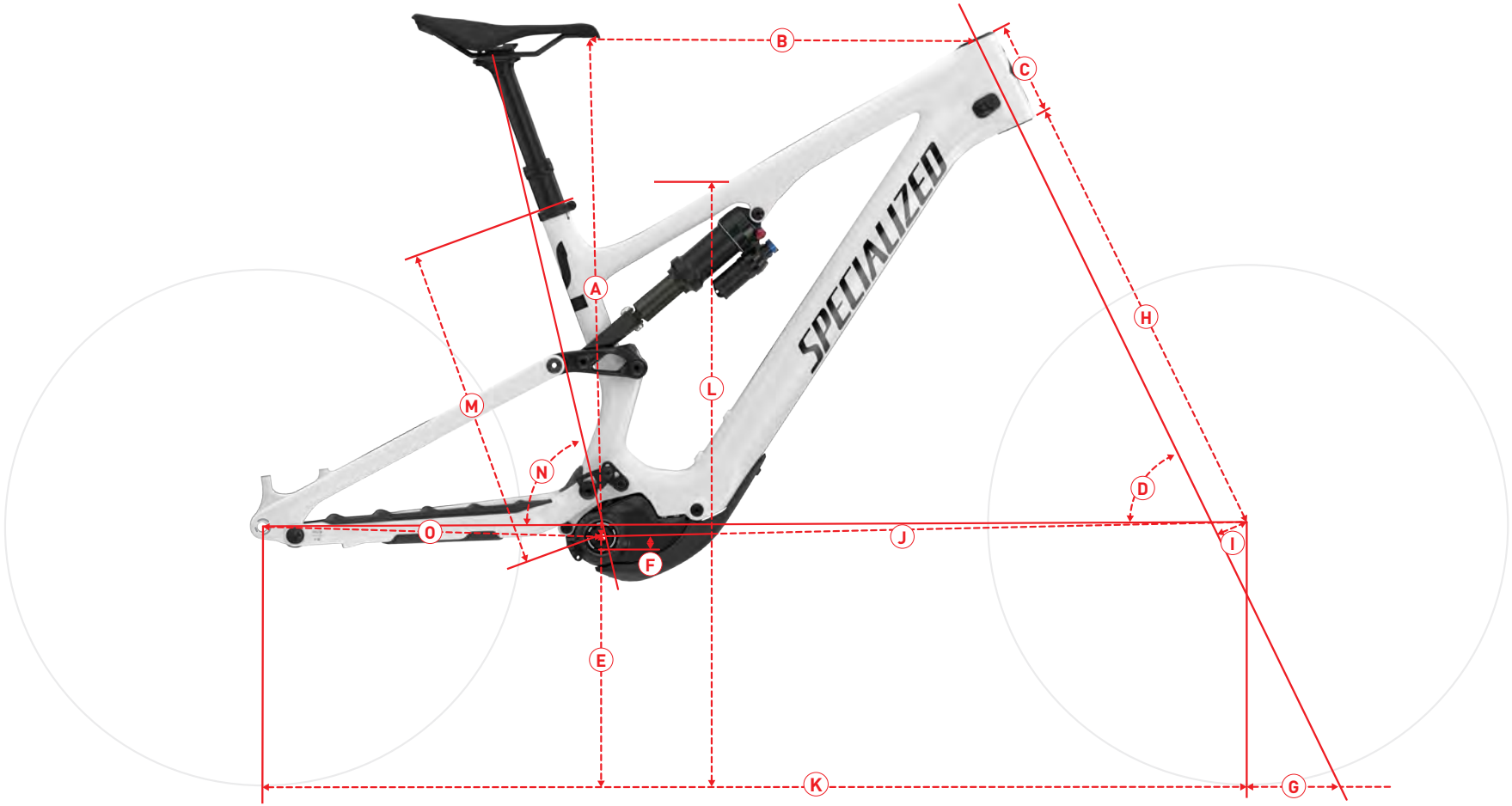
PREPARATION

- The build starts with a bare 2023 Turbo Levo SL Carbon frame with no components assembled.
- To build the Turbo Levo SL, it is essential to follow the order of operations as outlined in this guide.
- Modifying the order of assembly will result in a longer build process.
- Specific procedures are different for carbon and alloy frames. Follow the appropriate steps in the assembly guide relating to your frame type.
- Insert a standard 30.9 mm seatpost into the tube, then use a 4 mm hex bit to torque the seatpost clamp to 6.2 Nm / 55 in-lbf.
- Place the bicycle frame into a stable repair stand.

WARNING: Do not clamp the carbon frame.

2. FRAME GEOMETRY

2.1. FRAME AS SOLD



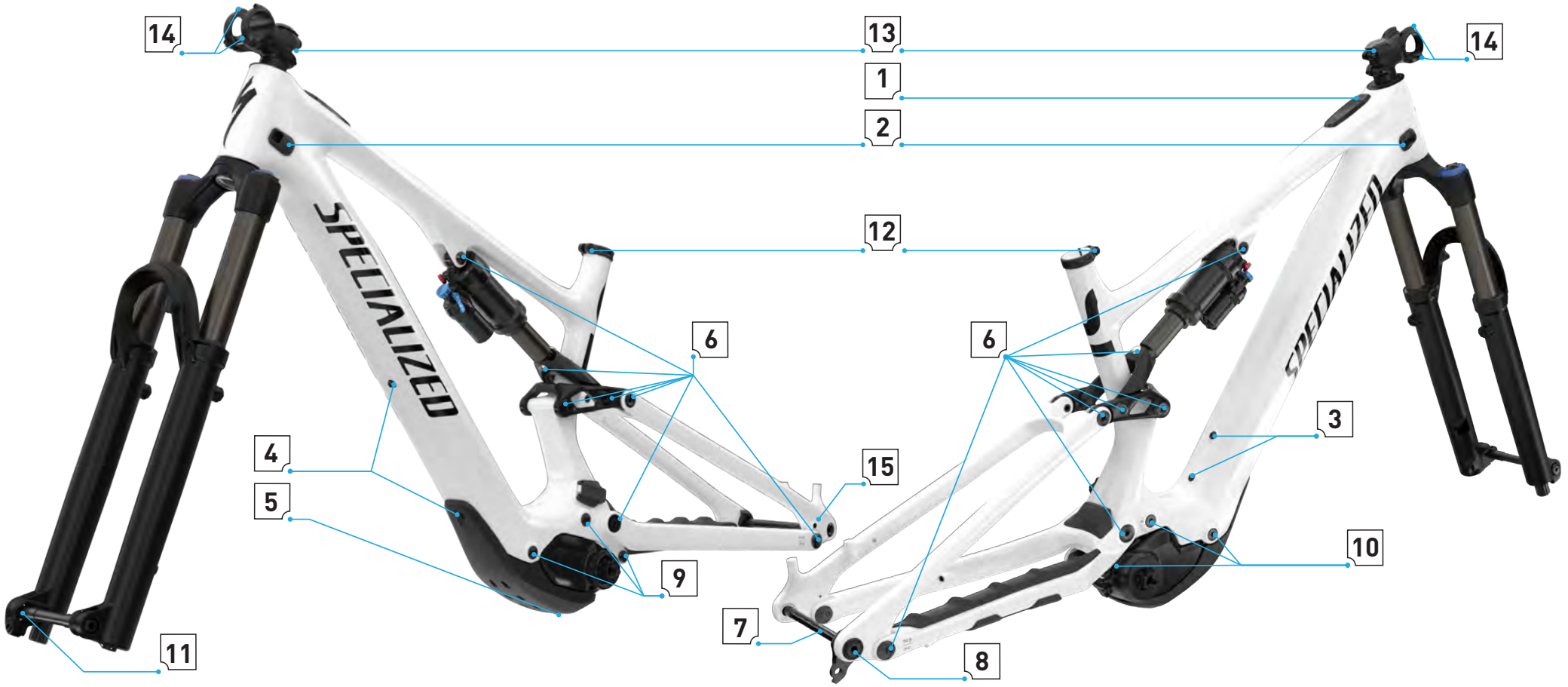
	ITEM	S1	S2	S3	S4	S5	S6
A	Stack (mm)	609	617	626	635	645	654
B	Reach (mm)	405	425	445	470	495	525
C	Head tube length (mm)	95	100	110	120	130	140
D	Head tube angle (°)	64.5 °					
E	BB height (mm)	343	348	348	348	348	348
F	BB drop (mm)	-34	-29	-29	-29	-29	-29
G	Trail (mm)	132					
H	Fork length (full) (mm)	560	570	570	570	570	570

	ITEM	S1	S2	S3	S4	S5	S6
I	Fork rake/offset (mm)	44					
J	Front center (mm)	726	752	776	806	835	869
K	Wheelbase (mm)	1158	1184	1208	1238	1267	1301
L	Standover height (mm)	727	763	766	767	773	778
M	Seat tube length (mm)	385	385	405	425	445	465
N	Seat tube angle (°)	76					
O	Chainstay length (mm)	433	432	432	432	432	432
	Crank length (mm)	165	165	170	170	170	175

ITEM	S1	S2	S3	S4	S5	S6
Handlebar width (mm)	780					
Stem length (mm)	40					50
Saddle width (mm)	155	143	143	143	143	143
Seatpost max insertion (mm)	180	180	200	220	240	260
Seatpost min. insertion (mm)		80				
Top tube length (horizontal) (mm)	560	582	604	631	659	691
Fork size (mm)	144	150	150	150	150	150

3. TORQUE SPECIFICATIONS

3.1. QUICK REFERENCE

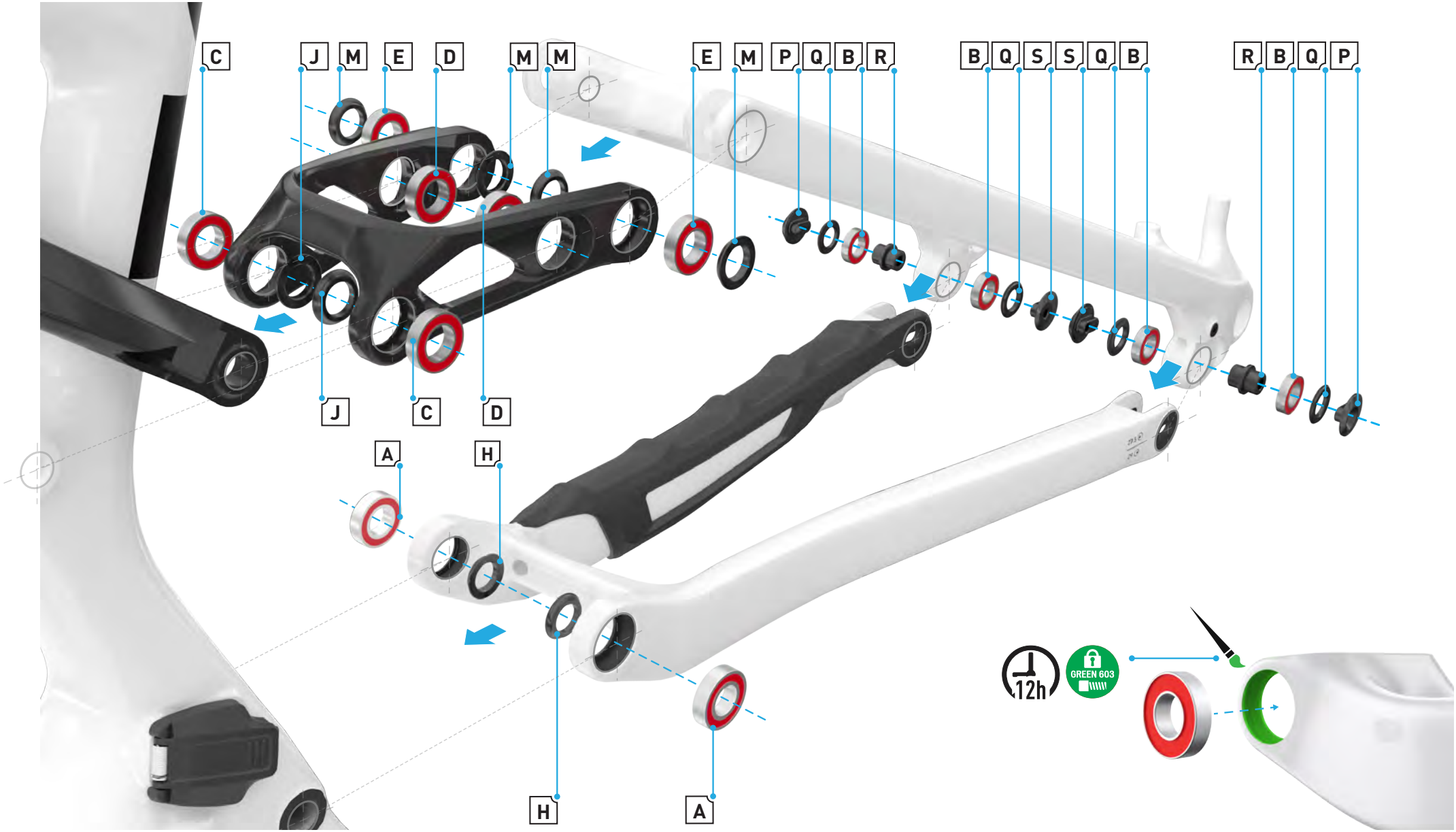


#	PART NAME	TYPE	BOLT SPEC	TOOL	TORQUE	
					Nm	in-lbf
1	TCU screw	Screw	M4 x 10 mm x 0.7 mm p	T10 Torx	1	9
2	ICR bolt	Screw	M3 x 18 mm x 0.5 mm p	T10 Torx	1	9
3	Water bottle cage bolt	Bolt	M5 x 18 mm x 0.5 mm p	3 mm hex	2.8	25
4	Battery mount bolts	Bolt	M6 x 14 mm x 1 mm p	4 mm hex	3	27
5	Rock guard bolt	Bolt	M6 x 14 mm x 1 mm p	4 mm hex	2.5	22
6	Rear suspension pivot bolts	Refer to: PIVOT BOLTS-CARBON FRAME: SPECIFICATIONS in this manual				
7	Rear thru-axle	Thru-axle	M12 x 148 mm x 0.5 mm p	6 mm hex	15	133
8	Derailleur hanger	Bolt	As supplied	8 mm hex	25	220

#	PART NAME	TYPE	BOLT SPEC	TOOL	TORQUE	
					Nm	in-lbf
9	Non-drive side motor bolts	Bolt	M10 x 25 mm x 1 mm p	5 mm hex	10	90
10	Drive side motor bolts	Bolt	M6 x 21 mm x 1 mm p	5 mm hex	13	115
11	Front fork thru-axle	Thru-axle	Refer to fork manufacturer			
12	Seat collar	Bolt	M5 x 18 mm x 1 mm p	4mm hex	6.2	55
13	Stem at steerer tube	Bolt	M6 x 20 mm x 1 mm p	5 mm hex	8	71
14	Stem at handlebar	Bolt	M6 x 20 mm x 1 mm p	5 mm hex	6	53
15	Speed sensor bolt	Bolt	M4 x 14 mm x 0.7 mm p	3 mm hex	3	26

4. PIVOT BEARINGS AND SPACERS

4.1. PIVOT BEARINGS AND SPACERS – EXPLODED VIEW



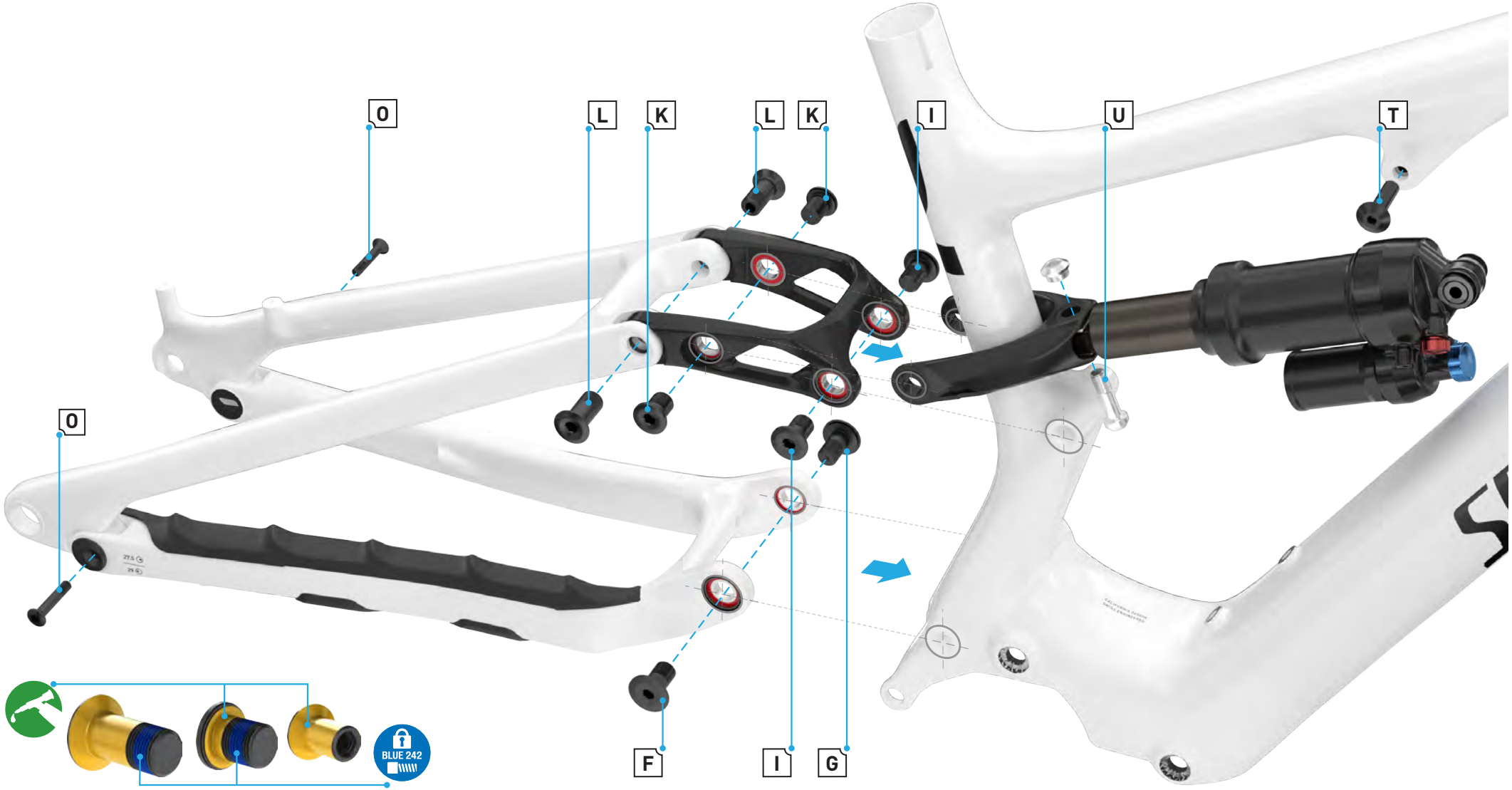
Apply green Loctite 603 retaining compound to the bearing bore interface surfaces, then press all the bearings into their respective pivot locations. After installing the bearings, allow the Loctite 603 retaining compound to cure 12 hours before riding the bicycle.

4.2. PIVOT BEARINGS AND SPACERS – SPECIFICATIONS

#	PIVOT	SERVICE PART NUMBER	QTY	MATERIAL	Ø OD (mm)	Ø ID (mm)	WIDTH (mm)	THREAD (mm)	LENGTH (mm)	TOOL	BEARING NUMBER
A	**Main pivot bearing**	**S210600003**	2	Steel	24	12	6	N/A	N/A	N/A	6901-2RS
B	**Horst link bearing**		4	Steel	21	12	5	N/A	N/A	N/A	6801-2RS
C	**Link at seat tube**		2								
D	**Link at extension**		2								
E	**Link at seatstay**		2								
H	**Main pivot inner spacer**	**S210500019**	2	Aluminum	19.5	12.1	3	N/A	N/A	N/A	N/A
J	**Link at seat tube inner spacer**		2	Aluminum	19.5	12.1	3	N/A	N/A	N/A	N/A
M	**Link at seatstay spacers**		4	Aluminum	19.5	12.1	3	N/A	N/A	N/A	N/A
P	**Horst link outer flip chip**		2	Aluminum	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Q	**Horst link outer spacer**		4	Aluminum	21	12	2.5	N/A	N/A	N/A	N/A
R	**Horst link inner spacer**		2	Aluminum	16	6	16	N/A	N/A	N/A	N/A
S	**Horst link inner flip chip**		2	Aluminum	N/A	N/A	N/A	N/A	N/A	N/A	N/A

5. PIVOT BOLTS

5.1. PIVOT BOLTS – EXPLODED VIEW



i	All pivot bolts are factory treated with a threadlocker patch on the threads. If it begins to wear off, remove any remaining threadlocker, then apply a new coat of Loctite 243 or install new bolts with the pre-applied threadlocker patch.
!	CAUTION: Only apply grease to the unthreaded portion of the bolt shaft and the inner bolt head surface (YELLOW highlighted portion of bolts as shown in the image).

!	CAUTION: Contaminating the threads of any of the pivot bolts with grease could lead to the Loctite not functioning as intended; the bolts could come loose causing damage to the bicycle.
💡	For best alignment results, do not torque any of the rear triangle pivot and shock bolts until the rear triangle is fully assembled to the front triangle.

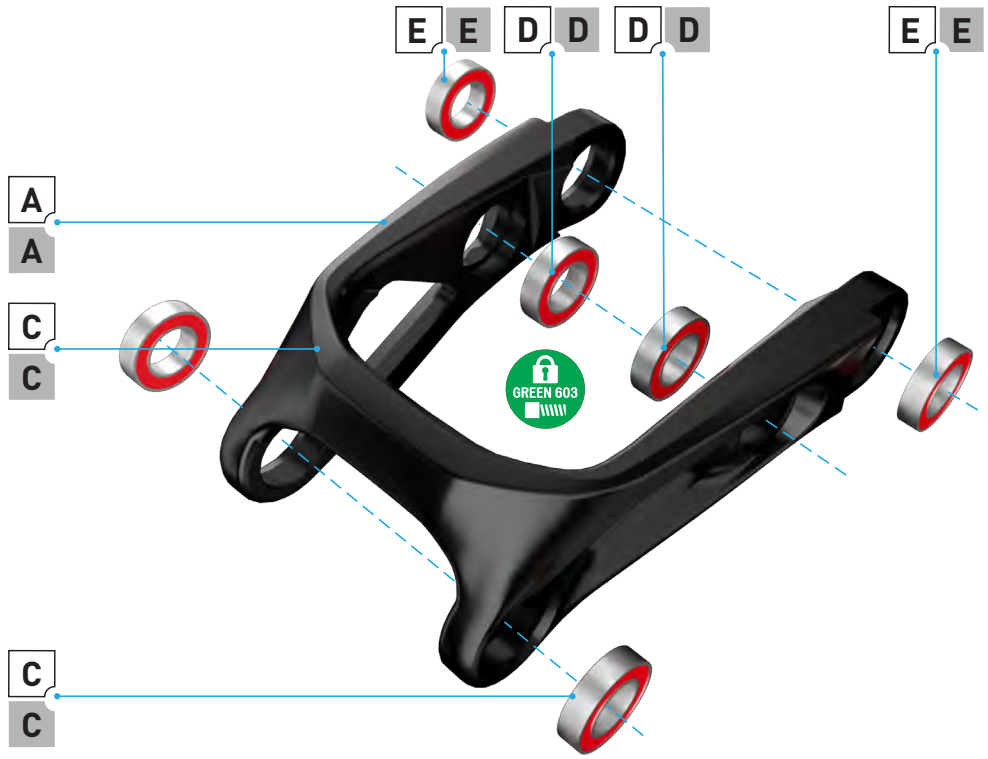
5.2. PIVOT BOLTS – SPECIFICATIONS

#	PIVOT	SERVICE PART NUMBER	QTY	MATERIAL	Ø OD (mm)	Ø ID (mm)	WIDTH (mm)	BOLT SIZE	LENGTH (mm)	TOOL	TORQUE	
											Nm	in-lbf
F	**Main pivot bolt DS**	**S210500019**	1	Aluminum	N/A	N/A	N/A	M12 left hand	20	6 mm hex	24	210
G	**Main pivot bolt NDS**		1	Aluminum	N/A	N/A	N/A	M12	20	6 mm hex	24	210
I	**Link at seat tube bolt**		2	Aluminum	N/A	N/A	N/A	M12	17	6 mm hex	20	180
K	**Link at extension bolt**		2	Aluminum	N/A	N/A	N/A	M12	14	6 mm hex	24	210
L	**Link at seatstay bolt**		2	Aluminum	N/A	N/A	N/A	M12	27	6 mm hex	20	180
O	**Horst link (dropout) pivot bolt**		2	Coated steel	N/A	N/A	N/A	M6	32	5 mm hex	10	90
T	**Forward shock mounting bolt**		1	Stainless steel	N/A	N/A	N/A	M5	13	4 mm hex	5.5	49
U	**Rear shock mounting bolt**		1	Stainless steel	N/A	N/A	N/A	M8	28	6 mm hex	20	180

6. ASSEMBLY PROCESS

6.1. REAR TRIANGLE ASSEMBLY

6.1.1. SUSPENSION LINK BEARINGS



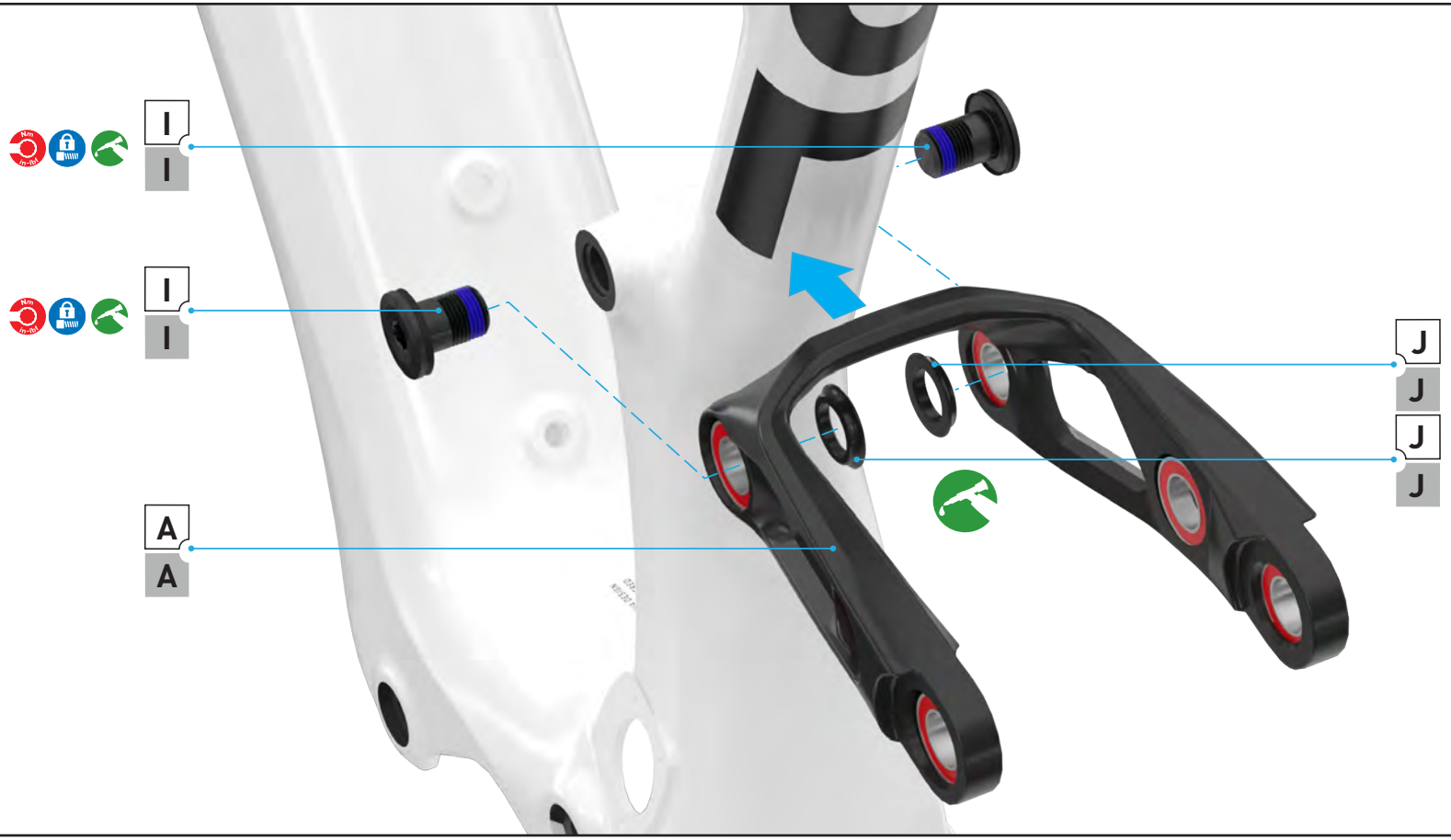
#	PART NAME	SERVICE PART NUMBER - CARBON	SERVICE PART NUMBER - ALLOY	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
							Nm	in-lbf
A	Shock link – Carbon	S214300007		1	LINK,MTB,PA TRAIL FSR G1,29F/27.5R,ALY	N/A	N/A	N/A
C	Link forward bore bearing			2	6801-2rs	N/A	N/A	N/A
D	Link mid bore bearing			2		N/A	N/A	N/A
E	Link rear bore bearing			2		N/A	N/A	N/A

Apply green Loctite 603 to all the bearing/bore interface surfaces 12 hours before pressing all the bearings into their respective pivot locations.

CAUTION: When installing the mid bore bearings, using a bearing press tool with a bearing kit adaptor is critical.

- Press the link at seat tube bearings **(C)** into the front bore of the link, and the link at seatstay bearings **(E)** into the rear bore from the outside of the link.
- Press the link at extension bearings **(D)** from the inside of the link.
- Install the link at extension bearings **(D)** using a bearing press tool with the correct bearing kit adaptor.

6.1.2. LINK AT SEAT TUBE



#	PART NAME	SERVICE PART NUMBER – CARBON	SERVICE PART NUMBER – ALLOY	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
							Nm	in-lbf
A	Link	**S214300007**		1	LINK,MTB,PA TRAIL FSR G1,29F/27.5R,ALY	N/A	N/A	N/A
I	Link at seat tube pivot bolt	**Part of suspension bolt kit. S210500019**	**Part of suspension bolt kit. S220500016**	2	M12 x 17 mm x 1.0 mm p, bolt	6 mm hex	20	180
J	Link at seat tube pivot – spacer			2	12.1 mm id x 19.5 mm od x 3 thick, spacer	N/A	N/A	N/A

For best alignment results, do not torque any of the rear triangle pivot and shock bolts until the rear triangle is fully assembled to the front triangle.

- Grease, then place the link at seat tube inner spacers **(J)** against the link at seat tube bearings **(C)** (reduced edge facing toward the bearing).
- Align the bearings and spacers of the link with the bore in the seat tube.
- Grease the non-threaded surfaces, then thread the link at seat tube bolts **(I)** into the frame.
- Use a 6 mm hex bit and hand tighten the two bolts.

6.1.3. LINK AT SHOCK EXTENSION

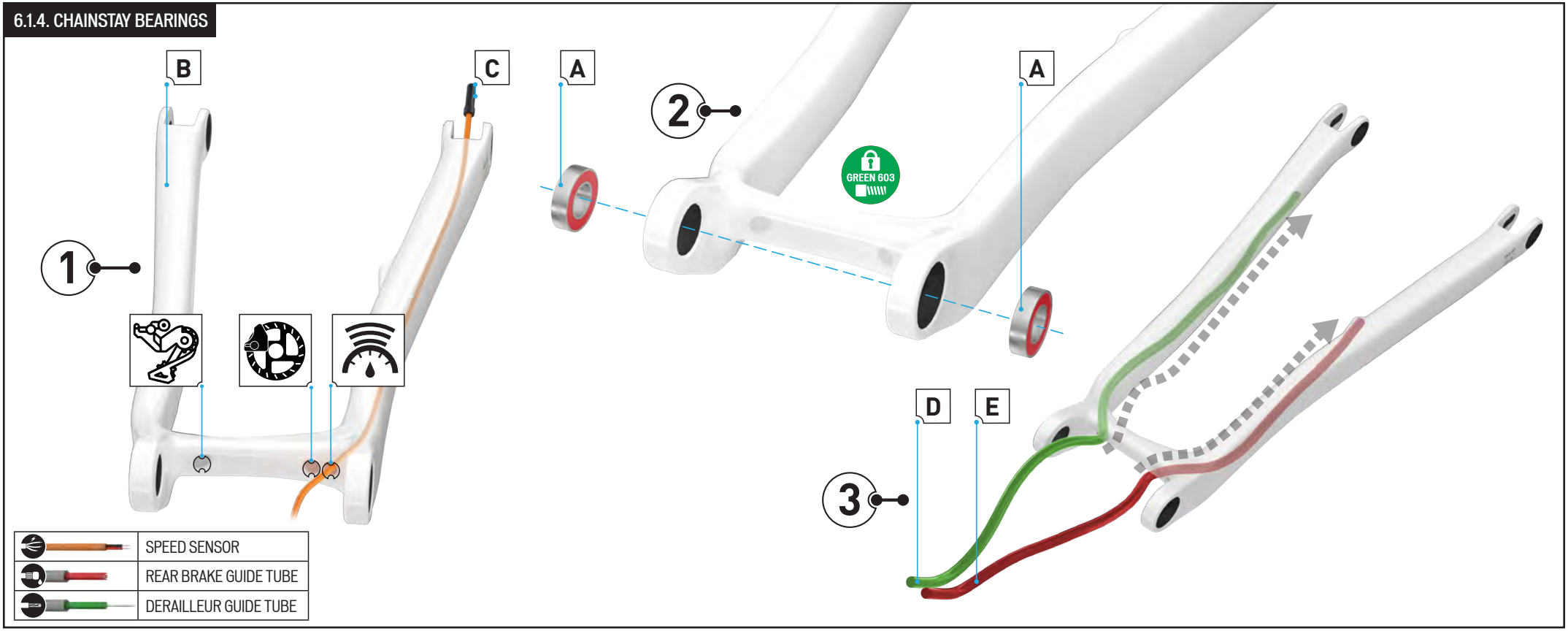
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	Shock extension – Carbon	**S216300005**	1	LINK,MTB,PA TRAIL FSR G1,29F/27.5R,ALY	N/A	N/A	N/A
K	Link at extension bolt	**Part of suspension bolt kit. S210500019**	2	M12 x 14 mm x 1 mm p, bolt	6 mm hex	24	210

Place a cloth over the frame to prevent the extension arm from damaging the paint.

Do not assemble the rear shock until the motor and battery assemblies are complete.

- Place the extension arm around the seat tube and align the extension arm bores with the link mid bores.
- Grease the non-threaded surfaces, then thread the link at extension bolts **(K)** into the link mid bores.
- Use a 6 mm hex key to hand tighten the two bolts.

6.1.4. CHAINSTAY BEARINGS

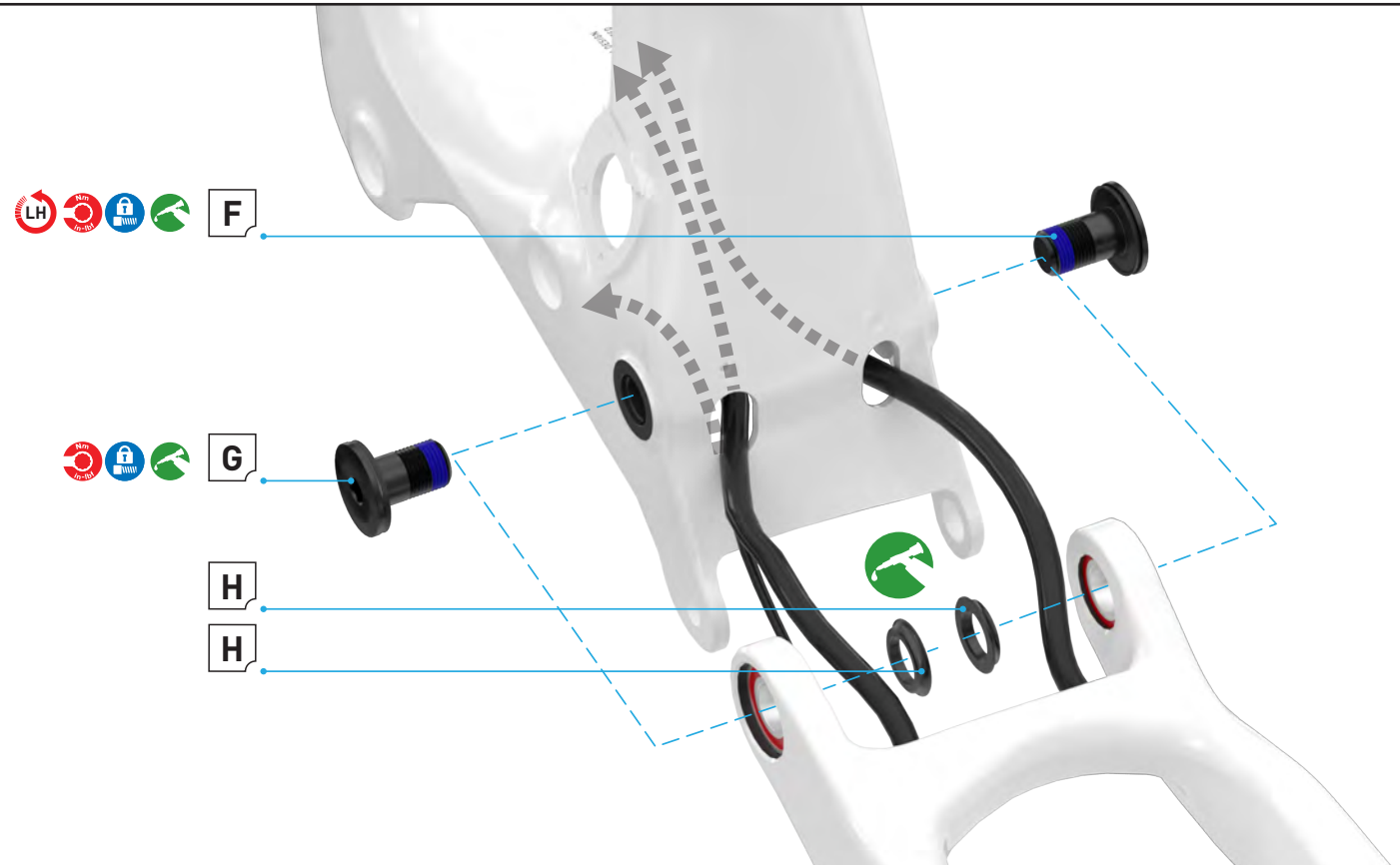


#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	Main pivot bearings – Carbon	**Part of suspension bearing kit. S210600003**	2	12 mm id x 24 mm od x 6 mm w, bearing	N/A	N/A	N/A
B	Chainstay – Carbon (satin)	**S211500005**	1	CHS MY22 LEVO SL CRBN, STN CRBN	N/A	N/A	N/A
B	Chainstay – Carbon (gloss)	**S211500008**	1	CHS MY22 LEVO SL CARBON, CARBON, GLS SMK	N/A	N/A	N/A
C	Speed sensor cable	**S196800019**	1	ELE MY20 MTB SL SYSTEM, SPEED SENSOR KIT	N/A	N/A	N/A
D	Derailleur cable guide tube		1	TUBE,ICR,5.5 X 7,NYLON,BLK - Cut length: 490 mm	N/A	N/A	N/A
E	Rear brake hose guide tube		1	TUBE,ICR,5.5 X 7,NYLON,BLK - Cut length: 410 mm	N/A	N/A	N/A

- 1. Thread the speed sensor cable from the main pivot end of the chainstay through the lower hole on the non-drive side until it exits 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.
- 2. On each side, press the main pivot bearings (A) into the main pivot bores from the inside of the chainstays.
- 3. Insert the derailleur guide tube (D) through the ICR port located in the drive side of the chainstay and route it to the rear port of the chainstay. Insert the brake guide tube **(E)** through the inner ICR port located in the non-drive side of the chainstay and route it to the mid port of the chainstay.

Apply green Loctite 603 to all the bearing/bore interface surfaces 12 hours before pressing all the bearings into their respective pivot locations.

6.1.5. MAIN PIVOT

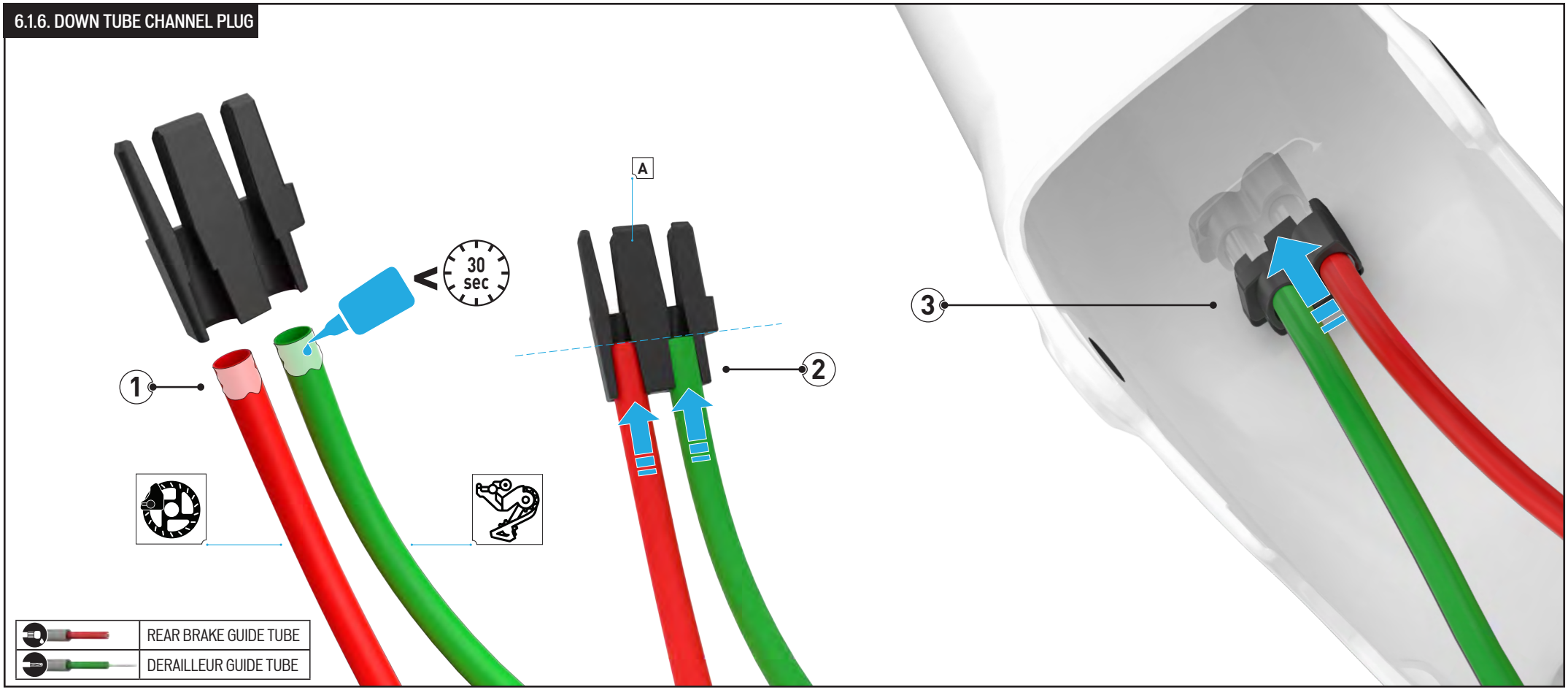


#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
F	Main pivot bolt DS	**Part of suspension bolt kit. S210500019**	1	M12 x 20 mm x 1 mm p, left hand, bolt	6 mm hex	24	210
G	Main pivot bolt NDS		1	M12 x 20 mm x 1 mm p, bolt	6 mm hex	24	210
H	Main pivot inner spacer		2	12.1 mm id x 19.5 mm od x 3 mm w, spacer	N/A	N/A	N/A

The drive side main pivot bolt is a left-hand thread.

- Carefully guide the two nylon cable guide tubes and the speed sensor cable plug through the two cable slots at the back of the frame and align the forward bore of the chainstay with the main pivot on the frame.
- Grease then place the main pivot inner spacers **(H)** against the inside main pivot bearings **(H)** (reduced edge facing toward the bearing).
- Grease the non-threaded surfaces, then insert the main pivot drive side bolt **(F)** and the main pivot non-drive side bolt **(G).** Use a 6 mm hex key, to hand tighten only.

6.1.6. DOWN TUBE CHANNEL PLUG

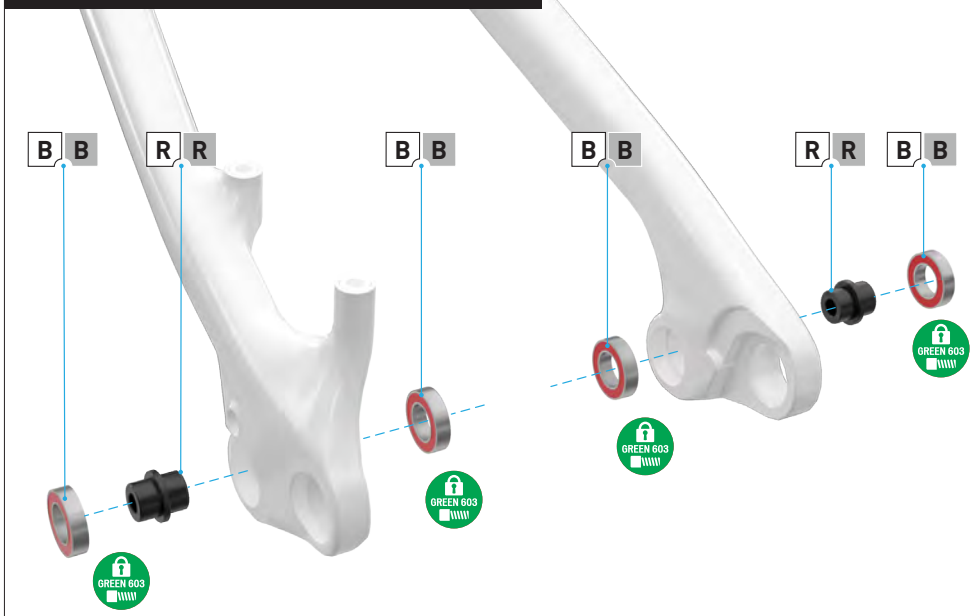


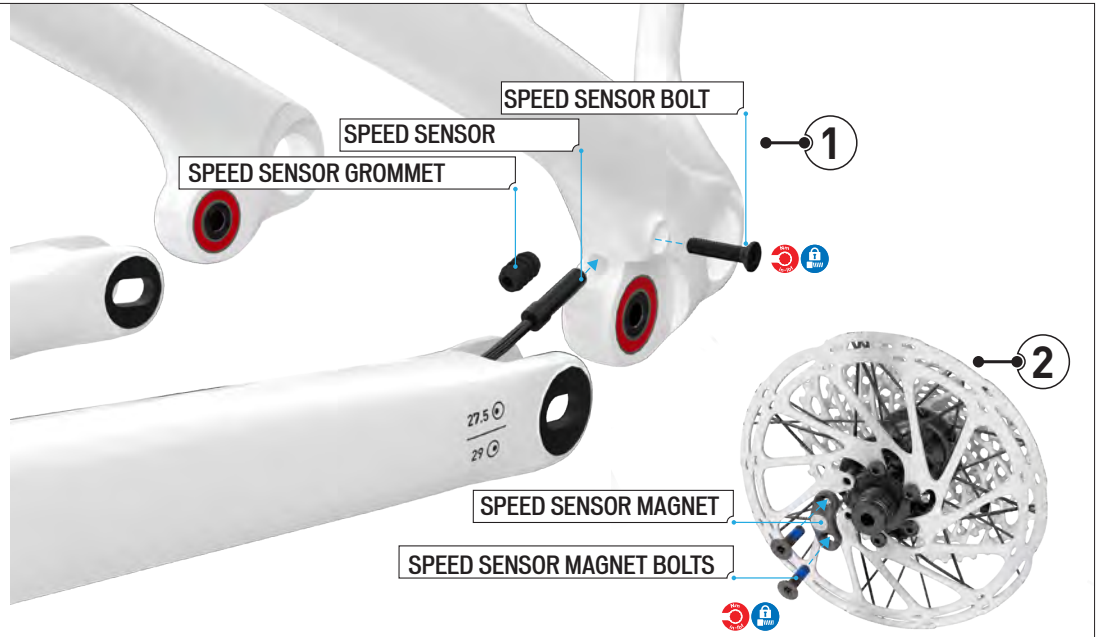
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION
A	Down tube channel plug	**S226500009**	1	ICR,CABLE GUIDE,MTB,PA TRAIL FSR G1,29F/27.5R

- 1: Place a small amount of Loctite 416 at the end of the rear brake guide tube. Briefly allow the glue to spread around the guide tube.
- 2. Quickly insert the guide tube as far as possible into the base of the down tube channel plug (A) and hold in place allowing the glue to set.
- Repeat the process with the rear derailleur guide tube.
- 3. Insert the channel plug into the cable guide tube that runs down the inside of the down tube.

	Loctite 416 has a 20-30 second work time.
	Ensure the down tube channel plug is completely inserted into the guide tube. Failure to do so could cause the battery to snag.

6.1.7. HORST PIVOT – BEARINGS AND SPEED SENSOR





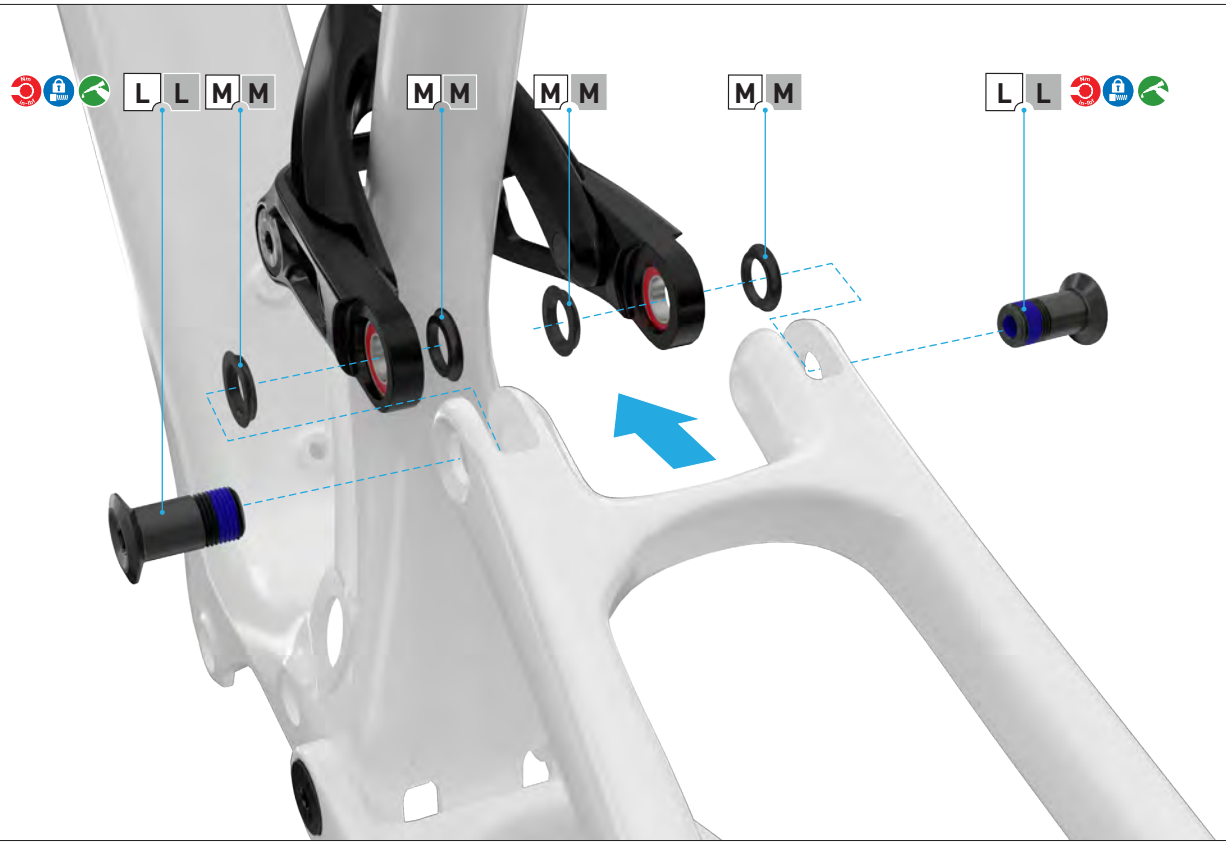
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
R	Horst link inner spacer	**Part of suspension bolt kit. S220500016**	2	6 mm id x 16 mm od x 16 mm w, stepped spacer	N/A	N/A	N/A
B	Horst link bearing		4	12 mm id x 21 mm od x 5 mm w, ball bearing	N/A	N/A	N/A
	Speed sensor kit	**S196800019**	1	ELE MY20 MTB SL SYSTEM, SPEEDSENSOR KIT	N/A	N/A	N/A
	Speed sensor cable		1	CA,SNSR,SPEED,BROSE, AMPHENOL, WERNERWIRTH COPY CON,650MM	N/A	N/A	N/A
	Speed sensor bolt		1	M4 x 18 mm x 0.7 mm p, bolt	3 mm hex	1	9
	Speed sensor grommet	**S216800021**	1	ELE TURBO MTB SPEED SENSOR GROMMET	N/A	N/A	N/A
	6-Bolt rotor mount speed sensor magnet assembly	**S194200016**	1	6-BOLT VERSION	N/A	N/A	N/A
	Speed sensor magnet bolts		2	M5 x 16 mm x 0.8 mm p, bolt	T25 Torx	6.2	56

- From the inside of each Horst pivot bore, insert a bearing **(B)**.
- Insert the center spacers **(R)** from the outside of the Horst pivot bores.
- On the outside of each Horst pivot bore, insert a bearing **(B)** sandwiching the center spacer between the other bearing.

i	Apply green Loctite 603 to all the bearing/bore interface surfaces 12 hours before pressing all the bearings into their respective pivot locations.
i	The speed sensor must be installed before assembling the Horst pivot.

- Align the chainstay close to the Horst link pivot.
- Insert the speed sensor into the hole at the front of the dropout, then feed it through the chainstay until is passes the bolt hole.
- Insert the speed sensor bolt into the hole. Use a torque wrench and 3 mm hex bit to torque the bolt to specification.
- Pry open the grommet and place it over the speed sensor cable behind the sensor.
- Slide the rubber grommet up into the speed sensor hole to secure it.
- 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.

6.1.8. LINK AT SEATSTAY PIVOT



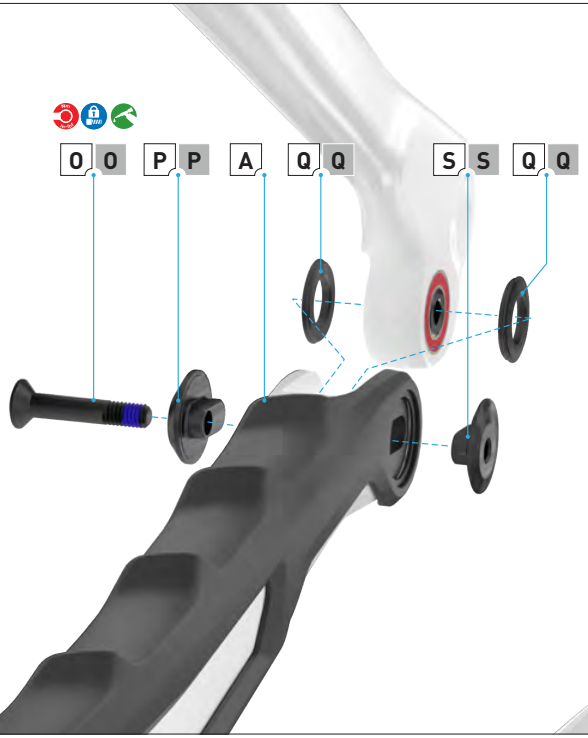
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Seatstay	**S215000005**	1	SS, MTB, PA TRAIL FSR G1, 29F/27.5R, CRBN	N/A	N/A	N/A
L	Link at seatstay bolt	**Part of Carbon suspension bolt kit. S210500019**	2	M12 x 27 mm x 1.0 mm p, bolt	6 mm hex	20	180
M	Link at seatstay spacers		4	12.1 mm id x 19.5 mm od x 3 mm w, spacer	N/A	N/A	N/A

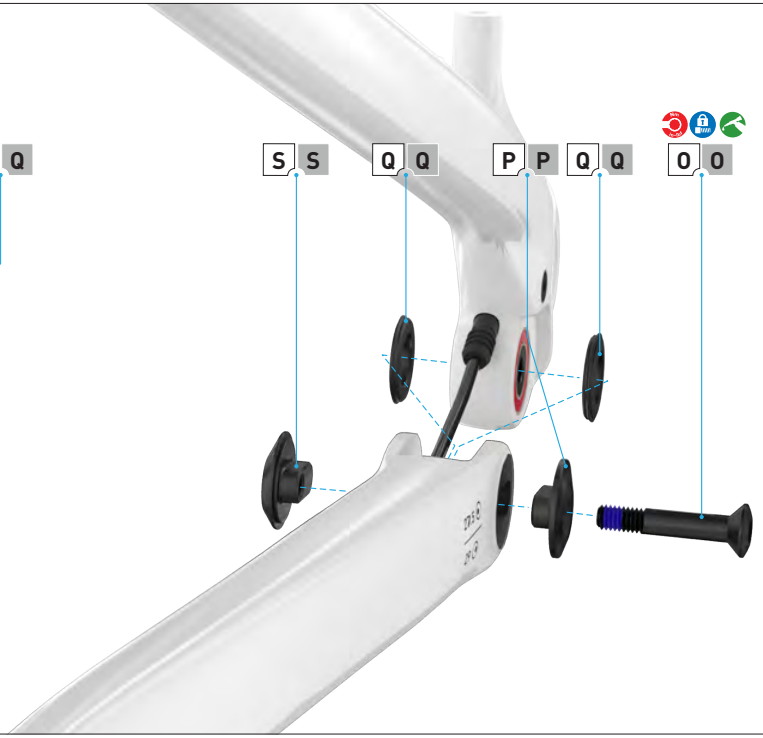
- Grease and place the link at seatstay spacers **(M)** (x4) with the reduced edge against the bearings of the upper link rear bore.
- Rotate the seatstay into position to align the seatstay bore with the link pivot bore.
- Grease the non-threaded surfaces, then insert the seatstay bolts **(L)** (x2) through the seatstay and link.
- Use a 6 mm hex key to hand tighten the two bolts.

6.1.9. HORST PIVOT

FLIP CHIP - 27.5 “REAR WHEEL (DEFAULT)

FLIP CHIP - 29" REAR WHEEL



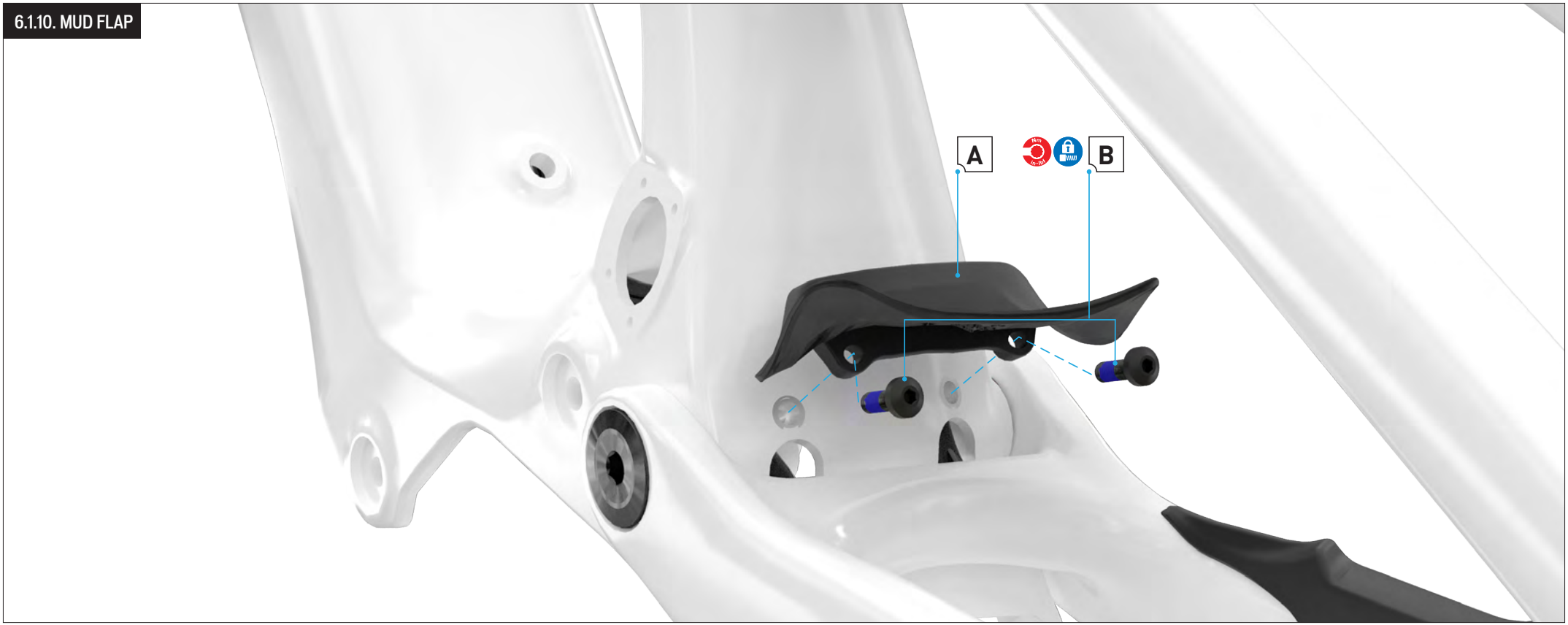


#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	Chainstay protector	**S216900005**	1	CS PROTECTOR,MTB,PA TRAIL FSR G1.1	N/A	N/A	N/A
O	Horst pivot bolt	**S214200059**	2	M6 x 32.5 mm 1 mm p, bolt	5 mm hex	10	90
P	Horst link outer flip chip		2	DO PIVOT SPACER,GEO ADJ,6.0 ID, FLIP CHIP	N/A	N/A	N/A
Q	Horst link outer spacer		4	12 mm id x 21 mm od x 2.5 mm w, spacer	N/A	N/A	N/A
S	Horst link inner flip chip		4	DO PIVOT SPACER,GEO ADJ 6 MM X 1 MM, FLIP CHIP	N/A	N/A	N/A

	CAUTION: Before installing a 29"rear wheel on a S1 or S2 size frame, consult section 6. GENERAL NOTES ABOUT ASSEMBLY in the Levo SL User Manual regarding saddle clearance.
	WARNING: The drive side and non-drive side Horst flip chips must both be aligned in the same 27.5" or 29" position. Improperly installed flip chips can damage the frame and can also cause you to lose control and fall.
	Always assemble the chainstay protector before assembling the horst pivot flip chips and bolts
	Once the flip chips are installed and torqued, there will be a small gap between the outer flange and the chainstay. Do not over tighten

- Clean the chainstay, then attach the chainstay protector **(A)** to the drive side chainstay with the protector over the flip chip pivot hole.
- Grease the spacers **(Q)** (x4) and place the reduced surface side against the bearings **(B)**.
- Rotate and align the seatstay pivot with the chainstay pivot while pulling the excess speed sensor cable from the motor area.
- NOTE: Ensure the speed sensor cable is free from the Horst pivot and cannot get pinched which would damage the cable.
- Depending on the size of your rear wheel, align the flip chip inner **(S)** and outer spacers **(P)** in either the 27.5"or 29" position and place them against the frame.
- Ensure that the inner and outer flip chip spacers are aligned in the same direction.
- Make sure all flip chips are fully seated and aligned with the chainstay protector before inserting the bolt.
- Grease all non-threaded surfaces and install the Horst link pivot bolts **(O)**. **Use** a 5 mm hex key to hand tighten only.

6.1.10. MUD FLAP

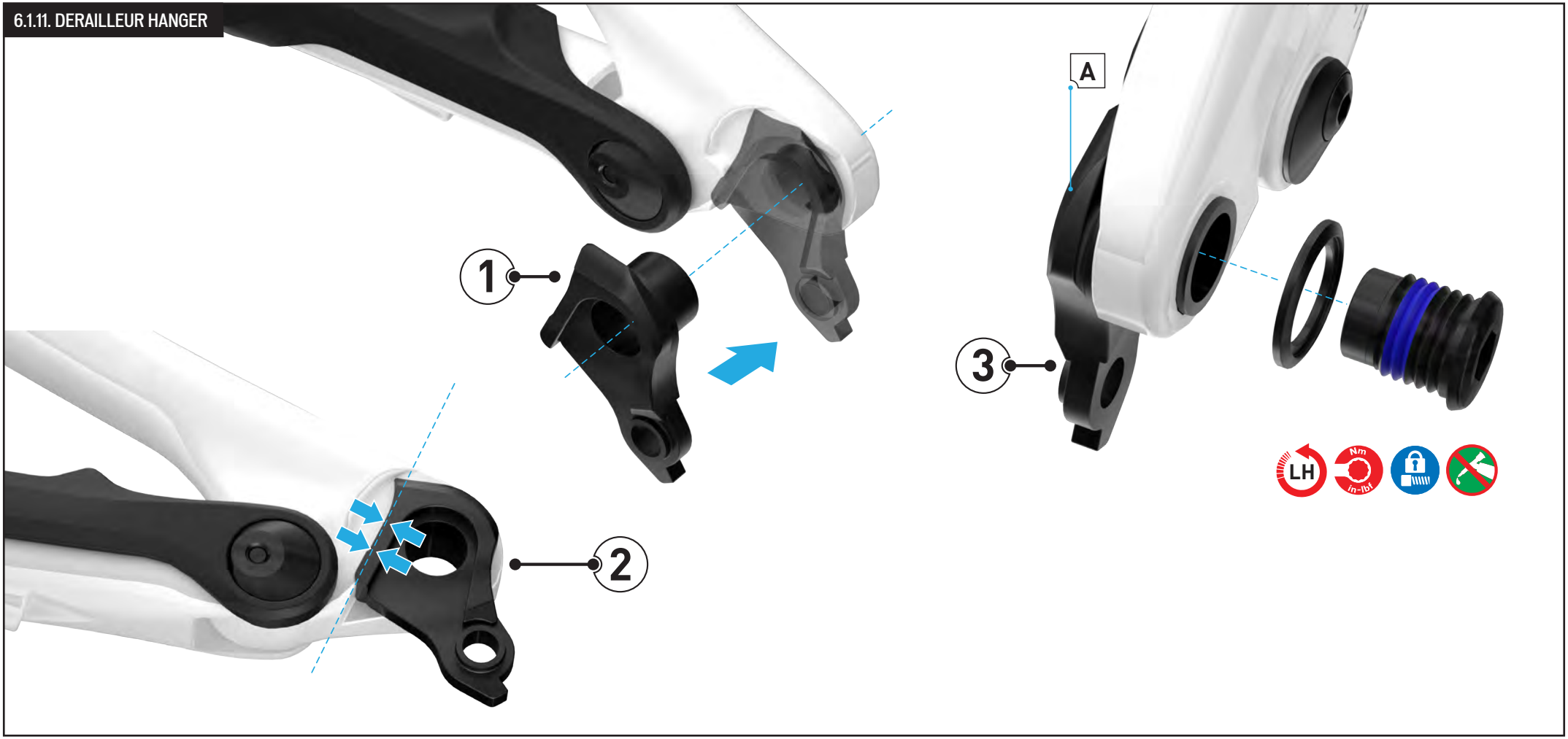


#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	Mud flap kit	**S214200057**	1	KIT,MUD FLAP,MTB,PA TRAIL FSR G1	N/A	N/A	N/A
B	Mud flap bolt		2	M4 x 12 mm x 0,7 mm p, bolt	2.5 mm hex	0.3	2.7

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

- Apply Loctite to the two mud flap bolts and place them in the two holes in the mud flap.
- Place the mud flap on the back of the frame on top of the chainstay.
- Flex the mud flap up to access the two mounting holes in the frame.
- Use a 2.5 mm hex key to tighten the two mud flap bolts.

6.1.11. DERAILLEUR HANGER



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	SRAM universal derailleur hanger	**S202600002**	1	HGR SRAM AC UDH DERAILLEUR HANGER AL BLACK (00.7918.089.000)	8 mm hex (left-hand thread)	25	220

CAUTION: Do NOT apply grease to the frame, UDH hanger, or UDH bolt threads.

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

- 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.
- 3. Install the UDH washer, then thread the UDH bolt through the washer and into the hanger.

- Use a torque wrench and 8 mm hex bit to torque 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.

6.1.12. DERAILLEUR ASSEMBLY

- Install the derailleur following the manufacturer's specifications.
- Insert the derailleur cable housing into the derailleur.

6.1.13. REAR BRAKE CALIPER

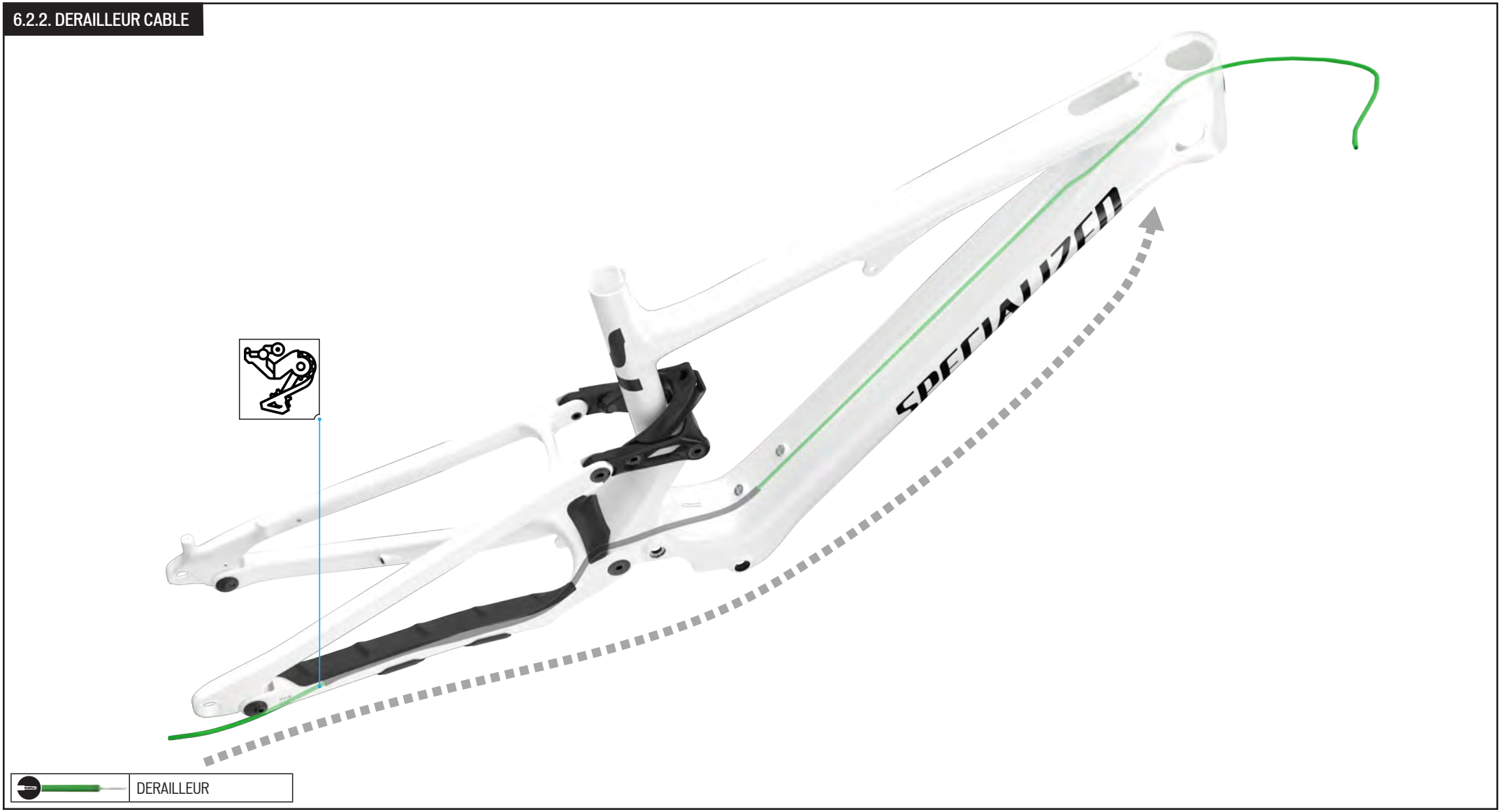
■ Install the rear brake caliper on the non-drive side of the seatstay according to the manufacturer's specification.

6.2.1. REAR BRAKE HOSE

	REAR BRAKE

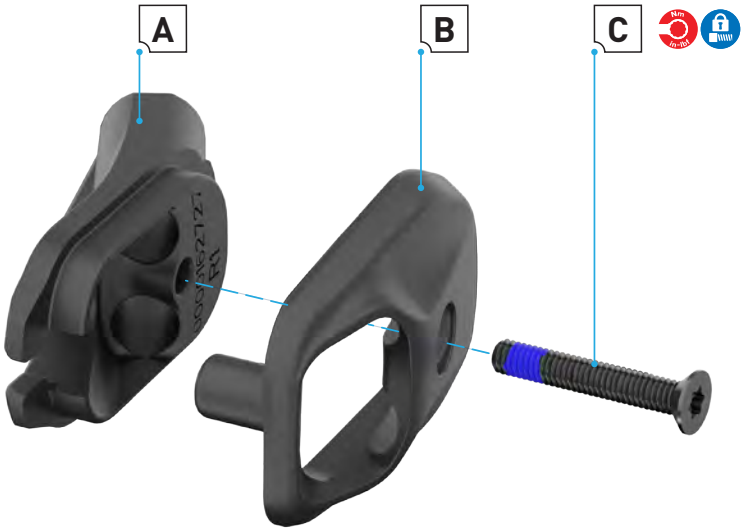
- Feed the rear brake hose into the non-drive side ICR cable port on the inside of the chainstay.
- Feed the cable though the nylon guide tubes and up the down tube.
- When the hose reaches the ICR port, gently guide it out of the non-drive side head tube cable port.

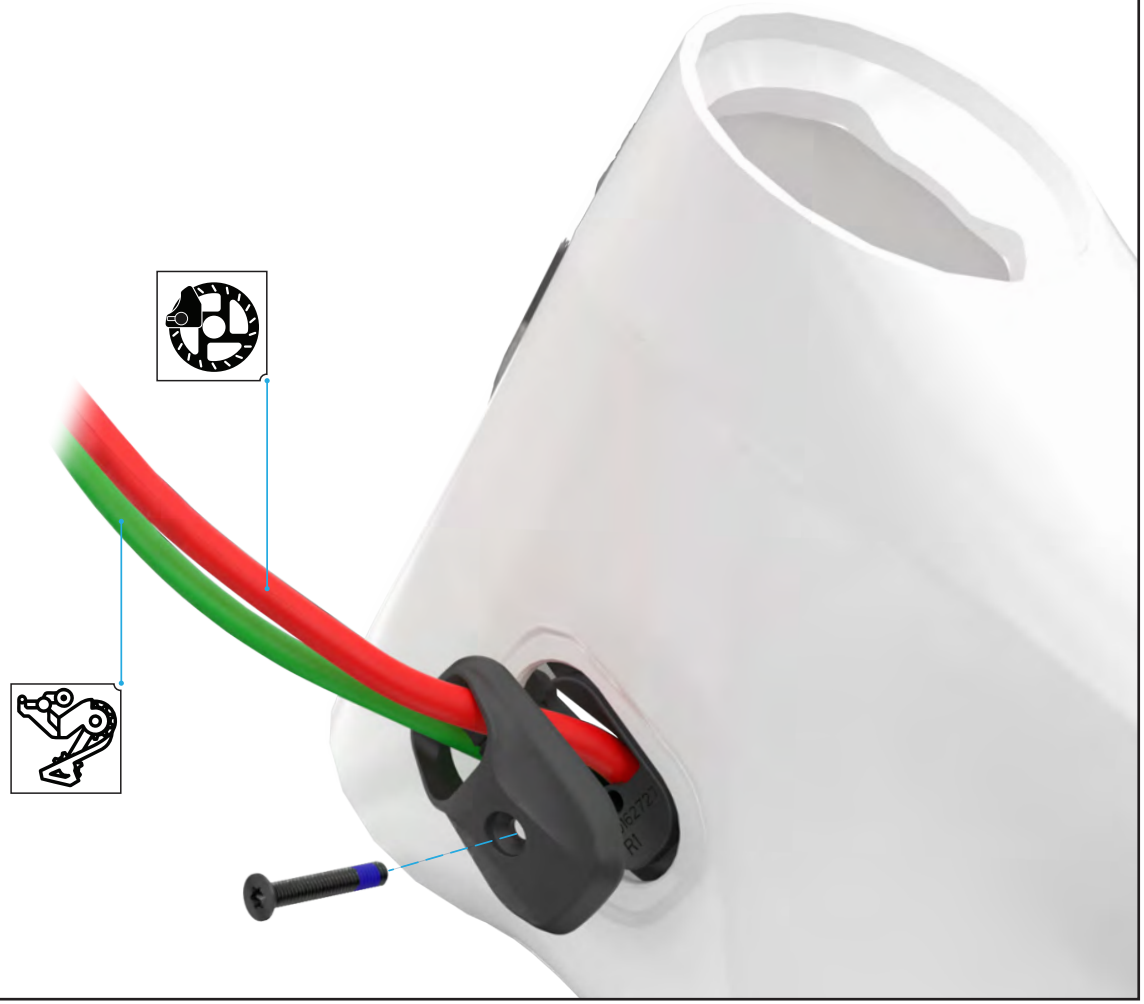
6.2.2. DERAILLEUR CABLE



- Feed the derailleur cable housing into the drive side ICR port on the bottom of the chainstay.
- Feed the cable through the derailleur cable guide tube and up the down tube.
- When the cable housing reaches the ICR port, gently guide it out of the NDS head tube ICR port.

6.2.3. NON-DRIVE SIDE ICR PORT



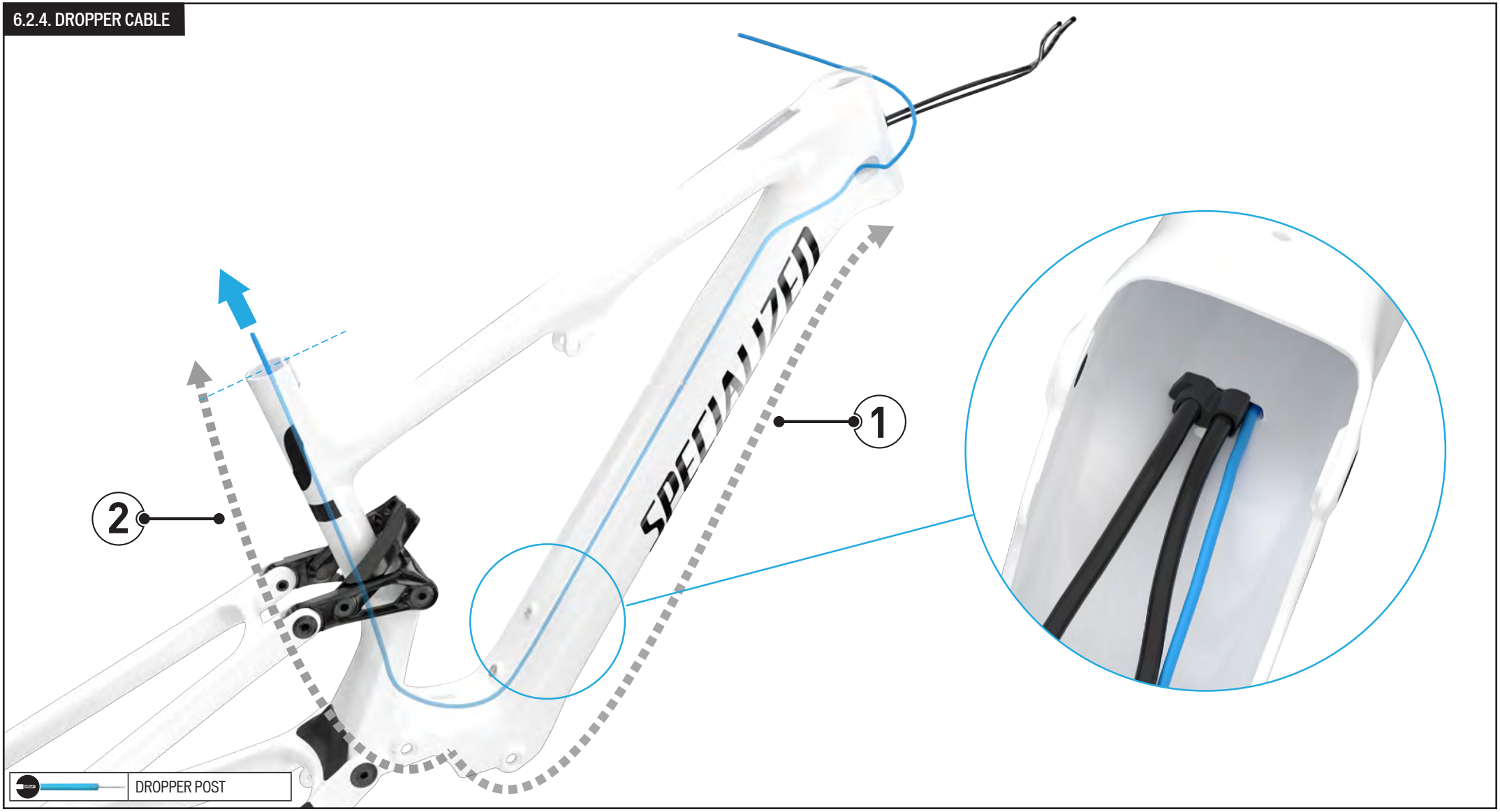


	REAR BRAKE
	DERAILLEUR

#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	ICR cover – 2 wire	S216500007	1	ICR CVR,UNIVERSAL RACETRACK, 2 WIRES, 2 CABLES	N/A	N/A	N/A
B	ICR base		1	ICR BASE, UNIVERSAL RACETRACK, NYLON, BLK	N/A	N/A	N/A
C	ICR guide screw		1	M3 x 18 mm x 0,5 p, bolt	T10 Torx	1	9

- Using a T10 Torx key, loosen the screw holding the inner and outer components of the ICR port guide together but do not separate the two components completely.
- Feed the rear brake hose through the upper hole of the non-drive side ICR guide.
- Feed the derailleur cable through the lower hole on the non-drive side ICR guide.
- Slide the inner component of the ICR guide into the NDS head tube port and place the outer component on the frame.
- Use a torque wrench and T10 Torx bit to torque the bolt to specification.

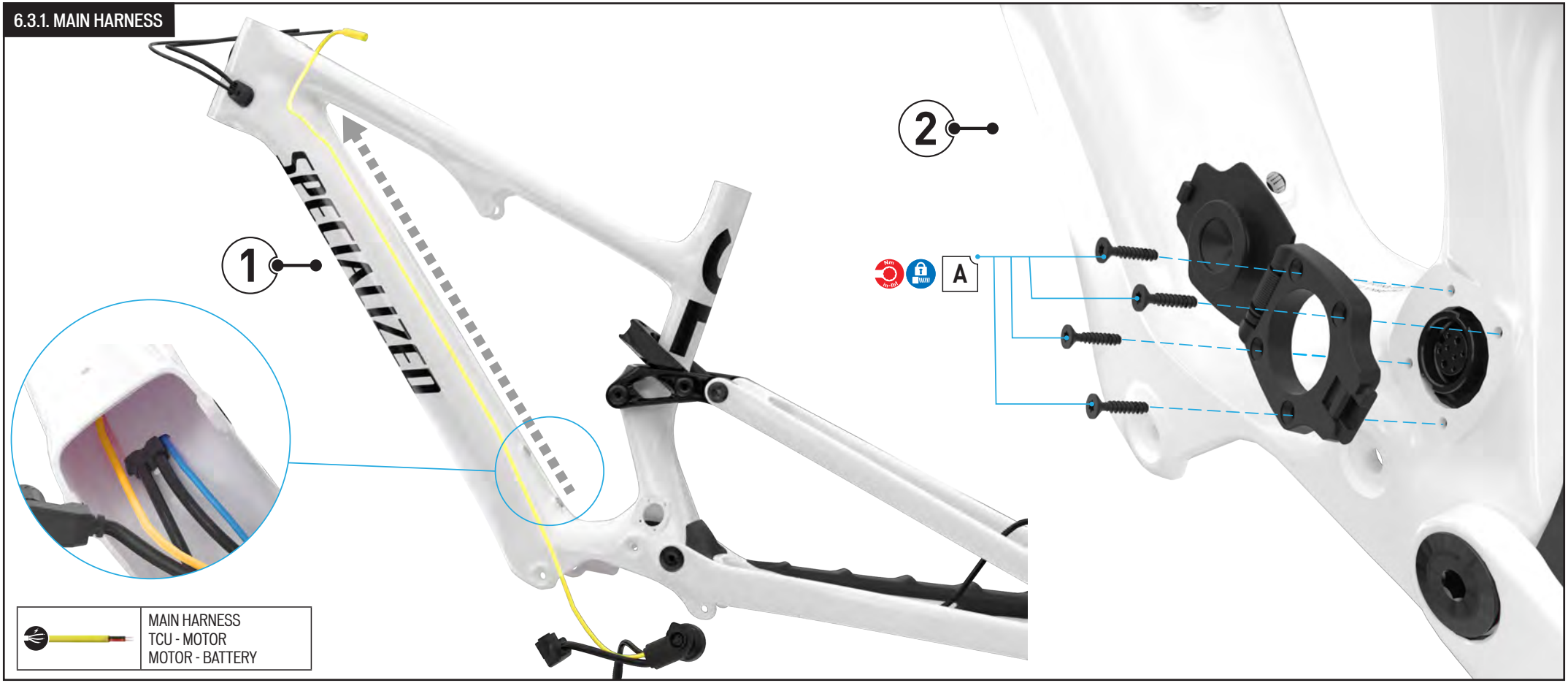
6.2.4. DROPPER CABLE



- 1. Route the dropper cable up through the integrated cable guide tube inside the down tube until it exits the ICR port on the drive side of the head tube.
- 2. Guide the other end of the dropper housing up into the seat tube, until it exits the seat tube.Ensure the dropper post cable housing exits past the top of the frame to guarantee access when installing the dropper post.

	Make sure enough cabling is exiting the frame to properly install the dropper post.
	Once bicycle assembly is complete, install the dropper post according to the manufacturer's specifications.

6.3.1. MAIN HARNESS

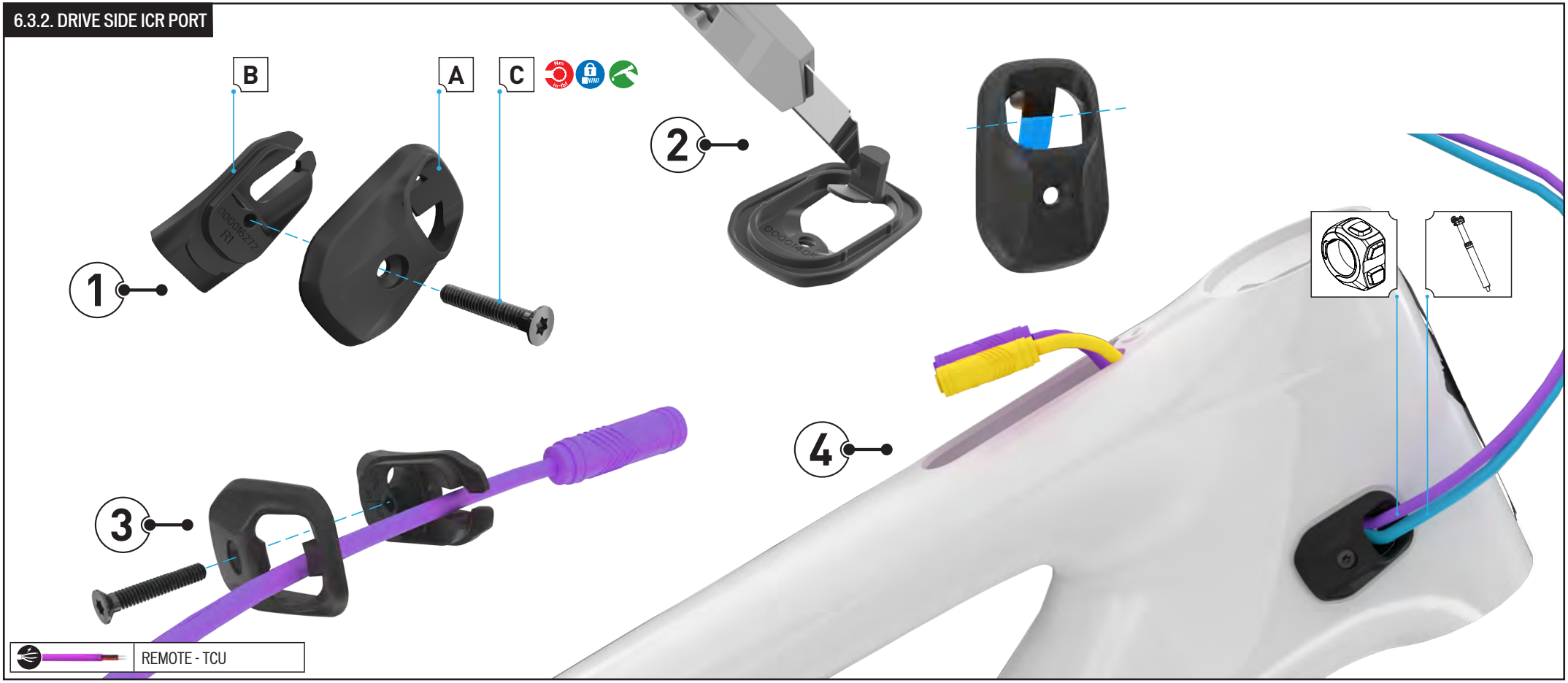


#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Charge port kit	**S209900023**	1	MSC SL SELF OPENING CHARGE PORT KIT	N/A	N/A	N/A
A	Charge port bolts		4	M2.5 X 14 mm, bolt	T8 Torx	1	9
	Main harness	**S196800021**	1	ELE WIRING, SL SYSTEM. MAIN HARNESS MOTOR-BATTERY-TCU	N/A	N/A	N/A

- 1. Route the motor–to–HMI cable up the down tube (outside of the down tube integrated cable channel) until it exits from the TCU port on the top tube.
- 2. Separate the charge port door and the charge port base on the main harness. From the inside of the frame, line up the charge port base with the charge port hole. Place the charge port door on the outside of the frame making sure the four holes line up with the four holes in the frame. The door should face the front of the bicycle when open.Insert the four mounting screws. Use a torque wrench and T8 Torx bit to torque the screws to specification.

When replacing the charge port lid with the motor installed, remove only three of the screws securing the old charge port lid. Loosen the remaining screw until you can rotate the charge port lid enough to secure the new lid using the screw on the opposite side. You can then remove the old component, rotate the new lid, and secure it with the remaining three screws.

6.3.2. DRIVE SIDE ICR PORT



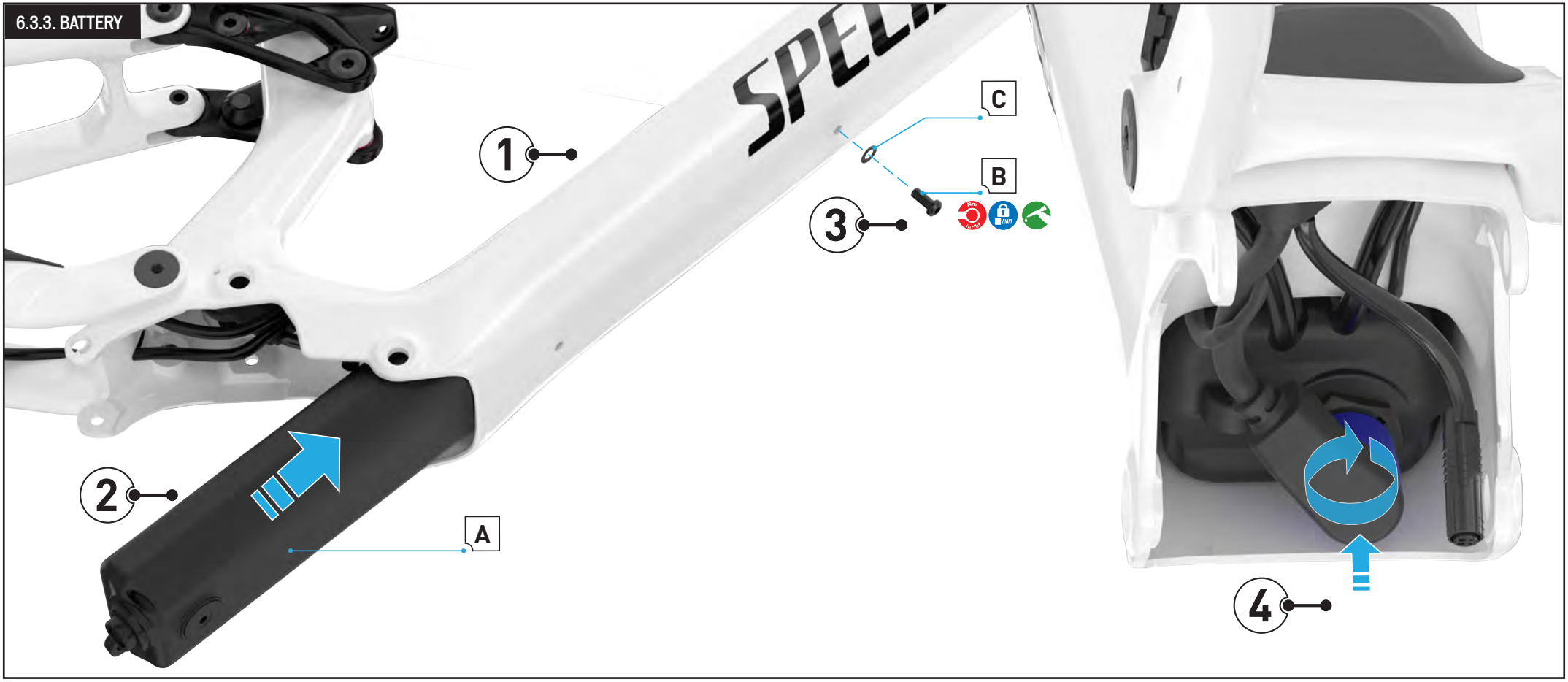
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	ICR cover – 2 wire	**S216500007**	2	ICR CVR,UNIVERSAL RACETRACK,2 WIRES,2 CABLES	N/A	N/A	N/A
B	ICR base		2	ICR BASE,UNIVERSAL RACETRACK,NYLON,BLK	N/A	N/A	N/A
C	ICR guide screw		2	M3 x 18 mm x 0,5 mm p, bolt	T10 Torx	1	9

The trail remote connector cannot pass through the ICR guide base holes and must be threaded through the slot located in the guide base. Removal of the tab on the ICR guide cover gives your access to the slot in the ICR guide base.

CAUTION: Using a sharp blade can cause injury. Keep fingers out of the path of the blade when cutting. Follow all safety guidelines from the blade's manufacturer.

- 1. Using a T10 Torx key loosen the screw holding the inner and outer components of the drive side ICR port guide together and separate the two components completely.
- 2. Use a sharp blade to remove the tab in the ICR guide cover.
- 3. Thread the remote cable connector through the ICR guide base and then through the slot in the guide base and out of the TCU cutout in the top tube. Thread the derailleur cable through the lower hole on the non-drive side ICR guide.
- 4. Slide the inner component of the ICR guide into the NDS head tube port, and place the outer component on the frame. Using a torque wrench and a T10 Torx bit, and torque the ICR guide screw to specification.

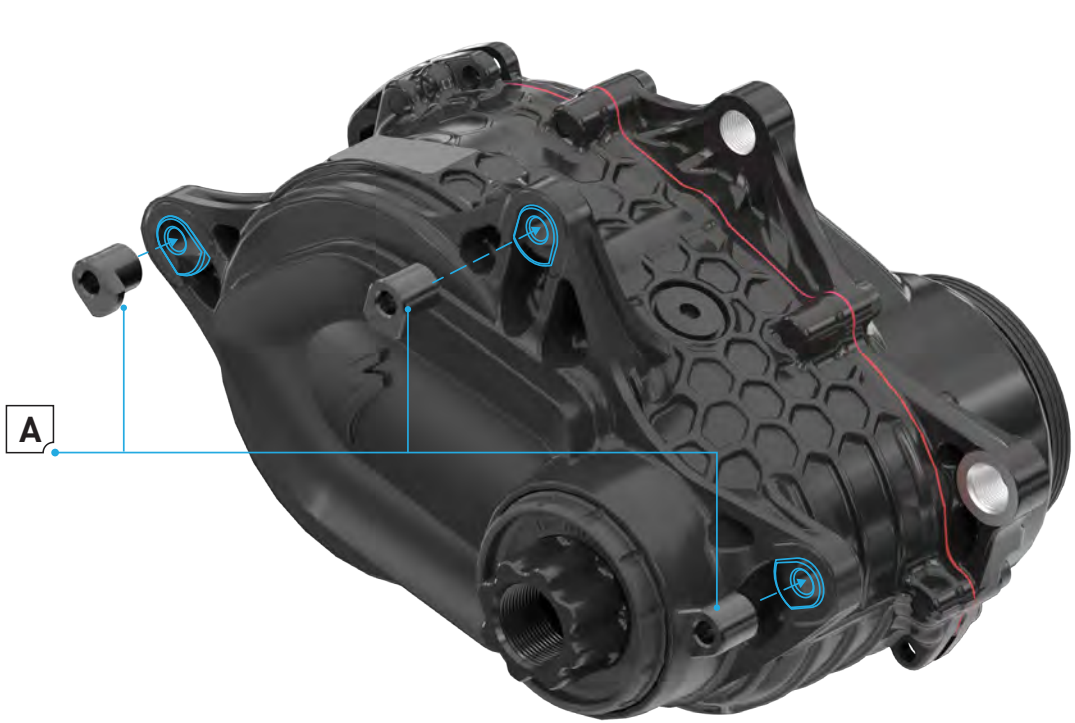
6.3.3. BATTERY



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	Internal battery	**S196800015**	1	ELE BATTERY SL SYSTEM, INTEGRATED, 320WH, SBC-B15, W/O BOLTS	N/A	N/A	N/A
	Battery mounting hardware – Carbon	**S210500020**	1	BLT MY22 LEVO SL CARBON, BATTERY MOUNTING HARDWARE	N/A	N/A	N/A
B	Battery mounting bolt		2	M6 x 14 mm x 1.0 mm p, bolt	4 mm hex	3	27
C	Battery mounting washer		2	6.4 mm Id x 12 mm od x 0.5 mm thick, washer	N/A	N/A	N/A

- 1. Ensure the down tube channel plug, rear brake and derailleur guide tubes, and dropper post cable are securely in place in the down tube cable channel. Pull on the HMI cable from the TCU cutout to ensure the cable is as straight as possible in the down tube.
- 2. Slide the battery up the down tube until the upper battery bolt hole aligns with the upper battery mount hole in the frame.
- 3. Insert the battery mount bolt (B) and washer (C). Use a torque wrench and 4 mm hex bit and torque the bolt to specification.
- 4. Connect the main harness to the battery and rotate the battery twist-lock connector clockwise until it locks ensuring a secure connection.

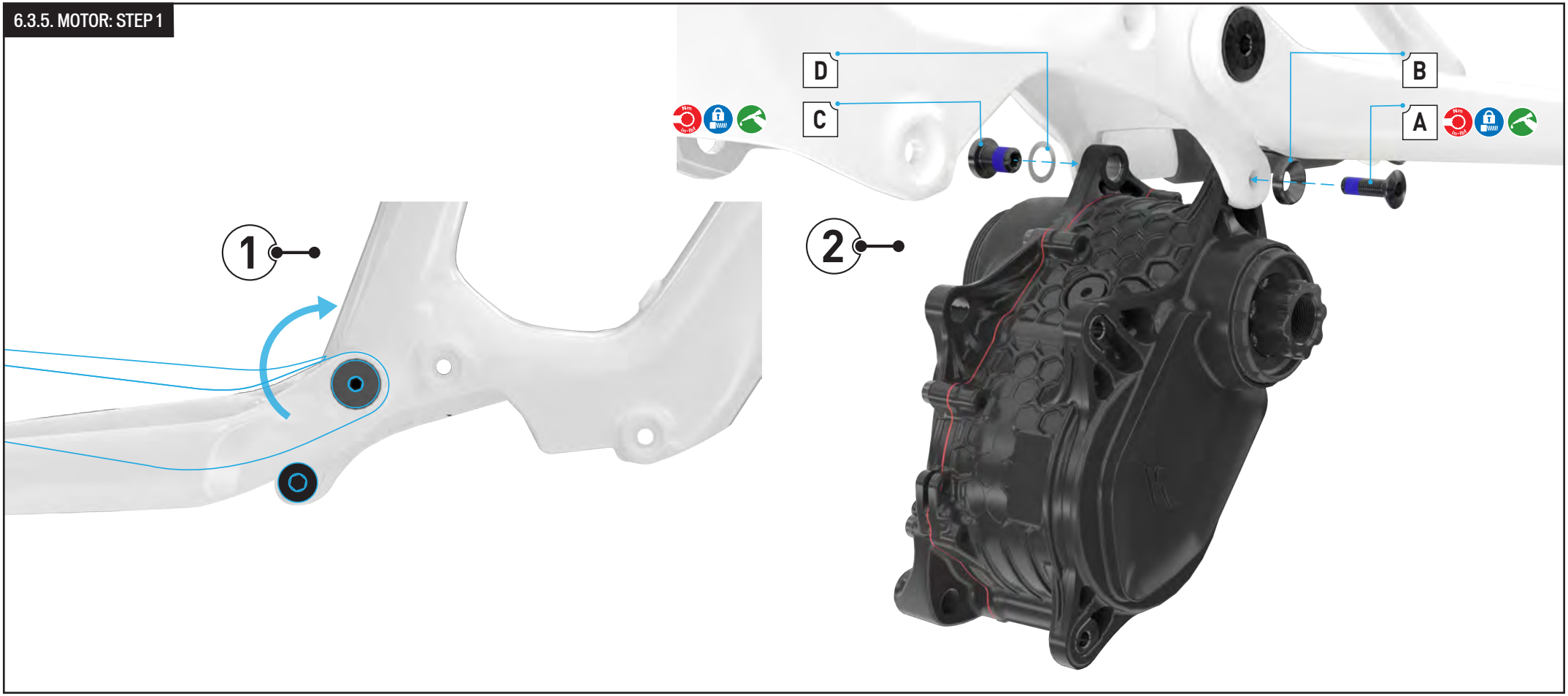
6.3.4. MOTOR PREPARATION



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Motor	**S226800001**	1	MOTOR, M20	N/A	N/A	N/A
A	Removable threaded inserts		3	DS MOTOR MOUNT THREADS	N/A	N/A	N/A

- Prepare the motor for assembly by placing three motor bolt inserts **(A)** into the slots on the non-drive side of the motor as indicated.
- Tap the inserts lightly with a rubber mallet to fully seat them.

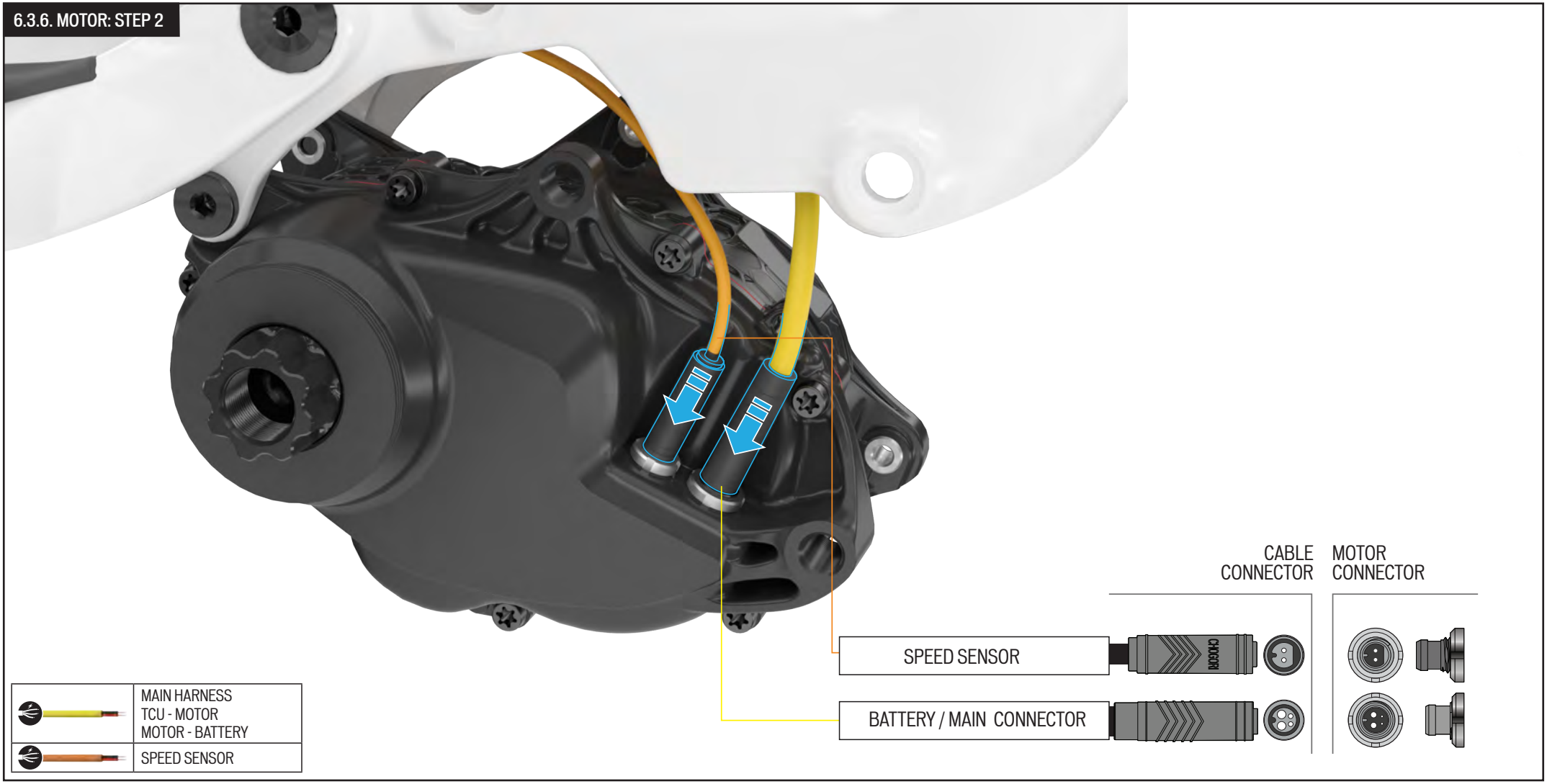
6.3.5. MOTOR: STEP 1



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Motor mounting hardware kit – Carbon	**S210500018**	1	BLT MY22 LEVO SL CARBON MOTOR MOUNTING HARDWARE KIT	N/A	N/A	N/A
A	NDS motor bolt		3	M6 x 20 mm x 1.0 mm p, bolt	5 mm hex	10	90
B	NDS motor washer		3	6.4 mm id x 16 mm od x 4 mm thick, washer	N/A	N/A	N/A
C	DS motor bolt		3	M10 x 14 mm x 1.0 mm p, bolt	5 mm hex	13	115
D	DS motor washer		3	11 mm id x 16 mm od x 0.5 mm thick, washer	N/A	N/A	N/A

- 1. Before assembling the motor, rotate the chainstay upward to enure access to the rear motor bolt holes.
- 2. Install the motor assembly into the frame. Make sure the rear motor bolt holes are aligned with the frame bolt holes.
- Grease the non-threaded surfaces and insert the non-drive side motor bolt (A) and washer (B) into the frame using a 5 mm hex key. Hand tighten only allowing the motor to rotate around this pivot.
- Grease the non-threaded surfaces and insert the drive side motor mounting bolt (C) and washer (D) into the frame using 5 mm hex key to hand tighten.

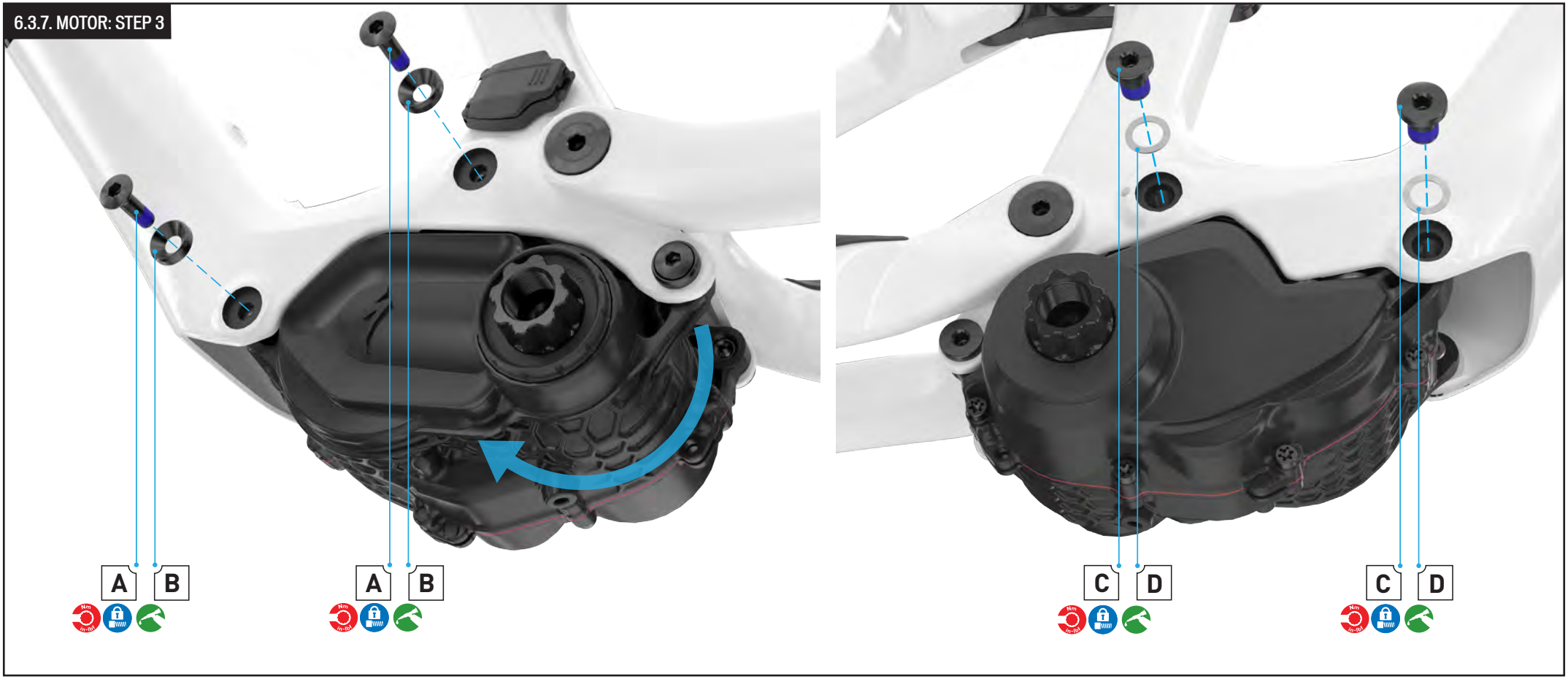
6.3.6. MOTOR: STEP 2



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Motor	**S226800001**	1	MOTOR, M20	N/A	N/A	N/A
	Speed sensor cable	**S196800019**	1	ELE MY20 MTB SL SYSTEM, SPEEDSENSOR KIT	N/A	N/A	N/A
	Main harness	**S196800021**	1	ELE WIRING, SL SYSTEM. MAIN HARNESS MOTOR-BATTERY-TCU	N/A	N/A	N/A

- Connect the speed sensor connector to the motor in the rear position.
- Connect the battery/main harness connector to the motor in the forward position.

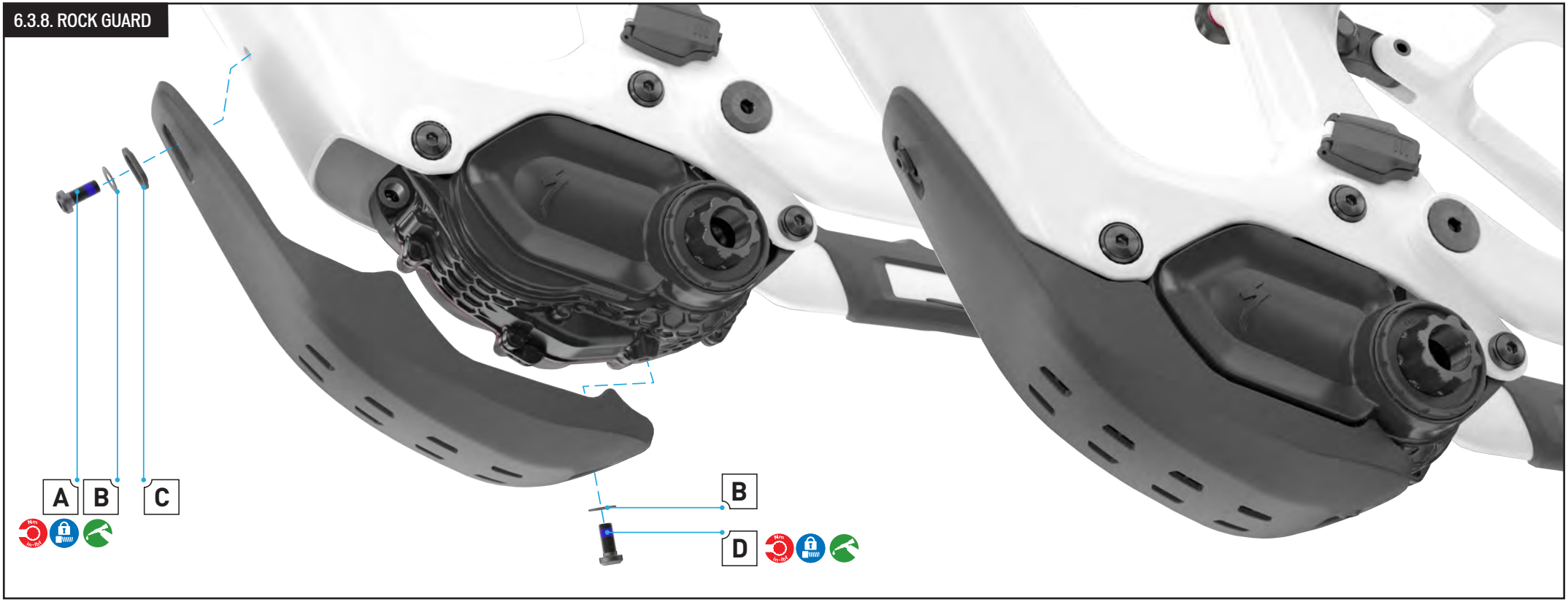
6.3.7. MOTOR: STEP 3



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Motor mounting hardware kit	S210500018	1	BLT MY22 LEVO SL CARBON MOTOR MOUNTING HARDWARE KIT	N/A	N/A	N/A
A	NDS motor bolt		3	M6 x 20 mm x 1.0 mm p, bolt	5 mm hex	10	90
B	NDS motor washer		3	6.4 mm id x 16 mm od x 4 mm thick, washer	N/A	N/A	N/A
C	DS motor bolt		3	M10 x 14 mm x 1.0 mm p, bolt	5 mm hex	13	115
D	DS motor washer		3	11 mm id x 16 mm od x 0.5 mm thick, washer	N/A	N/A	N/A

- Rotate the motor assembly into the frame. Make sure the motor bolt holes are aligned with the frame bolt holes.
- Grease the non-threaded surfaces and insert the remaining non-drive side motor mounting bolts (A) and washers (B) into the frame using a 5 mm hex key.
- Grease the non-threaded surfaces and insert the remaining drive side motor mounting bolts (C) and washers (D) using a 5 mm hex key.
- Torque all drive side motor bolts to specification.
- Torque all non-drive side motor bolts to specification.

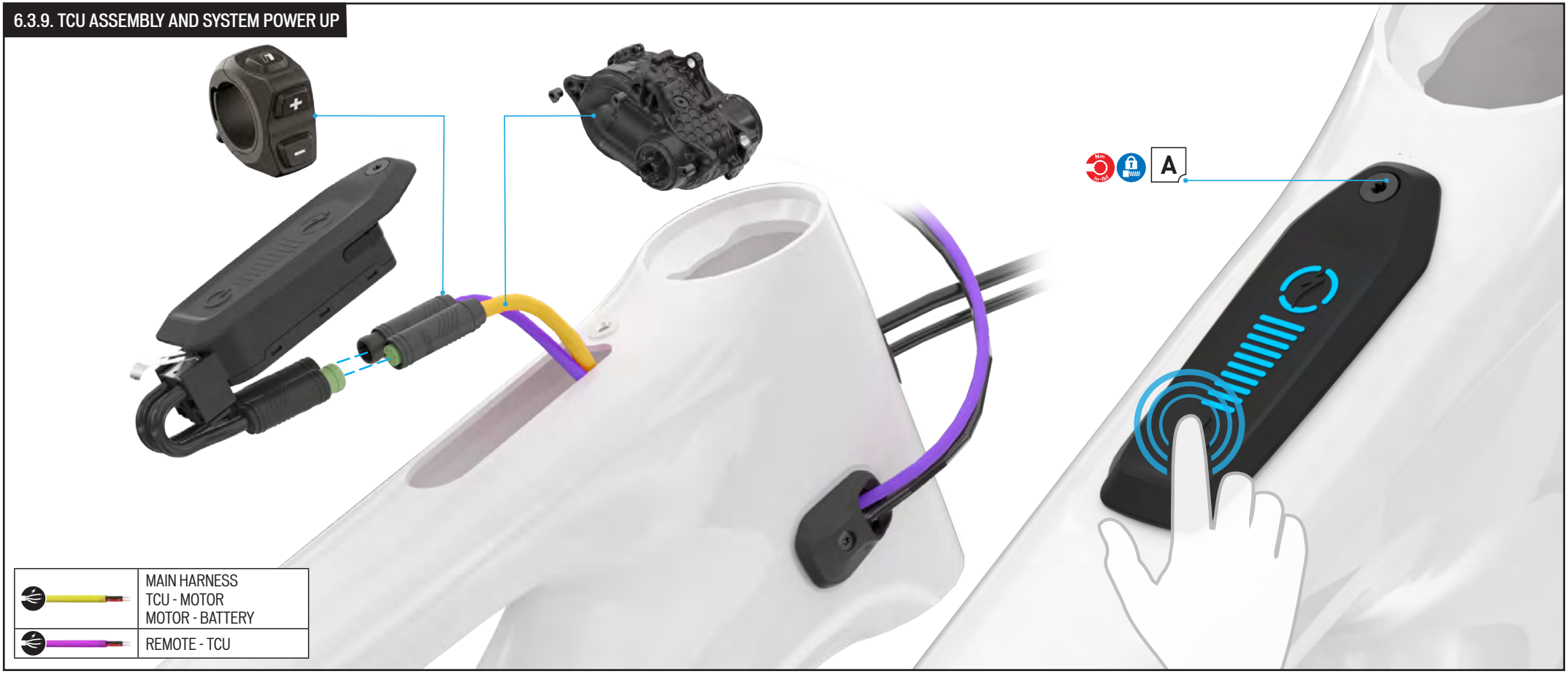
6.3.8. ROCK GUARD



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Rock guard kit	S214200058	1	SUB MY22 LEVO SL CARBON ROCK GUARD KIT MOTOR,M20	N/A	N/A	N/A
	Rock guard		1	ROCK GUARD,PA TRAIL FSR G1.1	N/A	N/A	N/A
A	Rock guard / battery bolt		1	M6 x 14 mm x 1 mm p, bolt	4 mm hex	3	27
B	Rock guard washer		2	6.4 mm id x 12 mm od x 0.5 mm thick, washer	N/A	N/A	N/A
C	Rock guard slot washer		1	6.4 mm id x 12 mm od x 1.5 mm thick, slot washer	N/A	N/A	N/A
D	Rear rock guard bolt		1	M6 x 14 mm x 1 mm p, bolt	4 mm hex	2.5	22

- Insert the forward rock guard / battery bolt, washer, and slot washer. Use a torque wrench and 4 mm hex bit and torque to specification.
- Insert the rear rock guard bolt and washer. Use a torque wrench and 4 mm hex bit and torque to specification.

6.3.9. TCU ASSEMBLY AND SYSTEM POWER UP



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Turbo connect unit (TCU)	**S216800009**	1	ELE TURBO CONNECT UNIT DISPLAY (A1.2) WITH GITEKI MARK	N/A	N/A	N/A
A	TCU screw		1	M4 x 10 mm bolt	T10 Torx	0.8	7

TCU

- Before continuing with the assembly, connect the supplied TCU and briefly turn on the system to ensure the motor and battery are operating correctly.
- Insert the corresponding cable connectors into the TCU connectors as indicated. The connectors make an audible click when they are fully inserted.
- Insert the TCU into the top tube through the top tube cutout.
- Use torque wrench and T10 Torx bit and torque to specification.
- Start the system by pressing and holding the POWER BUTTON on the TCU display.
- Power the system off by pressing the POWER BUTTON until the display turns off.

WARNING! Always turn the battery off when not in use and/or when working on the bicycle.

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.

6.3.10. MASTERMIND TCU ASSEMBLY AND SYSTEM POWER UP

#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	MasterMind turbo connect unit (TCU)	**S216800020**	1	ELE TURBO CONNECT UNIT 2	N/A	N/A	N/A
A	Turbo connect unit (TCU) mounting bolt		1	M4 x 10 mm bolt	T10 Torx	0.8	7

MASTERMIND TCU

- Before continuing with the assembly, connect the supplied MASTERMIND TCU and briefly turn on the system to ensure the motor and battery are operating correctly.
- Insert the corresponding connectors in the MM TCU connectors as indicated. The connectors make an audible click when they are fully inserted.
- Insert the MM TCU into the top tube through the top tube cutout.
- Use torque wrench and T10 Torx bit and torque to specification.
- Start the system by pressing and holding the POWER BUTTON on the MASTERMIND TCU display.
- Power the system off by pressing the POWER BUTTON until the display turns off.

WARNING! Always turn the battery off when not in use and/or when working on the bicycle.

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.

6.3.11. REAR SHOCK: CARBON SHOCK EXTENSION

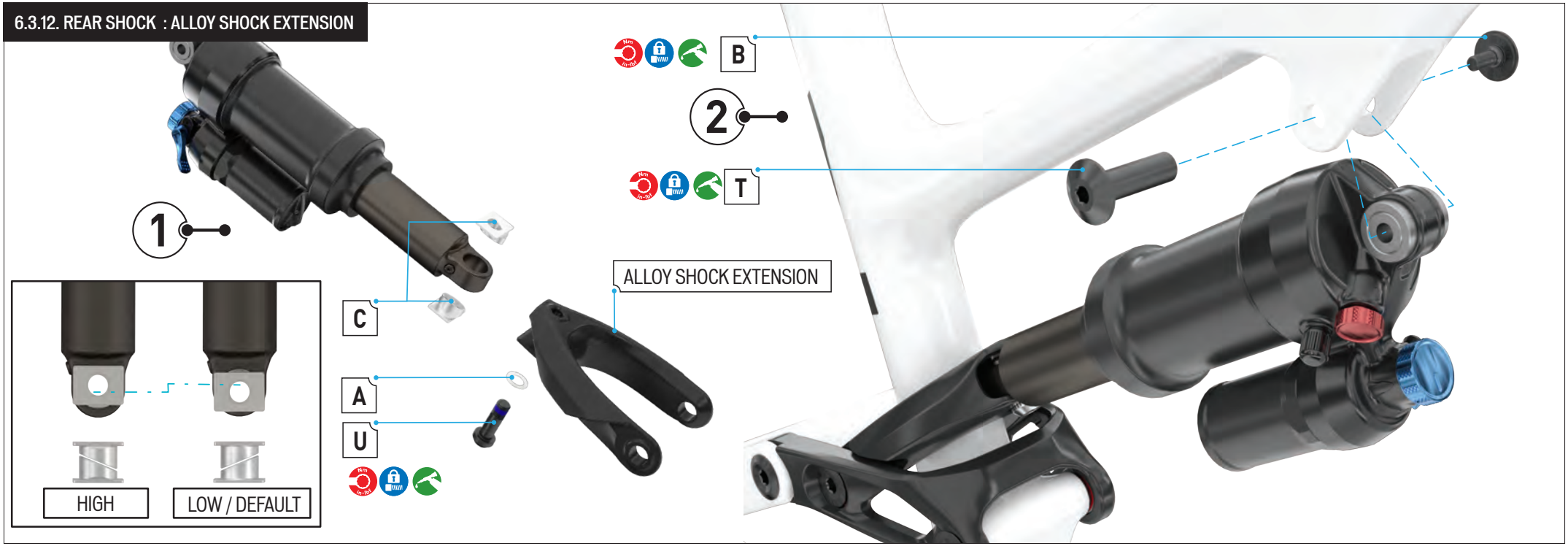
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Shock extension – Carbon	**S216300005**	1	SHK EXT MY22 LEVO SL CARBON, CARBON EXTENSION	N/A	N/A	N/A
	Rear shock hardware kit	**S210500021**	1	BLT MY22 LEVO SL CARBON, REAR SHOCK HARDWARE KIT	N/A	N/A	N/A
U	Rear shock mounting bolt – Carbon extension		1	M8 x 28 mm x 1.25 mm p, bolt	6 mm hex	20	180
A	Rear shock mounting washer		1	8.2 mm id x 13 mm od x 0.5 mm thick, washer	N/A	N/A	N/A
T	Forward shock mounting axle		1	FSM,MTB,XC FSR H1, AXLE	4 mm hex	5.5	49
B	Forward shock mounting screw		1	M5 x 11 mm x 0.8 mm p, bolt	4 mm hex	5.5	49
C	Geo-adjust flip chip bushing kit	**S189900096**	1	BLT GEO-ADJUST FLIP CHIP BUSHING KIT, FOR REAR SHOCK EYELET, 8 MM ID X 15 MM OD X 6.5MM, STEEL (2 PCS)	N/A	N/A	N/A

CARBON FRAME: Do not assemble the rear shock until motor and battery assembly is complete

Place a cloth on the frame to prevent the shock from damaging the paint

- Place the flip chips in the rear shock eyelet based on your preferred rear wheel size.
- Install the shock/flip chip assembly into the shock extension, then insert and only secure the rear shock mounting bolt using a 6 mm hex key.
- Rotate and align the shock with the forward shock mount.
- Insert the forward shock eye bolt. Use a torque wrench and 4 mm hex bit and torque the bolt to specification.
- Use a torque wrench and 6 mm hex bit to torque the rear shock mounting bolt to specification.

6.3.12. REAR SHOCK : ALLOY SHOCK EXTENSION



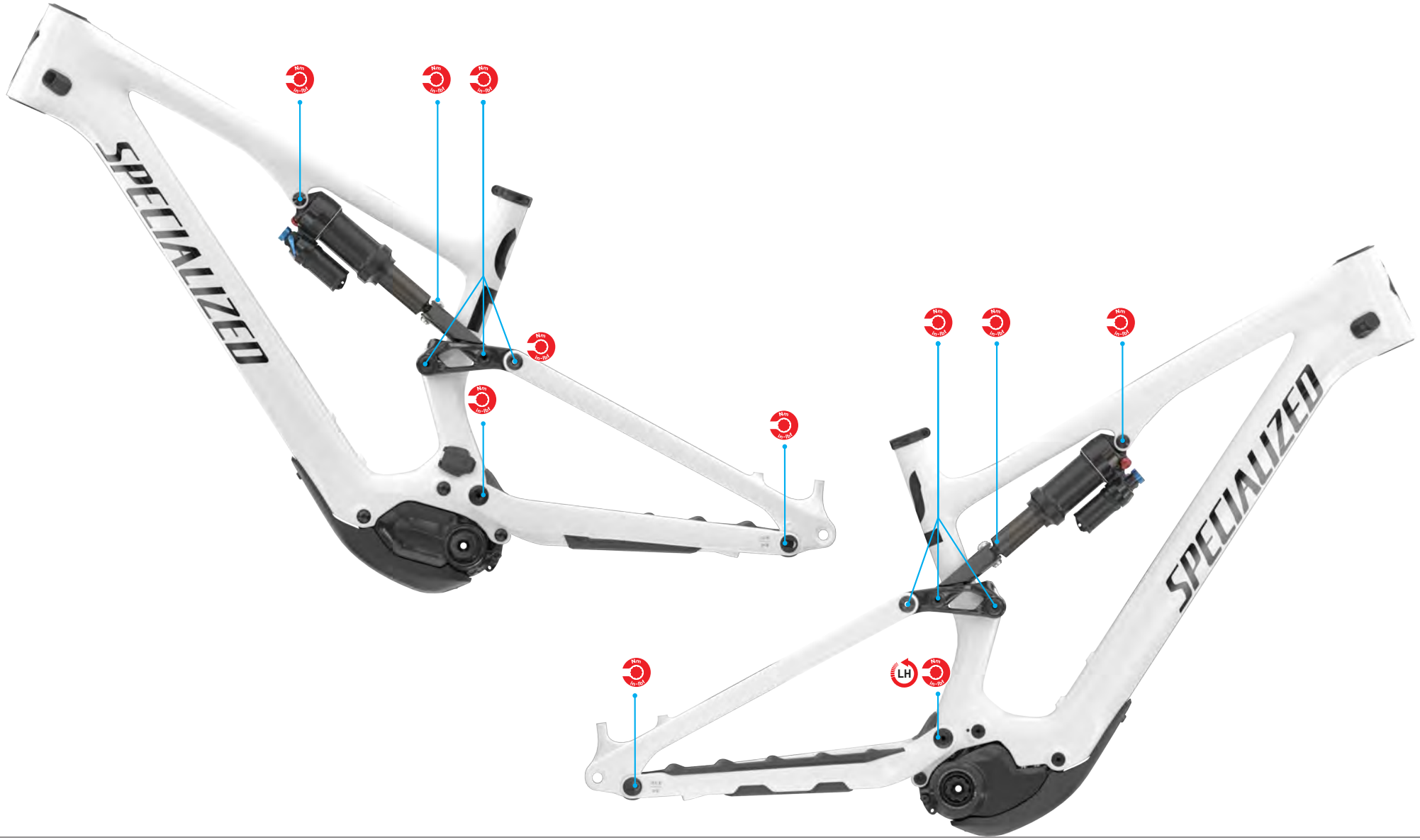
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Shock extension – Alloy	**S216300004**	1	SHK EXT MY22 LEVO SL CARBON, ALLOY EXTENSION	N/A	N/A	N/A
	Rear shock hardware kit	**S210500021**	1	BLT MY22 LEVO SL CARBON, REAR SHOCK HARDWARE KIT	N/A	N/A	N/A
U	Rear shock mounting bolt – Alloy extension		1	M8 x 26 mm x 1.25 mm p,bolt	6 mm hex	20	180
A	Rear shock mounting washer		1	8.2 mm id x 13 mm od x 0.5 mm thick, washer	N/A	N/A	N/A
T	Forward shock mounting axle		1	FSM,MTB,XC FSR H1, AXLE	4 mm hex	5.5	49
B	Forward shock mounting screw		1	M5 x 11 mm x 0.8 mm p, bolt	4 mm hex	5.5	49
C	Geo-adjust flip chip bushing kit	**S189900096**	1	BLT GEO-ADJUST FLIP CHIP BUSHING KIT, FOR REAR SHOCK EYELET, 8 MM ID X 15 MM OD X 6.5MM, STEEL (2 PCS)	N/A	N/A	N/A

CARBON FRAME: Do not assemble the rear shock until motor and battery assembly is complete

Place a cloth on the frame to prevent the shock from damaging the paint

- Place the flip chips in the rear shock eyelet based on your preferred rear wheel size.
- Install the shock/flip chip assembly into the shock extension, then insert and loosely tighten the rear shock mounting bolt using a 6 mm hex key.
- Rotate and align the shock with the forward shock mount.
- Insert the forward shock eye bolt. Use a torque wrench and 4 mm hex bit and torque to specification.
- Use a torque wrench and 6 mm hex bit to torque the rear shock mounting bolt to specification.

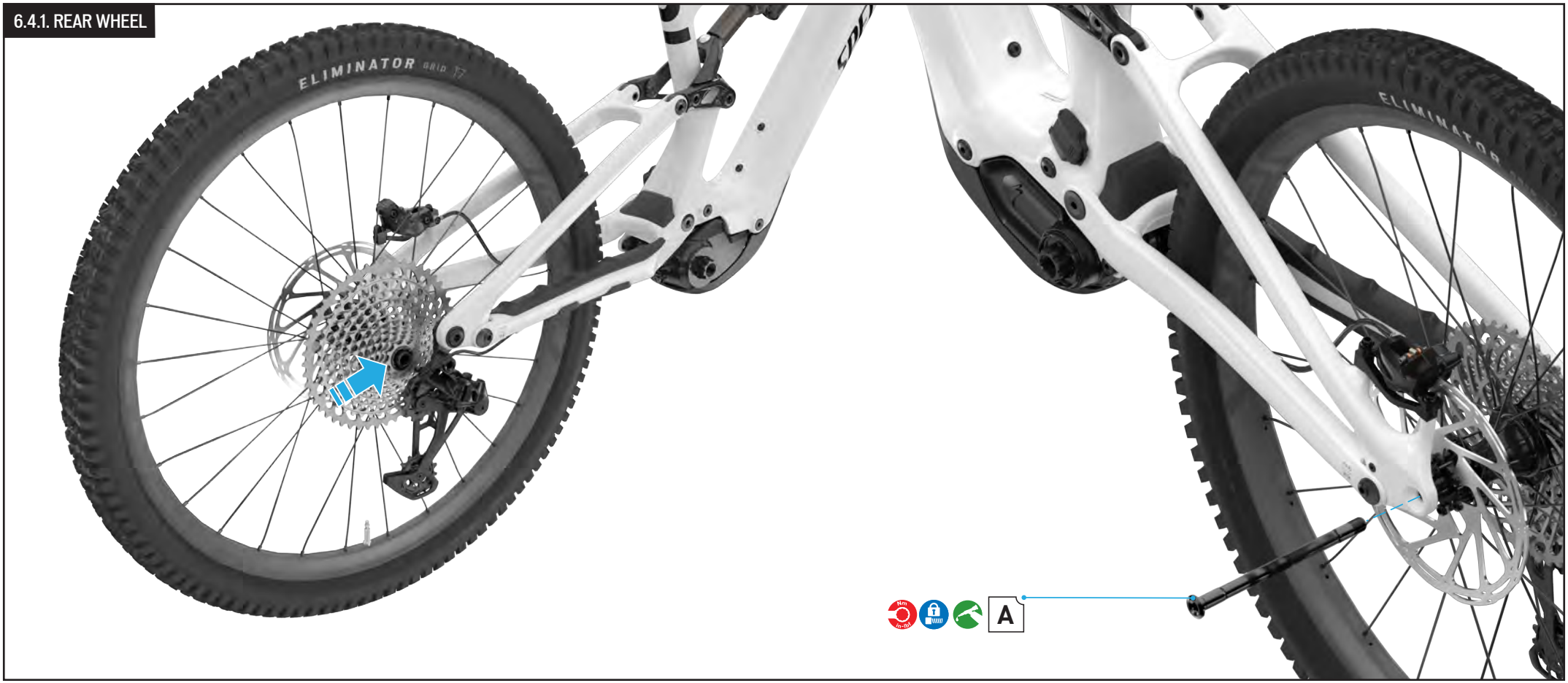
6.3.13. SUSPENSION BOLTS



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Suspension bolt kit my23 Levo SL Carbon	**S210500019**	1	SUSPENSION BOLT KIT MY22 LEVO SL CARBON	N/A	N/A	N/A

■ Torque all rear suspension bolts to specification.

6.4.1. REAR WHEEL

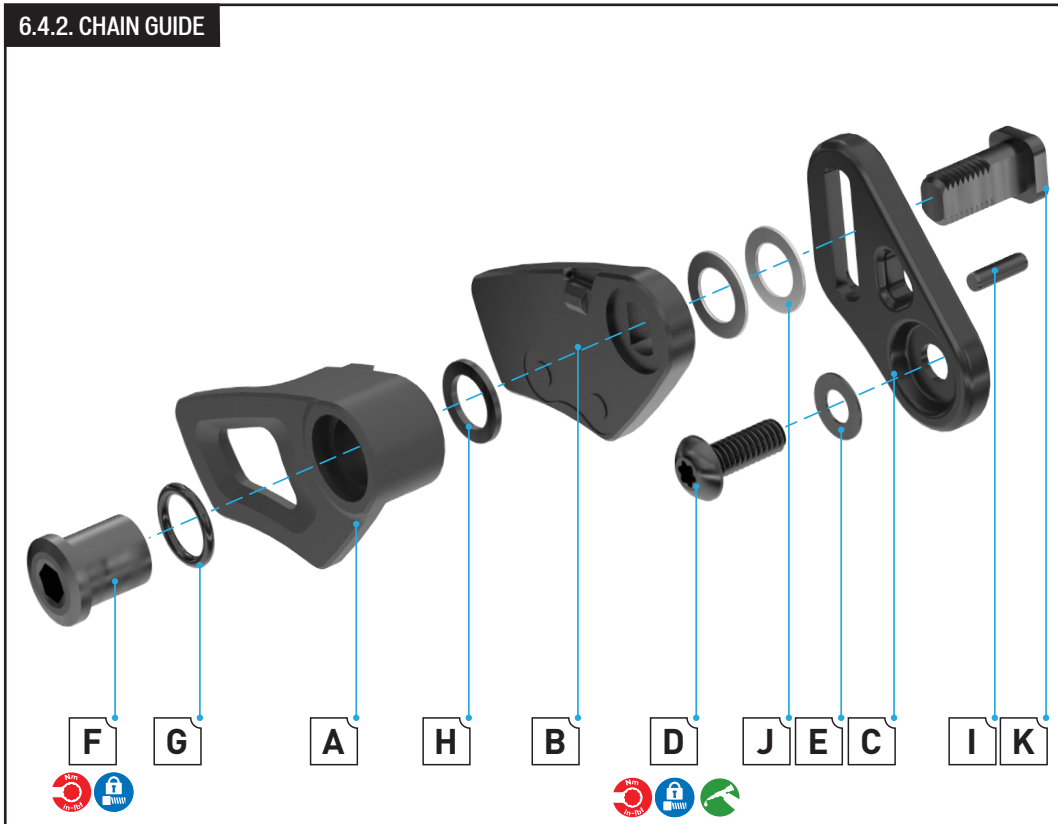


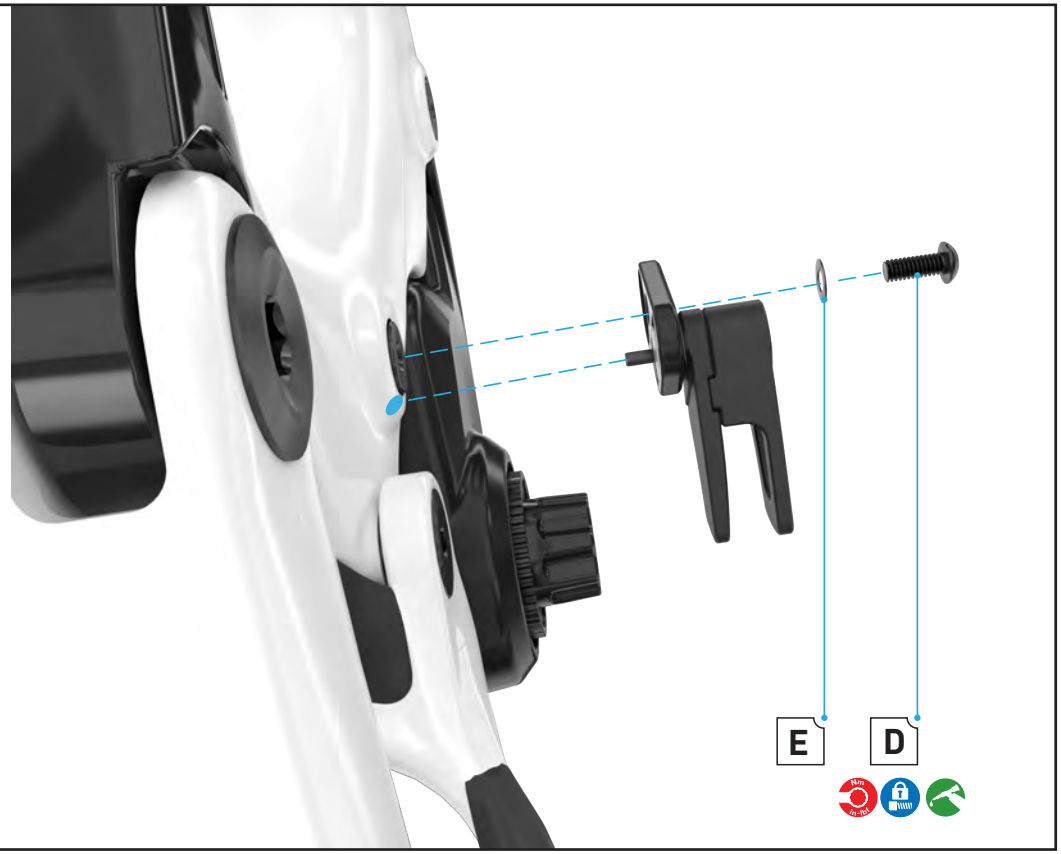
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	Rear thru-axle	**S220200002**	1	12 mm x 148 mm x 174.5 mm, axle	6 mm hex	15	133
	Roval traverse 27.5 Rim	**S193700010**	1	MY19 ROVAL TRAVERSE 27.5 RIM-670, 30 MM WIDTH 28H W/CHARCOAL DECAL RIM	N/A	N/A	N/A

- Install the rear wheel into the rear frame ensuring the brake disc is between the brake pads.
- Lightly grease the shaft of the thru-axle and slide it through the frame from the left (non-drive side) of the bicycle.
- Do not grease the threads of the thru-axle.
- Use a torque wrench and 6 mm hex bit to tighten the rear thru-axle (A) to the specified torque setting found on the axle and/or in the user manual.

WARNING! A wheel attachment device that is not properly secured can allow the wheel to loosen or come off, suddenly stop the wheel, decrease your control, and cause you to fall, resulting in serious personal injury.

6.4.2. CHAIN GUIDE

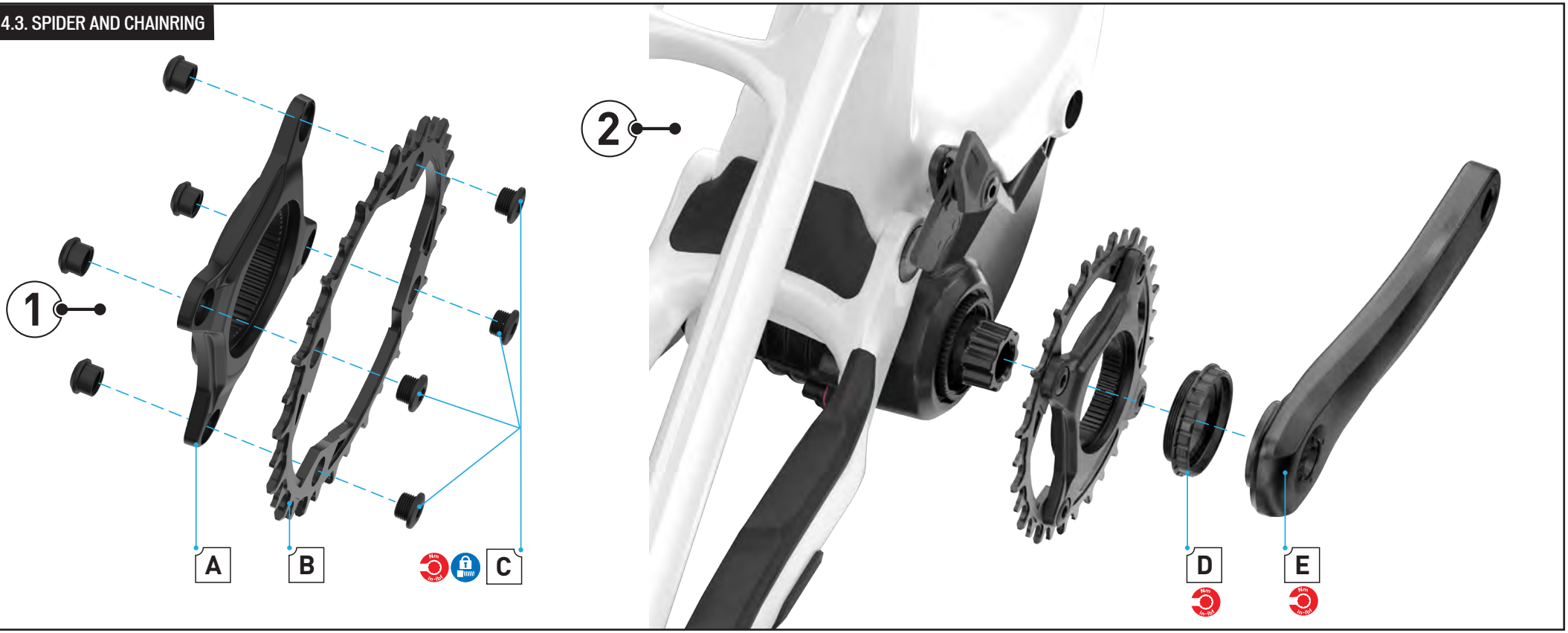




#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Chainguide (Carbon ver.2)	S231200005	1	CHG LEVO SL (GEN.2), CARBON FRM, CHAIN GUIDE, MOTOR BOLT MOUNTED, 32-34T	N/A	N/A	N/A
A	Chain guide outer plate		1	CHAIN GUIDE,OUTER PLATE	N/A	N/A	N/A
B	Chain guide inner plate		1	CHAIN GUIDE,INNER PLATE	N/A	N/A	N/A
C	Chain guide back plate		1	BACK PLATE,PA TRAIL FSR C1	N/A	N/A	N/A
D	Chain guide mounting bolt		1	M5 x 14 mm, bolt	T25 Torx	3.5	30
E	Chain guide washer		1	5,1 mm id x 10 mm od x 0.9 mm thick, washer	N/A	N/A	N/A
F	Chain guide mounting nut		1	M8 x 1.0 mm p, nut	5 mm hex	4.5	40
G	O–ring		1	9 mm id x 1.5 mm w, O-ring	N/A	N/A	N/A
H	Spacer outer		1	8.1 mm id x 15 mm od x 1 w, spacer	N/A	N/A	N/A
I	Back plate dowel pin		1	3 mm od x 10 mm l, dowel pin	N/A	N/A	N/A
J	Spacer inner		2	8.2 mm id x 13 mm od x 0.5 mm thick, washer	N/A	N/A	N/A
K	Mounting bolt		1	M8 x 1.0 mm p, slotted bolt	N/A	N/A	N/A

- Place the chain guide on the frame, then insert the chain guide pin into the hole in the frame. This prevents the chain guide from rotating when torquing.
- Grease all the non-threaded surfaces of the chain guide mounting bolt (D) and insert the bolt and washer (E) through the chain guide back plate into the drive side center motor mounting bolt.
- Use a torque wrench and T25 Torx bit to torque the bolt to specification.
- Rotate the outer chain guide to face upward.

6.4.3. SPIDER AND CHAINRING



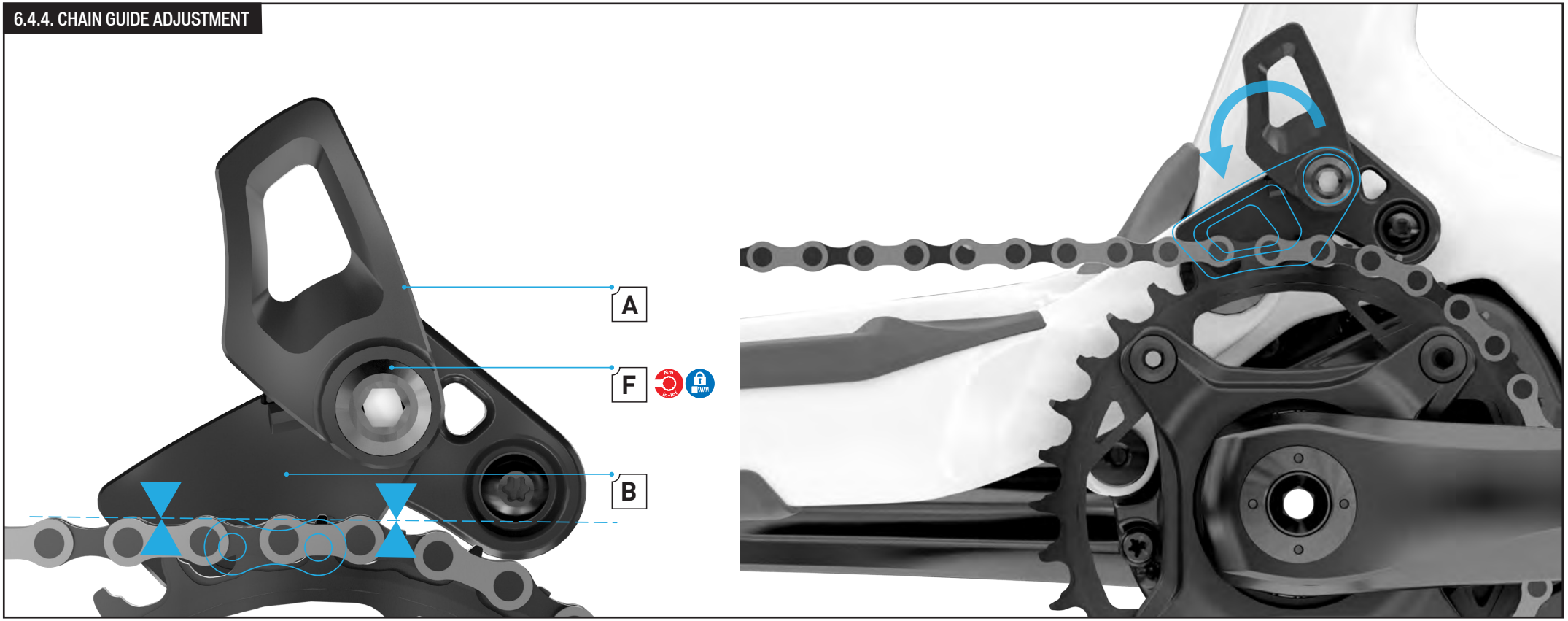
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	Spider	**S215100003**	1	SPR TURBO, SL SYSTEM, M20 MOTOR SPIDER, 104 BCD, 4-BOLT, ALLOY, SRAM (00.6218.030.003)	N/A	N/A	N/A
B	Chain ring	**S211400008**	1	CHR SRAM CHAINRING EAGLE 32T 104BCD ALLOY EMTB W/BOLTS (00.6218.040.000)	N/A	N/A	N/A
C	Chain ring bolts		4	M8.5 X 5 mm x 1 mm p, bolt	5 mm hex	10	90
D	Spider lock ring	**S225100001**	1	SPR SUB, TURBO, SL SYSTEM, SL M20 MOTOR, SPIDER LOCK RING	Park Tool BBT-79	49	434
E	Crank arms	**SEE TABLE**	1	CRK TURBO, SL M20, MOUNTAIN, 165 MM - 175 MM, L+R ARMS, CARBON / ALLOY, SRAM	8 mm hex	54	478

- 1. Assemble the chainring to the spider with the four chainring bolts and nuts. Use a torque wrench and a 5 mm hex bit to torque the bolts to specification.
- 2. Grease the center spindle of the spider and slide the spider and chainring over the drive side motor spindle. Insert the spider locking bolt and thread it onto the motor spindle. Install the chain: Determine the custom chain length according to the manufacturer's guidelines. Using a lock ring tool, tighten the lock ring nut to specification. Assemble both crank arms. Use a torque wrench and a 8 mm hex bit to torque the bolt to specification.

Assemble the chain and rear wheel. Hold the rear wheel to prevent the chainring from rotating while tightening the lock ring.

E	Crank arms Carbon 165 mm	**S211600039**
	Crank arms Carbon 170 mm	**S211600040**
	Crank arms Carbon 175 mm	**S211600041**
	Crank arms Alloy 165 mm	**S211600036**
	Crank arms Alloy 170 mm	**S211600037**
	Crank arms Alloy 175 mm	**S211600038**

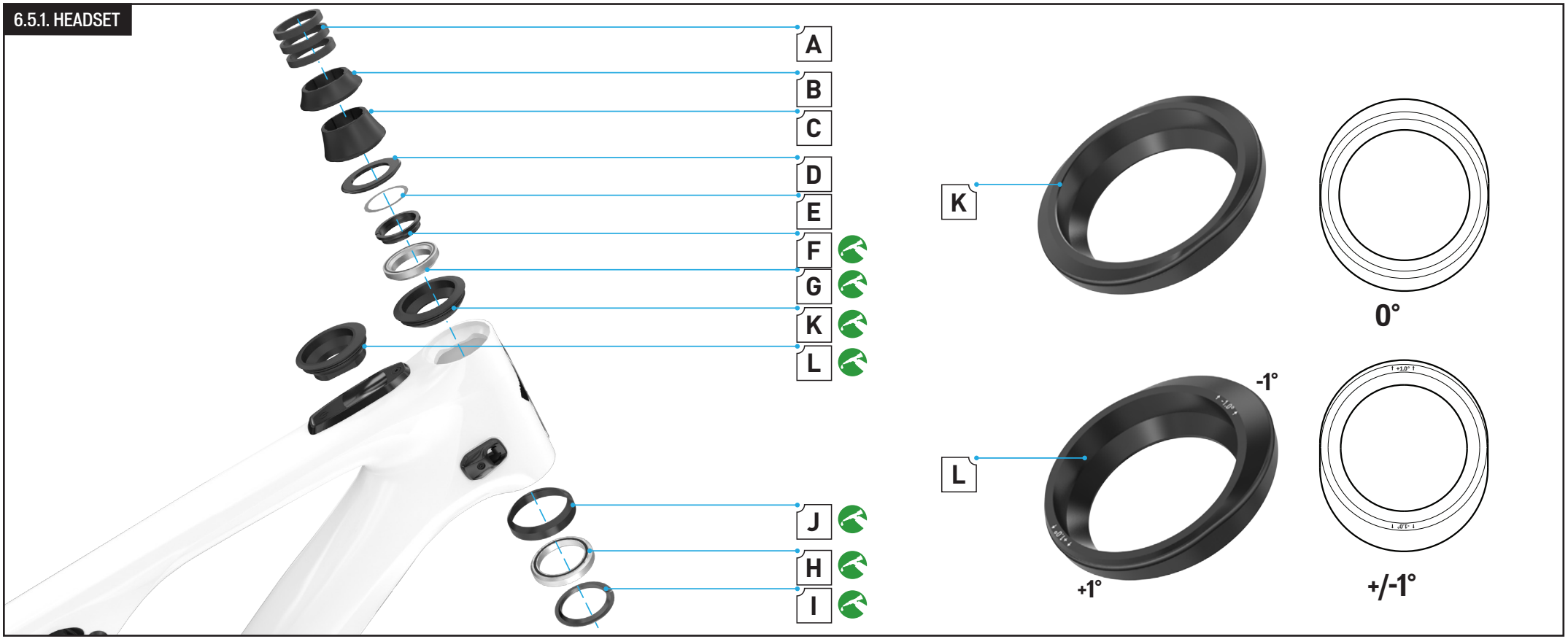
6.4.4. CHAIN GUIDE ADJUSTMENT



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Chian guide	**S231200005**	1	CHG LEVO SL (GEN.2), CARBON FRM, CHAIN GUIDE, MOTOR BOLT MOUNTED, 32-34T	N/A	N/A	N/A
F	Chain guide mounting nut		1	M8 x 1 mm p, nut	5 mm hex	4.5	40

- Shift to the smallest cog on the cassette.
- Loosen the chain guide mounting nut (F) with a 5 mm hex key and align the chain link graphic on the chain guide inner face (B) with the chain.
- Use a torque wrench and 5 mm hex bit to torque the chain guide mounting nut (F) to specification.
- Rotate the chain guide outer face (A) downward and lock into position.

6.5.1. HEADSET



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION
A	Headset spacer 5 mm		3	PRIME AERO, AC-286-5, CARBON SPACER ,34 MM OD X 28.6 MM ID X 5 MM HEIGHT, MATTE UD FINISH
B	Headset spacer 10 mm	**S212500012**	1	HEADSET SPACER 10 MM
C	Headset spacer 20 mm	**S212500013**	1	HEADSET SPACER 20 MM
D	Headset cap	**S182500005**	1	45.5 mm top cover
E	Tin plate spacer		1	MW006
F	Compression ring		1	ALLOY COMPRESSION RING
G	Upper bearing		1	1 1/8" (42 mm x 30.5 X 8 mm,) 45°
H	Lower bearing		1	1.5" (52 mm x 40 x 7 mm,) 45°
I	Crown race		1	AL CROWN RACE,ANO MATT BLK

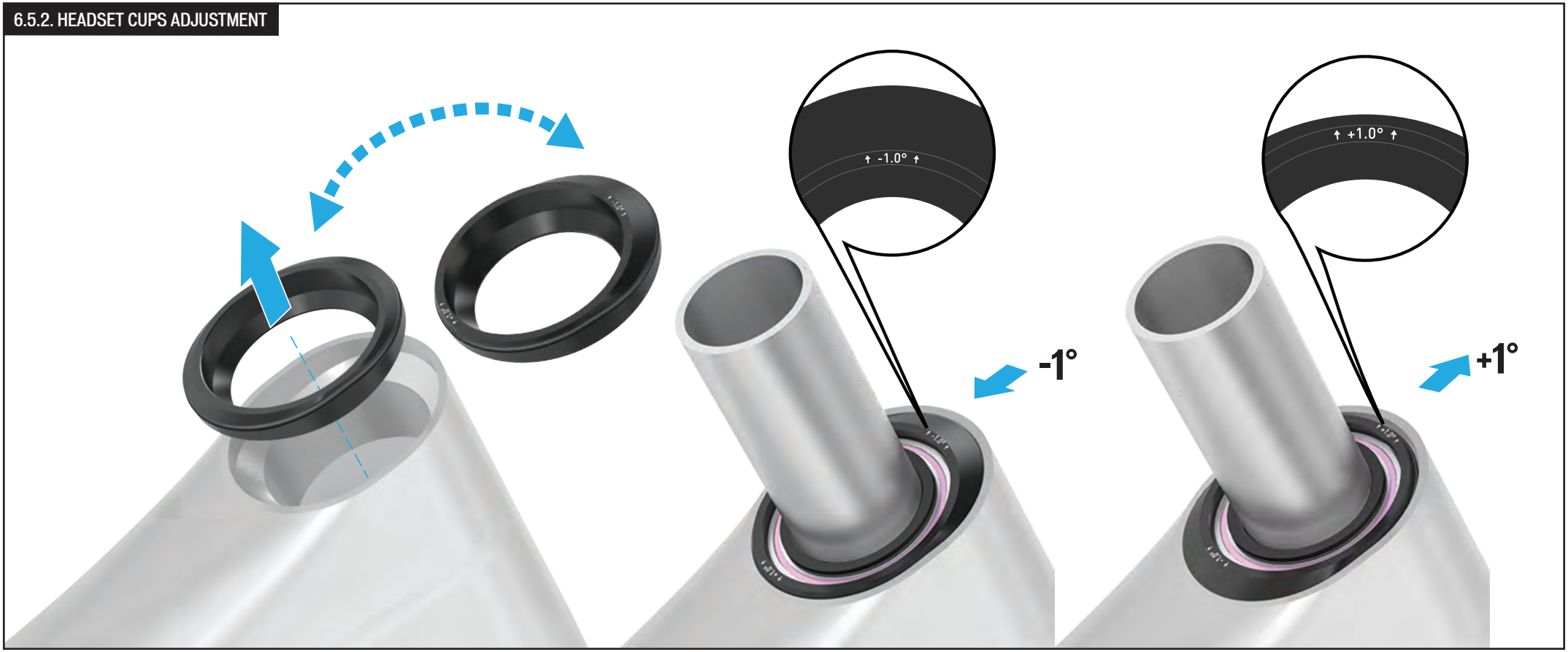
J	Lower bearing cup	**S212500015**	1	SPHERICAL ADAPTER 1.5" 45° - 54 MM OD X 52 MM ID
K	Upper zero offset cup		1	HEAD TUBE ANGLE ADJUST 0° | 1-1/8" - 41.8 MM ID, 46 MM X 52.5 MM
L	Upper +/-1° offset cup		1	HEAD TUBE ANGLE ADJUST 1° | 1-1/8" - 41.8 MM ID, 46 MM X 52.5 MM

All models are shipped with the zero offset cup installed. Switching the headset cup steepens or slackens the head tube angle by +/-1 degree.

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.

Changing the headset cup position and/or stem spacer orientation can affect the relationship between the head tube and the stem causing an interference that can lead to frame damage. Before fully torquing the stem, make sure there's no interference between stem and frame across the range of stem positions during normal steering. In some cases, adding a 5 mm spacer below the stem may be necessary to avoid contact between the stem and frame.

6.5.2. HEADSET CUPS ADJUSTMENT



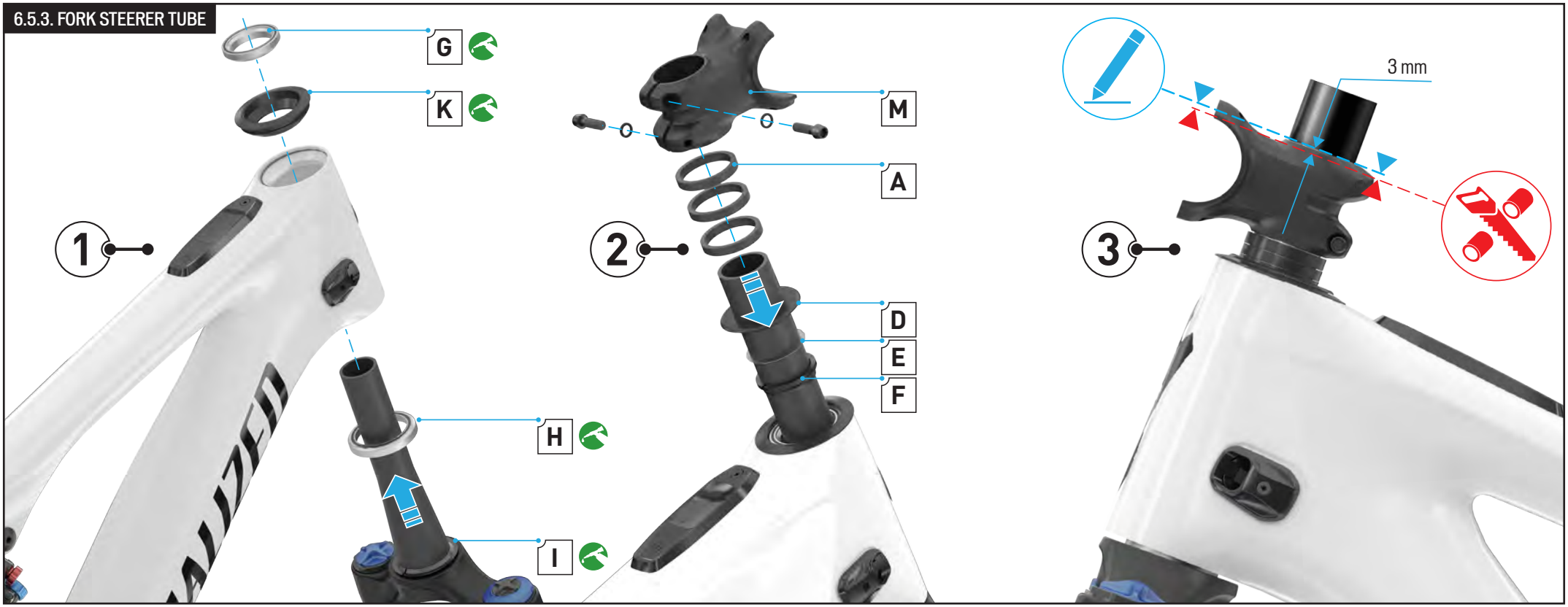
The head tube angle is adjustable via adjustable headset cups. The bicycle ships with the “zero” offset cup and a +/- 1 degree headset cup ships in the small parts box.

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.

6.5.3. FORK STEERER TUBE



#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Headset kit	**S182500005**	1	HDS NO.42/ACB/S/F/N 46CONE SPACER, AL COMPRS RING, UP 1.125/LOW1.5 CRMO 45, AL CROWN RACE,ANO MATT BLK	N/A	N/A	N/A
	Headset cups kit	**S212500015**	1	HDS SUB, MY22 LEVO HEADSET CUPS KIT, W/ 0-DEG AND +/-1-DEG CUPS	N/A	N/A	N/A
M	No gap stem		1	STEM, JD, JD-ST97Q, 6061-T6, 35 MM,40 MM/50 MM,STEEL,ZINC FINISH BOLT,NO THREAD LOCK	N/A	N/A	N/A
M	Deity copperhead stem (not shown)		1	DEITY STEM, COPPERHEAD, 26-CPROS35-BK/26-CPROS50-BK, 35/50 MM	N/A	N/A	N/A

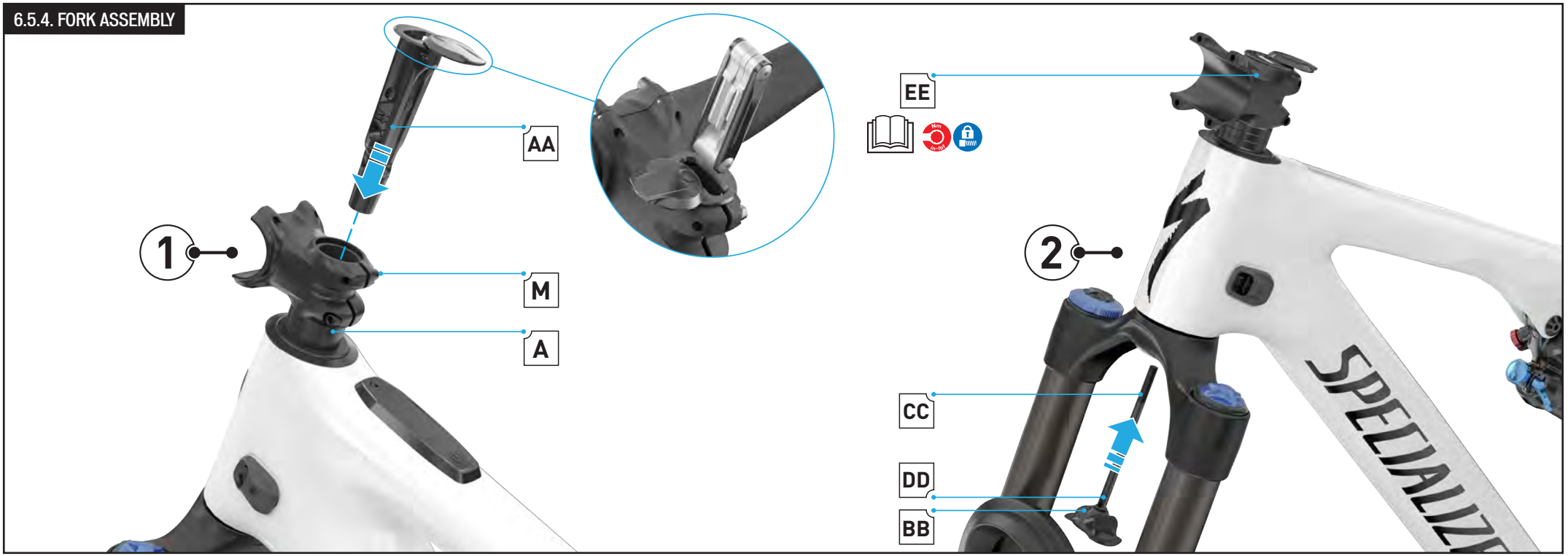
- 1. Assemble the lower crown race **(I)** onto the fork steerer tube, make sure the crown race gap is placed at the rear of the fork. Grease the lower bearing **(H)** and slide down the steerer tube onto the crown race **(I)**.
- 2. Grease the upper bearing cup **(K)** and assemble into the frame. Grease the upper bearing **(G)** and install into the headset bearing cup **(K)**. Insert the fork into the bottom of the head tube making sure all of the bearings are seated correctly. Assemble the compression ring **(F)**, tin plate washer **(E)**, and headset cap **(C)** followed by stem spacers **(A)** and stem **(L)**. Tighten the steerer bolts on the stem to hold the fork in position.
- 3. Carefully mark the upper edge of the stem on the steerer tube and remove the fork. The cut line is 3 mm below the mark from the top of the stem on the steerer tube.

To ensure a straight cut, trimming must be done with a handlebar cutting guide.

Do not use a fork steerer pipe cutter as this could create a burr that could prevent the fork from assembling correctly.

WARNING! To ensure the fork is assembled securely, the position of the fork steerer cut needs to be below the upper edge of the stem.

6.5.4. FORK ASSEMBLY



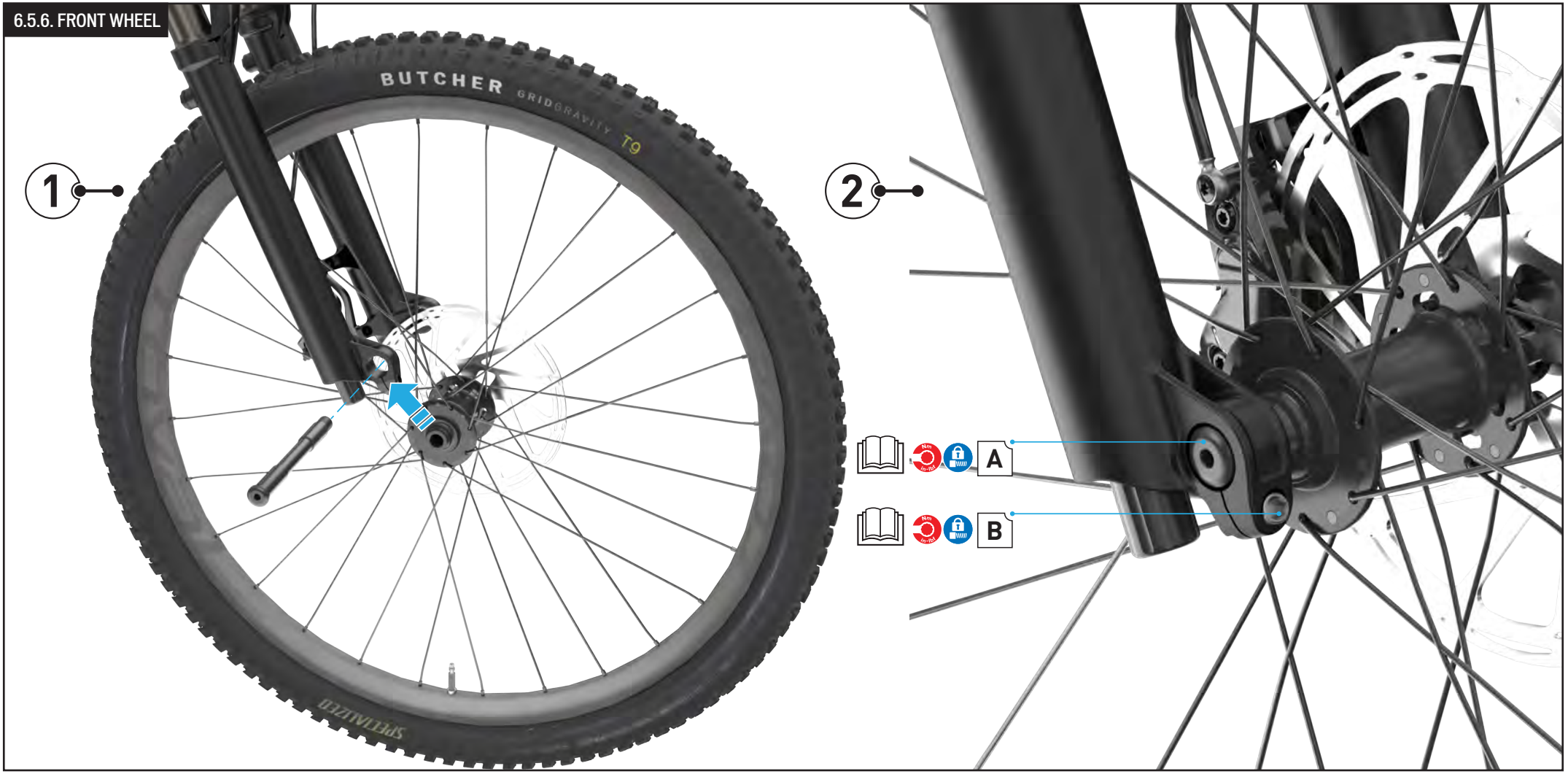
#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
AA	Swat™ Conceal carry mtb tool		1	90 mm S185300020 | 105 mm S185300016 | 120 mm S185300017	N/A	N/A	N/A
BB	Swat™ Bow tie anchor		1	SWAT™ BOW TIE ANCHOR	N/A	N/A	N/A
CC	Swat™ Anchor bolt		1	Frame size | S1/S2 90 mm | S3 105 mm | S4/S5 120 mm bolt	5 mm hex	N/A	N/A
A	Headset spacer 5 mm		3	PRIME AERO, AC-286-5, CARBON SPACER ,34 MM OD X 28.6 MM ID X 5 MM HEIGHT, MATTE UD FINISH	N/A	N/A	N/A
M	No gap stem		1	JD, JD-ST97Q, 6061-T6, 35 MM,40 MM/50 MM, STEEL, ZINC FINISH BOLT, NO THREAD LOCK STEM	N/A	N/A	N/A
EE	Stem steerer bolts		2	M6 x 20 mm x 1 mm p Bolt / includes spring washer	5 mm hex	8	71

- Slide the fork steerer tube back through the head tube and headset parts.
- Install the stem spacers **(A)** and stem **(M)** onto the steerer tube without tightening the bolts.
- Place the SWAT™ body (AA) in the top of the steerer tube orienting the top cap so it can rotate 180 degrees without contacting the stem.
- Place the SWAT™ anchor bolt **(CC)** in the SWAT™ bow tie anchor **(BB)** and place the supplied O-ring over the bolt to prevent the bolt from falling out.
- Place the bolt and cap assembly through the underside of the steerer tube, then thread the bolt into the underside of the SWAT™ body **(AA)**.
- Once the SWAT™ anchor bolt **(CC)** is threaded all the way in, make sure the SWAT™ bow tie anchor **(BB)** is evenly positioned against the lip of the steerer tube.
- With the stem **(M)** loose enough to rotate, adjust the headset compression until there is no back and forth movement and the headset rotates smoothly.
- Make sure the SWAT™ anchor bolt **(CC)** is tightened enough to prevent it from loosening.
- Once the headset is properly adjusted, align the stem and torque the stem steerer bolts **(EE)** according to the stem manufacturer's instructions.

6.5.5. FRONT BRAKE

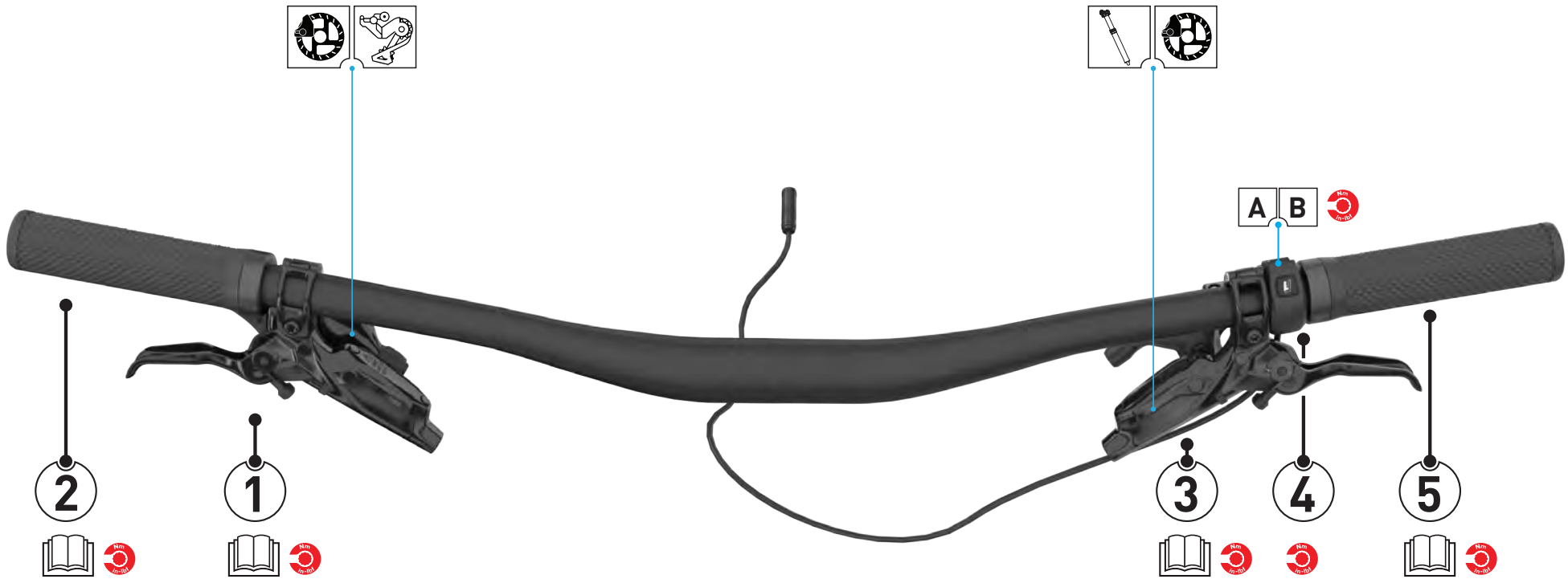
- 1. Install the front brake caliper and brake caliper adaptor to the fork following the manufacturers instructions. Use a torque wrench to torque the brake caliper mounting bolts to the manufacturer's specification.
- 2. Thread the front brake hose from the caliper through the cable guide on the fork leg.

6.5.6. FRONT WHEEL



- 1. Use a 6 mm hex key to loosen the pinch bolt **(B)**, then install the front wheel into the fork dropouts. Insert front wheel between the dropouts making sure the brake disc is between the brake caliper pads. Slide the thru-axle **(A)** through the drive side dropout and hub.
- Place the bicycle on the floor and compress the fork a couple of times to ensure that the lower leg has settled into its low-friction point.
- 2. Use a torque wrench and a 6 mm hex bit to torque the thru-axle (clockwise) to the manufacturer's torque specification. Use a torque wrench and a 6 mm hex bit to torque the pinch bolt on the drive side dropout to manufacturer's torque specification.

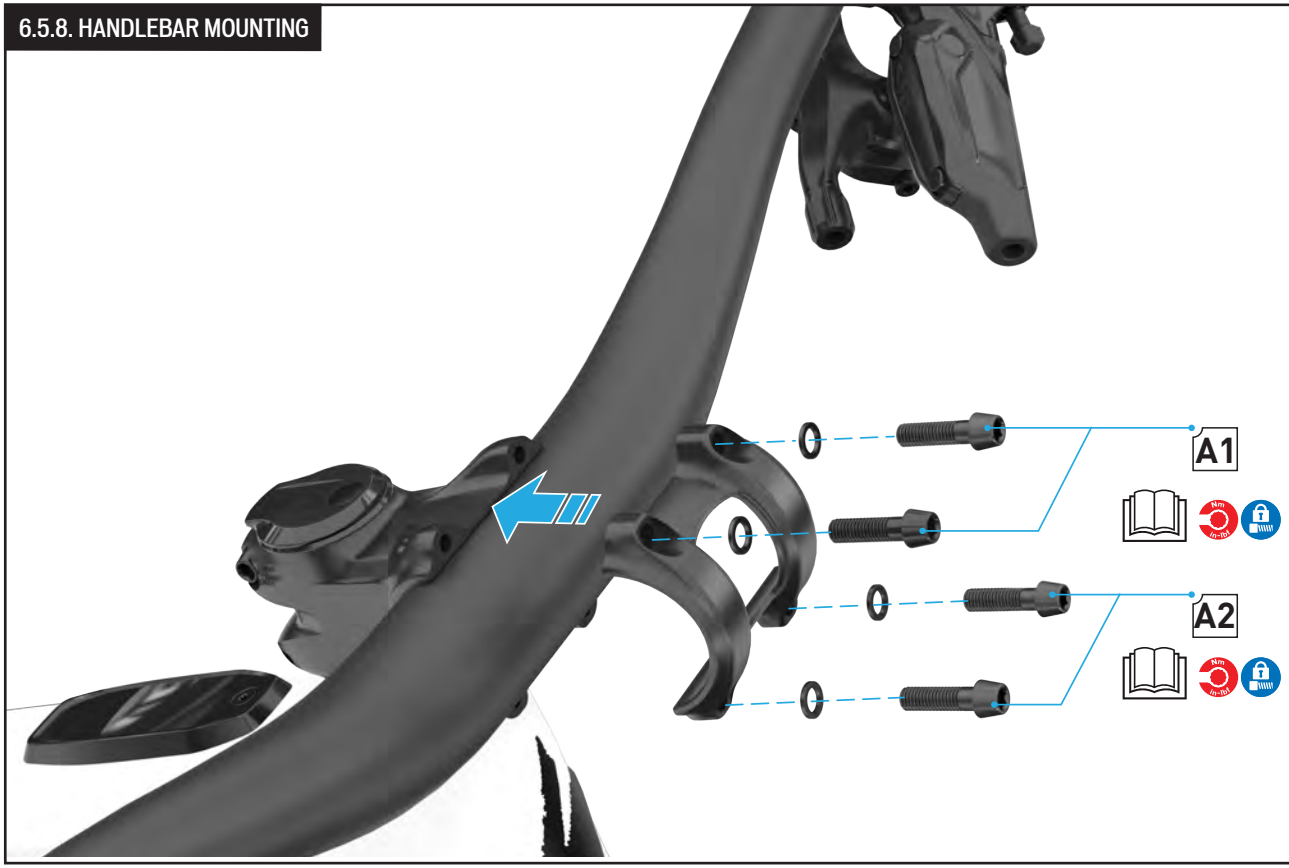
6.5.7. HANDLEBAR

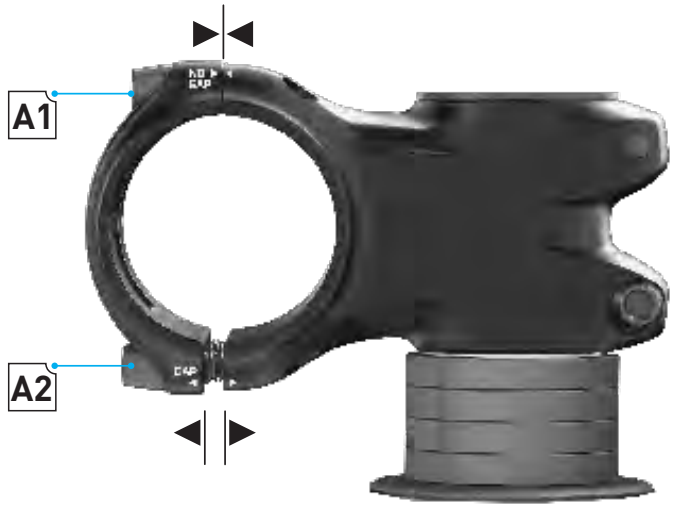


#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	Trail remote	S216800019	1	ELE TRAIL REMOTE 2	N/A	N/A	N/A
B	Trail remote bolt		1	Grub screw	2 mm hex	0.8	7

- 1. Install the drive side brake lever and shifter onto the bar and hand tighten only.
- 2. Install the drive side grip and torque to the manufacturer's specification.
- 3. Install the non-drive side brake lever and dropper remote onto the bar and hand tighten only.
- 4. Install the trail remote **(A)** on the bar rotating it into your desired position. Use a 2 mm hex key to hand tighten the bolt.
- 5. Install the non-drive side grip and torque to the manufacturer's specification.

6.5.8. HANDLEBAR MOUNTING





#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
	Alloy trail stem		1	STEM, JD, JD-ST97Q, 6061-T6, 35 MM,40 MM AND 50 MM, STEEL, ZINC FINISH BOLT, NO THREAD LOCK	N/A	N/A	N/A
A1	Alloy trail stem faceplate bolt upper		2	M5 x 18 mm x 0.8 mm p, bolt / includes spring washer	5 mm hex	6	53
A2	Alloy trail stem faceplate bolt upper		2	M5 x 18 mm x 0.8 mm p, bolt / includes spring washer	5 mm hex	6	53
	Stem deity copperhead (not shown)		1	DEITY STEM, COPPERHEAD, 35 MM AND 50 MM	N/A	N/A	N/A
	Stem deity copperhead bolts (not shown)		4	M6 x 18 mm x 1.0 mm p, bolt	5 mm hex	4-6	35.5 - 53

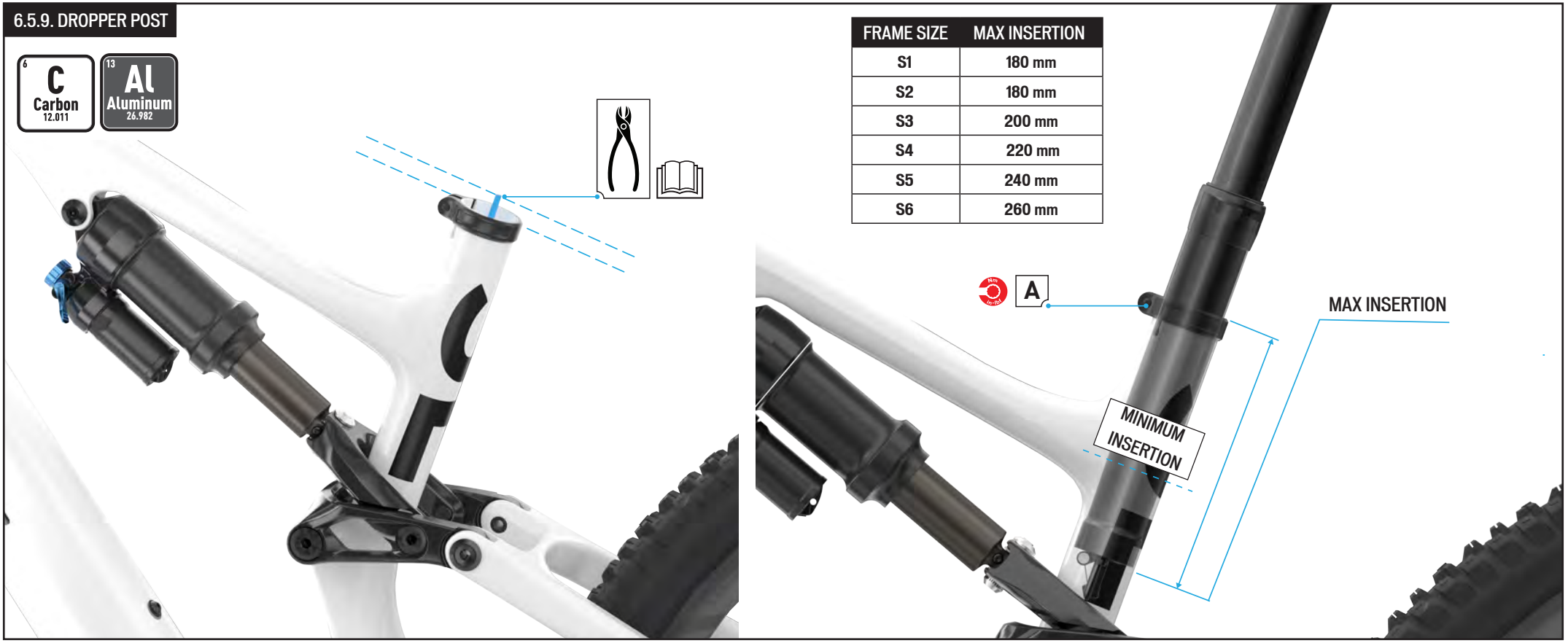
- Loosely thread the faceplate bolts (A1) + (A2) and washers through the faceplate and into the stem body.
- Rotate the handlebar to the desired position.
- Gradually torque the upper faceplate bolts (A1) to specification, alternating from the left to right bolt to evenly increase the torque until the specification is reached.
- Gradually torque the lower faceplate bolts (A2) alternating from the left to right bolt to evenly increase the torque until the specification is reached.
- With the bike on the ground, pull the front brake and rock the bike back and forth to ensure the headset is fully seated and that there is no looseness in the system.
- Complete all cabling according to the manufacturer's instructions.

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.

For additional information about stem installation, please refer to the Specialized Bicycle Owner's Manual, available at www.specialized.com.

You should not be able to rotate the stem spacers by hand if the system is sufficiently tightened.

6.5.9. DROPPER POST



FRAME SIZE	MAX INSERTION
S1	180 mm
S2	180 mm
S3	200 mm
S4	220 mm
S5	240 mm
S6	260 mm

#	PART NAME	SERVICE PART NUMBER	QTY	SPEC / DESCRIPTION	TOOL	TORQUE	
						Nm	in-lbf
A	Seatpost clamp	S214700007	1	STC SPL-SC02-386A-02,38.6MM EXTRUDED,7075-T73, BLACK ZINC BOLT,CLAMP TYPE, W/SKIRT FOR SHIMMED FRAMES	4 mm hex	6.2	55

- Remove the bicycle from the stand and remove the temporary seatpost.
- Using a cable housing cutter, cut the dropper cable housing according to the manufacturer's instructions.
- Install the dropper post into the seat tube according to the manufacturer's instructions.
- Use a torque wrench and 4mm hex bit and torque the seatpost bolt to specification.

Minimum insertion:

- The seatpost must be inserted into the frame deep enough so the minimum insertion/maximum insertion (min/max) mark on the seatpost is not visible. The frame requires a minimum of 80 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 the image above
- 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.
- Once the saddle height is determined, torque the seatpost collar bolt to specification. 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.

	WARNING! For general instructions regarding the installation of the seatpost, refer to the appropriate section in the Owner's Manual. Riding with an improperly tightened seatpost can allow the saddle and seatpost to slide down, which can damage the frame and cause you to lose control and fall.
	CAUTION: If a cable-actuated seatpost is inserted too far into the seat-tube, the housing can be damaged and cause the seatpost to not function properly.
	Do not apply grease to the contact surfaces between the seatpost and the seat tube. Grease reduces friction, which is critical to proper seatpost grip. Specialized recommends the application of carbon assembly compound (fiber paste), which can increase friction between carbon surfaces. Please visit your Specialized Authorized Retailer for additional information.

6.5.10. FINAL ADJUSTMENTS

Once fully assembled, remove the bicycle from the bicycle stand.

- Adjust the headset play, align the stem, and torque all the bolts to the manufacturer's specifications.
- Adjust the handlebar angle and torque all the bolts to the manufacturer's specifications.
- Arrange the cockpit components and torque all the bolts to the manufacturer's specifications.

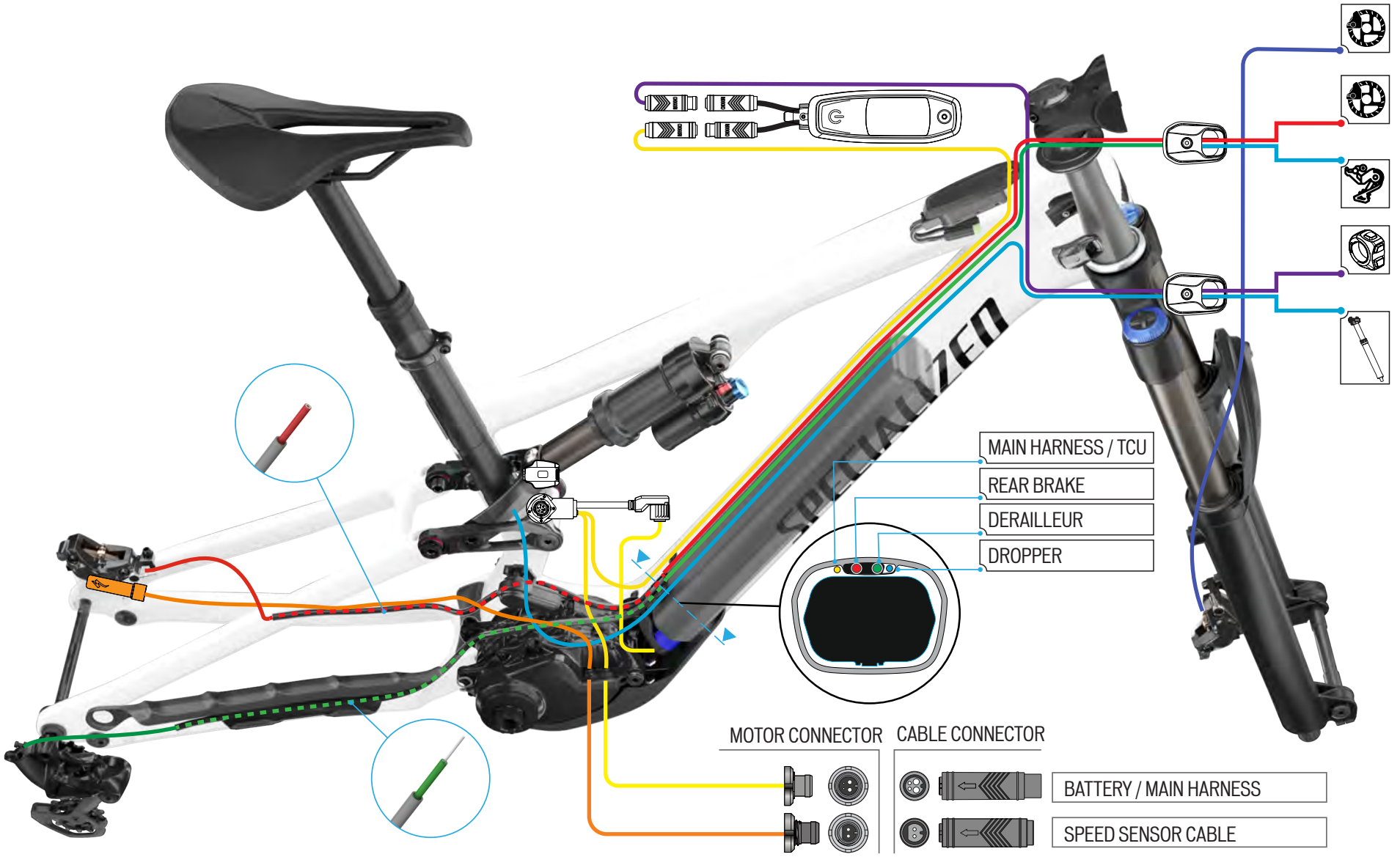
System power up and registration

- Connect the charger and charge the battery.
- Power up the system using the TCU/MasterMind TCU.
- Connect to Turbo Studio and perform the firmware updates.
- Complete online registration. Register bicycle here.
- Perform a test ride.

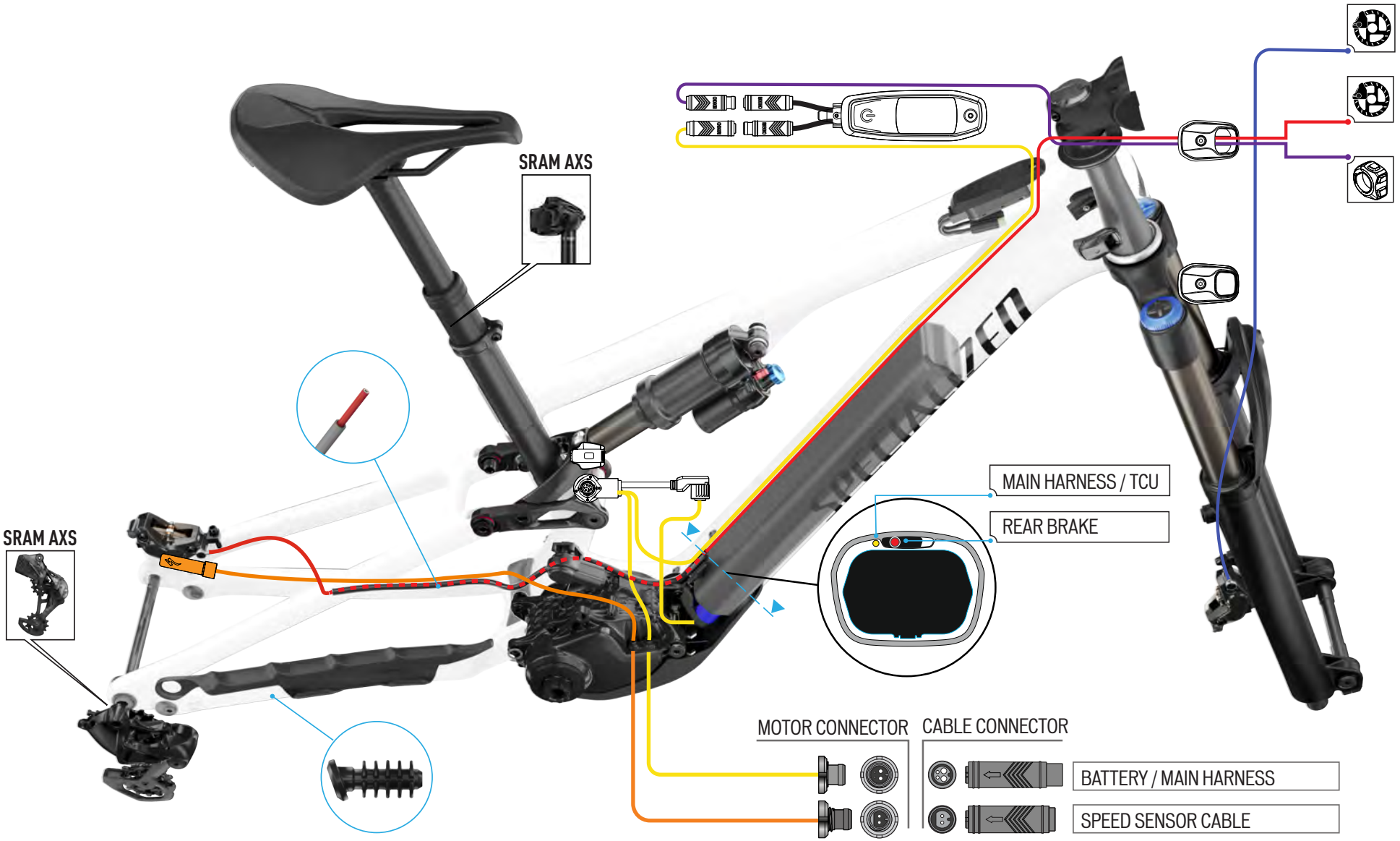
7. CABLING DIAGRAMS

7.1. CABLE ROUTING

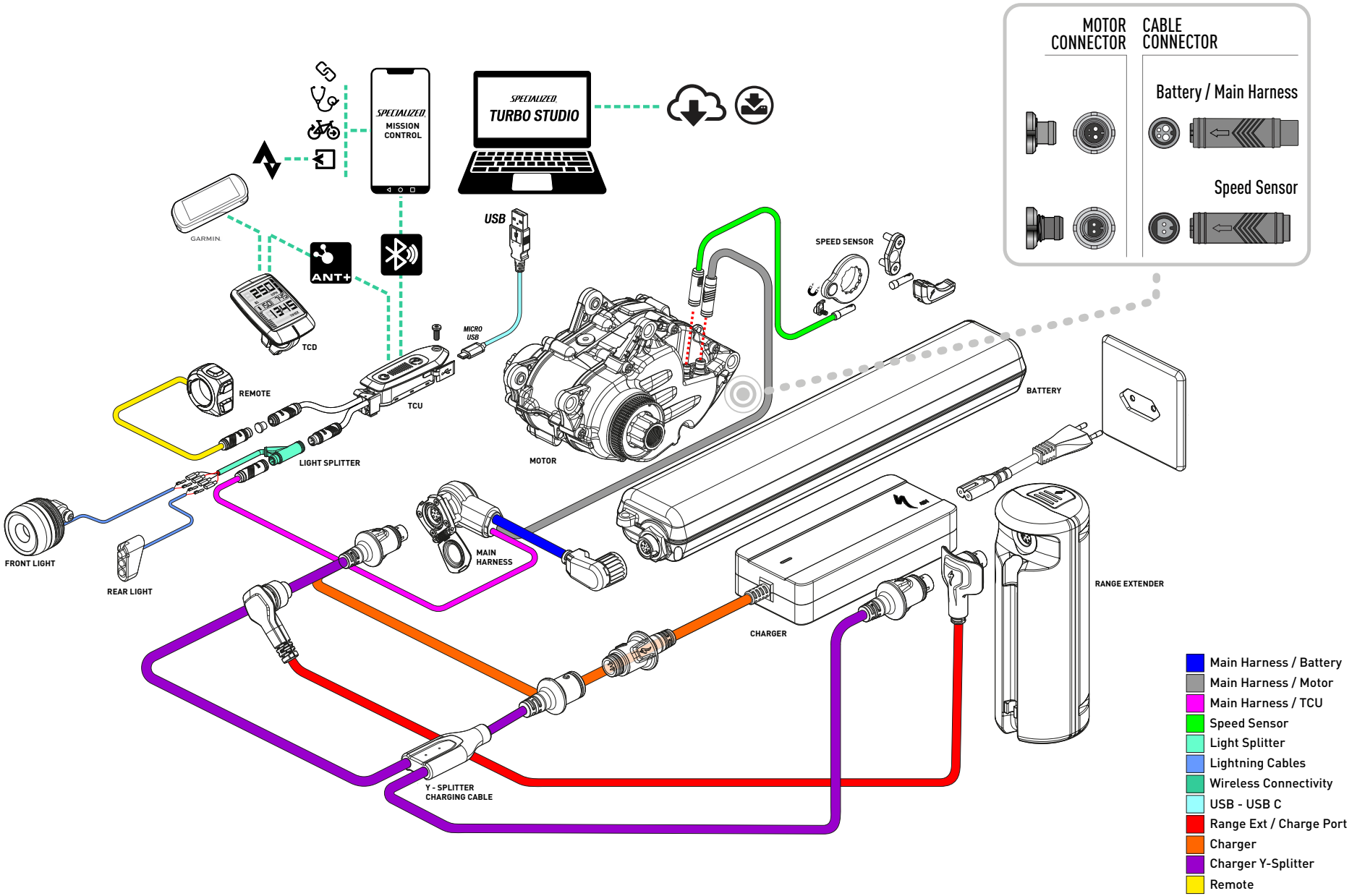
7.1.1. CARBON FRAME – NON AXS



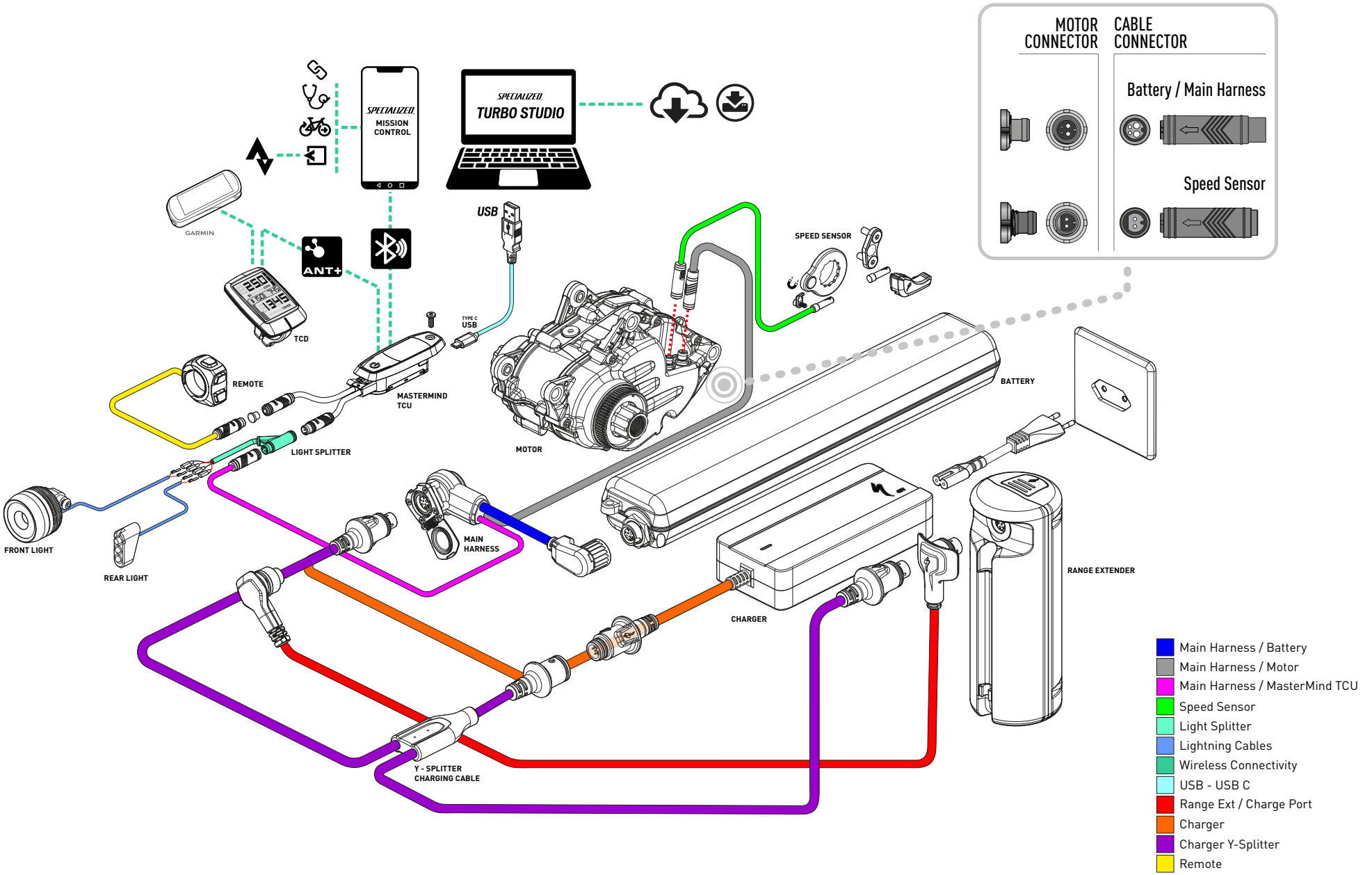
7.1.2. CARBON FRAME – AXS EQUIPPED



7.2.1. SYSTEM SCHEMATICS – TCU



7.2.2. SYSTEM SCHEMATICS – MASTERMIND TCU



8. SERVICE PARTS

8.1. SERVICE PARTS: SHARED PARTS

PART NAME	SERVICE PART NUMBER	PART SPECIFICATION	PART DESCRIPTION	QTY
Sram universal derailleur hanger	S202600002	SRAM UDH	HGR SRAM AC UDH DERAILLEUR HANGER AL BLACK (00.7918.089.000)	1
Rear thru-axle	S220200002	Axle diameter 12 mm,rear hub 148 mm, total length 174.5 mm	Axl Ta, 12x148mm, 174.5mm Length, Bolt On 6mm, Blk	1
Seat post clamp	S214700007	Seat post clamp	STC SPL-SC02-386A-02,38.6MM EXTRUDED,7075-T73, BLACK ZINC BOLT,CLAMP TYPE,W/SKIRT FOR SHIMMED FRAMES	1
Seat post shim	S174900001	Seat post shim	STP SEATPOST SHIM 34.90D - 30.9ID	1
6 Bolt rotor mount speed sensor magnet assembly	S194200016	Speed sensor magnet	SUB MY19 LEVO FSR SPEEDSENSOR-MAGNET KIT	1
Range extender charger cable	98920-5660	Re: charger cable	CA,PLW CHARGER Y-CABLE	1
Range extender	98920-5640	Range extender	BTRY,PLW,EXTERNAL,160WH,SBC-B16, X3-168	1
Battery charger		Sbc-co6 charger	CHARGER KIT, MODIARY, SBC-C06, TURBO CHARGER, 54.6V3A, W/AC CORD, W/MANUAL, W/SOFT CASE	1
Internal battery	S196800015	Battery	ELE BATTERY SL SYSTEM, INTEGRATED, 320WH, SBC-B15, W/O BOLTS	1
Range extender rubber band	S209900007	Rubber band	MSC RANGE EXTENDER BAND, TUBE	1
Charge port door	S209900023	Charger socket	MSC SL SELF OPENING CHARGE PORT KIT	1
Main harness	S196800021	Main harness cable	ELE WIRING, SL SYSTEM. MAIN HARNESS MOTOR-BATTERY-TCU	1
Range extender cable	98922-5665	145 mm	RE-CABLE 145MM	1
MasterMind tcu	S216800020	MasterMind TCU	ELE TURBO CONNECT UNIT 2	1
Tcu bolt	S210500022	M4 x 10 mm x 0.7 mm p	BLT TCU,M4X0.7X10,TORX,LP,AL 7075 T73,BLK	1
Trail remote	S216800019	Bar mounted remote	ELE TRAIL REMOTE 2	1
Headset kit	S182500005	Complete headset	HDS NO.42/ACB/S/F/N 46CONE SPACER,AL COMPRS RING,UP1.125/LOW1.5 CRMO 45,AL CROWN RACE,ANO MATT BLK	1
Adjustable geometry headset cups	S212500015	Upper zero offset cup / Upper +/-1° offset cup	HDS SUB, MY22 LEVO HEADSET CUPS KIT, W/ 0-DEG AND +/-1-DEG CUPS	2
Headset cap	S212500012	10 mm	HDS HEADSET CAP TH H2487A 10MM	1
Headset cap	S212500013	20 mm	HDS HEADSET CAP TH H2487B 20MM	1
Front wheel rim	S193700004	29"	RIM RIM-665 FOR MY19 TRAVERSE 29 148 XX1 30MM INNER WIDTH DISC 28H ALLOY W/CHARCOAL DECAL	1
Rear wheel rim	S193700010	27.5" Rim	RIM MY19 ROVAL TRAVERSE 27.5 RIM-670, 30MM WIDTH 28H W/ CHARCOAL DECAL	1
Tubeless valve stem (in small parts box)	S225500008	Tubeless conversion kit	WHL SUB, ROVAL TUBELESS VALVE STEM - 40MM, MTB & ROAD (1 PCS.)	1
Icr port	S216500007	Cable routing port	CBG MY22 LEVO ICR PORT KIT	2
Speed sensor kit	S196800019	Speed sensor	ELE MY20 MTB SL SYSTEM, SPEEDSENSOR KIT	1
Speed sensor grommet	S216800021	Rubber grommet	ELE TURBO MTB SPEED SENSOR GROMMET	1
Cable binder	S166800007	Cable binder	ELE MY16 LEVO CABLE BINDER, MATERIAL: CB6-185, ABS+FIBER (PA66+G30%), 3X PER FSR (2 AT FRONT, 1 AT REAR)	2
Motor	S226800001	Motor,m20	ELE MOTOR, SL SYSTEM, M20	1
Mud flap kit	S214200057	Mud flap	SUB MY22 LEVO SL CARBON MUD FLAP KIT	1
Mud flap bolt		M4 x 12 mm x 0,7 mm p, bolt	SCR,CUST,M4X0.7 X 12,AL 2024-T6,BLK	2
Sram spider	S215100003	Motor spider	SPR TURBO, SL SYSTEM, M20 MOTOR SPIDER, 104 BCD, 4-BOLT, ALLOY, SRAM (00.6218.030.003)	1
Spider lock ring	S225100001	Lock ring	SPR SUB, TURBO, SL SYSTEM, SL M20 MOTOR, SPIDER LOCK RING	1
Chainring	S211400008	Sram 32t alloy ring 104 bcd ring	CHR SRAM CHAINRING EAGLE 32T 104BCD ALLOY EMTB W/ BOLTS (00.6218.040.000)	1
Chain ring bolts		M8.5 X 5 mm x 1 mm p, bolt		4
Alloy crank arms - 165 mm	S211600036	Sram fc s699 mhl gen2 nrrw al 165 norng/ nospd	CRK TURBO, SL M20, MOUNTAIN, 165MM, L+R ARMS, ALLOY, SRAM (11.6118.069.006)	1
Alloy crank arms - 170 mm	S211600037	Sram fc s699 mhl gen2 nrrw al 170 norng/ nospd	CRK TURBO, SL M20, MOUNTAIN, 170MM, L+R ARMS, ALLOY, SRAM (11.6118.069.003)	1
Alloy crank arms - 175 mm	S211600038	Sram fc s699 mhl gen2 nrrw al 175 norng/ nospd	CRK TURBO, SL M20, MOUNTAIN, 175MM, L+R ARMS, ALLOY, SRAM (11.6118.069.000)	1
Carbon crank arms - 165 mm	S211600039	Sram fc s996 mhl gen2 nrrw c 165 norng/ nospdr	CRK TURBO, SL M20, MOUNTAIN, 165MM, L+R ARMS, CARBON, SRAM (11.6118.067.006)	1
Carbon crank arms - 170 mm	S211600040	Sram fc s996 mhl gen2 nrrw c 170 norng/ nospdr	CRK TURBO, SL M20, MOUNTAIN, 170MM, L+R ARMS, CARBON, SRAM (11.6118.067.003)	1
Carbon crank arms - 175 mm	S211600041	Sram fc s996 mhl gen2 nrrw c 175 norng/ nospdr	CRK TURBO, SL M20, MOUNTAIN, 175MM, L+R ARMS, CARBON, SRAM (11.6118.067.000)	1
Shock link kit - carbon	S214300007	SHL MY22 LEVO SL CARBON, SHOCK LINK		1
Shock link		Carbon shock link	LINK,MTB,PA TRAIL FSR G1,29F/27.5R,ALY	1
Link bearing		12 mm id x 21 mm od x 5 mm w, ball bearing	BRG,BALL,12MM ID X 21MM OD X 5MM W,DBL SLD	6
Shock extension kit - Carbon	S216300005	SHK EXT MY22 LEVO SL CARBON, CARBON EXTENSION		1
Shock extension		Carbon	EXTN,MTB,PA TRAIL FSR G1,29F/27.5R,CRBN	1
Shock extension kit - Alloy	S216300004	Shk ext my22 Levo SL Carbon, Alloy extension		1
Shock extension		Alloy	EXTN,MTB,PA TRAIL FSR G1,AL	1

Rear shock hardware kit - Carbon	S210500021	BLT KIT, MY22 LEVO SL (GEN.2) CARBON, REAR SHOCK MOUNTING BOLT KIT		1
Rear shock mounting bolt –Carbon extension		M8 x 25 mm bolt	SCR,CUST,M8X1.25 X 26,302 SST,SIL	1
Rear shock mounting bolt –Alloy extension		M8 x 28 mm bolt	SCR,CUST,M8X1.25 X 28,TI,LCK	1
Rear shock mounting washer		8.2 Mm id x 13 mm od x 0.5 Mm thick washer	WSHR,FLAT,M8,8.2 ID X 13 OD X 0.5 THICK,304 SST	1
Forward shock mounting axle		Fsm,mtb,xc fsr h1, axle	AXLE,FSM,MTB,XC FSR H1	1
Forward shock mounting screw		M5 x 11 mm bolt	SCR,CUST2,M5X0.8 X 11,SST,BLK,LCK	1
	S214200059	SUB MY22 LEVO SL CARBON, GEO ADJUST DROPOUT PIVOT SPACERS		1
Horst link outer flip chip		Pivot spacer, geo adj, 6.0 Mm id, flip chip	SPCR,DO PIVOT SPACER,GEO ADJ,6.0 ID,FLAT,ALY	2
Horst link inner flip chip		Pivot spacer, geo adj 6 mm x 1 mm, flip chip	SPCR,DO PIVOT,GEO ADJ,M6 X 1,ALY	2
Horst pivot bolt		M6 x 32.5 mm x 1.0 mm p, bolt	SCR,CUST,M6X1.0 X 32.5,STL,BLK	2
Horst link outer spacer		12 mm id x 21 mm od x 2.5 mm w, spacer	HORST PIVOT OUTER SPACER ASSY 12X21X2.5	4

8.2. SERVICE PARTS: CARBON FRAME

PART NAME	SERVICE PART NUMBER	PART SPECIFICATION	PART DESCRIPTION	QTY
Levo SL suspension bolt kit - Carbon	S210500019	SUSPENSION BOLT KIT MY22 LEVO SL CARBON		1
Forward shock mounting axle		Fsm,mtb,xc fsr h1, axle	AXLE,FSM,MTB,XC FSR H1	1
Forward shock mounting bolt		M5 x 11 mm x 0.8 mm p, bolt	SCR,CUST2,M5X0.8 X 11,SST,BLK,LCK	1
Rear shock mounting bolt - Alloy extension		M8 x 26 mm x 1.25 mm p, bolt	SCR,CUST,M8X1.25 X 26,302 SST,SIL	1
Rear shock mounting bolt - Carbon extension		M8 x 28 mm x 1.25 mm p, bolt	SCR,CUST,M8X1.25 X 28,TI,LCK	1
Rear shock mounting washer		8.3 mm id x 13 mm od x 0,5 mm thick, washer	WSHR,FLAT,M8,8.3IDX13ODX0.5THK,304SST	2
Main pivot bolt DS		M12 mm x 20 mm x 1.0 mm p, left hand, bolt	SCR ASSY,CUST,M12X1.0 X 20,FSR2 LH,7075,BLK	1
Main pivot bolt NDS		M12 mm x 20 mm x 1.0 mm p, bolt	SCR ASSY,CUST,M12X1.0 X 20,FSR2,7075,BLK	1
Link at extension bolt		M12 mm x 14 mm x 1 mm p, bolt	SCR ASSY,M12 X 1.0 X 14,FSR	2
Link at seat tube pivot bolt		M12 mm x 17 x 1.0 mm p, bolt	SCR ASSY,M12 X 1.0 X 17,21MM HEAD,FSR	2
Forward shock mounting bolt		M5 x 11 mm x 0.8 mm p, bolt	SCR,CUST2,M5X0.8 X 11,SST,BLK,LCK	1
Link at seatstay bolt - Carbon		M12 x 27 mm x 1.0 mm p, bolt	SCR,SHLDR, CUST,M12X1.0 Ø12 X 27,7075,BLK	2
Main pivot / link at seat tube / link at seatstay spacers		12.1 mm id x 19.5 mm od x 3 mm w, spacer	SPCR,12.1 ID X 19.5 OD X 3 W,FSR,AL7075-T6	8
Horst pivot bolt		M6 x 32.5 mm x 1.0 mm p, bolt	SCR,CUST,M6X1.0 X 32.5,STL,BLK	2
Horst link outer flip chip		Do pivot spacer,geo adj,6.0 Id, flip chip	SPCR,DO PIVOT SPACER,GEO ADJ,6.0 ID,FLAT,ALY	2
Horst link inner flip chip		Do pivot spacer,geo adj 6 mm x 1 mm, flip chip	SPCR,DO PIVOT,GEO ADJ,M6 X 1,ALY	2
Horst link inner spacer		6 mm id x 16 mm od x 16 mm w, stepped spacer	SPCR,STEP,6MM ID X 16MM OD X 16MM W,7075-T6	2
Horst link outer spacer		12 mm id x 21 mm od x 2.5 mm w, spacer	HORST PIVOT OUTER SPACER ASSY 12X21X2.5	4
Suspension bearing kit - Carbon	S210600003	BRG MY22 LEVO SL CARBON SUSPENSION BEARING KIT		1
Suspension bearings		12 mm id x 21 mm od x 5 mm w, ball bearing	BRG,BALL,12MM ID X 21MM OD X 5MM W,DBL SLD	10
Main pivot bearing		12 mm id x 24 mm od x 6 mm w, ball bearing	BRG,BALL,12MM ID X 24MM OD X 6MM W,DBL SLD	2
Chain guide	S231200005	Chainguide (Carbon ver.2)	CHG LEVO SL (GEN.2), CARBON FRM, CHAIN GUIDE, MOTOR BOLT MOUNTED, 32-34T	1

Seatstay kit - Carbon (gloss)	S215000005	STS MY22 LEVO SL CRBN, GLS SMK		1
Seatstay		Seatstay carbon gloss finish	SS,MTB,PA TRAIL FSR G1,29F/27.5R,CRBN	1
Seatstay bearing		12 mm id x 21 mm od x 5 mm w, ball bearing	BRG,BALL,12MM ID X 21MM OD X 5MM W,DBL SLD	4
Seatstay spacer		6 mm id x 16 mm od x 16 mm w, stepped spacer	SPCR,STEP,6MM ID X 16MM OD X 16MM W,7075-T6	2
Seatstay kit - Carbon (satin)	S215000007	STS MY22 LEVO SL CARBON, CARBON, STN CARB		1
Seatstay		Seatstay carbon satin finish	SS,MTB,PA TRAIL FSR G1,29F/27.5R,CRBN	1
Seatstay bearing		12 mm id x 21 mm od x 5 mm w, ball bearing	BRG,BALL,12MM ID X 21MM OD X 5MM W,DBL SLD	4
Seatstay spacer		6 mm id x 16 mm od x 16 mm w, stepped spacer	SPCR,STEP,6MM ID X 16MM OD X 16MM W,7075-T6	2
Chainstay kit - Carbon (satin)	S211500005	CHS MY22 LEVO SL CRBN, STN CRBN		1
Chainstay		Chainstay carbon satin finish	CS,MTB,PA TRAIL FSR G1,29F/27.5R,CRBN	1
Chainstay bearing		12 mm id x 24 mm od x 6 mm w, ball bearing	BRG,BALL,12MM ID X 24MM OD X 6MM W,DBL SLD	2
Chainstay kit - Carbon (gloss)	S211500008	CHS MY22 LEVO SL CARBON, CARBON, GLS SMK		1
Chainstay		Chainstay carbon glossfinish	CS,MTB,PA TRAIL FSR G1,29F/27.5R,CRBN	1
Chainstay bearing		12 mm id x 24 mm od x 6 mm w, ball bearing	BRG,BALL,12MM ID X 24MM OD X 6MM W,DBL SLD	2
Down tube channel plug - Carbon	S226500009	ICR,CABLE GUIDE,MTB,PA TRAIL FSR G1,29F/27.5R		1
Motor mounting hardware - Carbon	S210500018	BLT MY22 LEVO SL CARBON MOTOR MOUNTING HARDWARE KIT		1
DS motor washer		11 mm ID x 16 mm OD x 0.5 mm thick, washer	WSHR,FLAT,M10,11 IDX16 ODX0.5 THICK,304 SST	3
DS motor bolt		M10 x 14 mm x 1 mm p, bolt	SCR,CUST,M10X1.0 X 14,AL 7075-T73,BLK,LCK	3
NDS motor bolt		6.4 mm ID x 16 mm OD x 4 mm thick, washer	WSHR,CUST,6.4 IDX16 ODX4 THICK,AL 7075,BLK	3
NDS motor washer		M6 x 20 mm x 1 mm p, bolt	SCR,CUST,M6X1.0 X 20,STL,BLK,LCK	3
Battery mounting hardware - Carbon	S210500020	BLT MY22 LEVO SL CARBON, BATTERY MOUNTING HARDWARE		1
Battery mounting bolt - Carbon		M6 x 14 mm x 1.0 p, bolt	WSHR,FLAT,M6,6.4 IDX12 ODX0.5 THICK,ST,BLK	2
Battery mounting washer - Carbon		6.4 mm Id x 12 mm od x 0.5 mm thick, washer	SCR,BTN HD,M6X1.0 X 14,AL 7075,BLK	2

Rock guard kit - Carbon	S214200058	SUB MY22 LEVO SL CARBON ROCK GUARD KIT		1
Rock Guard - Carbon		Rock guard - Carbon	ROCKGUARD,PA TRAIL FSR G1.1	1
Rock guard washer		6.4 mm id x 12 mm od x 0.5 mm thick, washer	WSHR,FLAT,M6,6.4 IDX12 ODX0.5 THICK,ST,BLK	2
Rock guard slotted washer		6.4 mm id x 12 mm od x 1.5 mm thick, slot washer	WSHR,SLOT HOLE,M6,6.4 IDX12 ODX1.5 THICK,SUS 304,BLK	1
Rock guard bolt		M6 x 14 mm x 1 mm p, bolt	SCR,BTN HD,M6X1.0 X 14,AL 7075,BLK	2
Chainstay protector	S216900005	Cs protector,mtb,pa trail fsr g1.1	CSP MY22 LEVO SL CARBON, CHAINSTAY PROTECTOR, CO-MOLDED	1