

# TECHNICAL GUIDE



## SCHEMATIC - REAR SUSPENSION



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



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SYMBOLS LEGEND



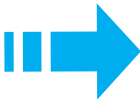
PART NUMBER



ASSEMBLY PROCESS ORDER



INSERT PATH



ASSEMBLY DIRECTION



GREASE



BLUE THREAD LOCK



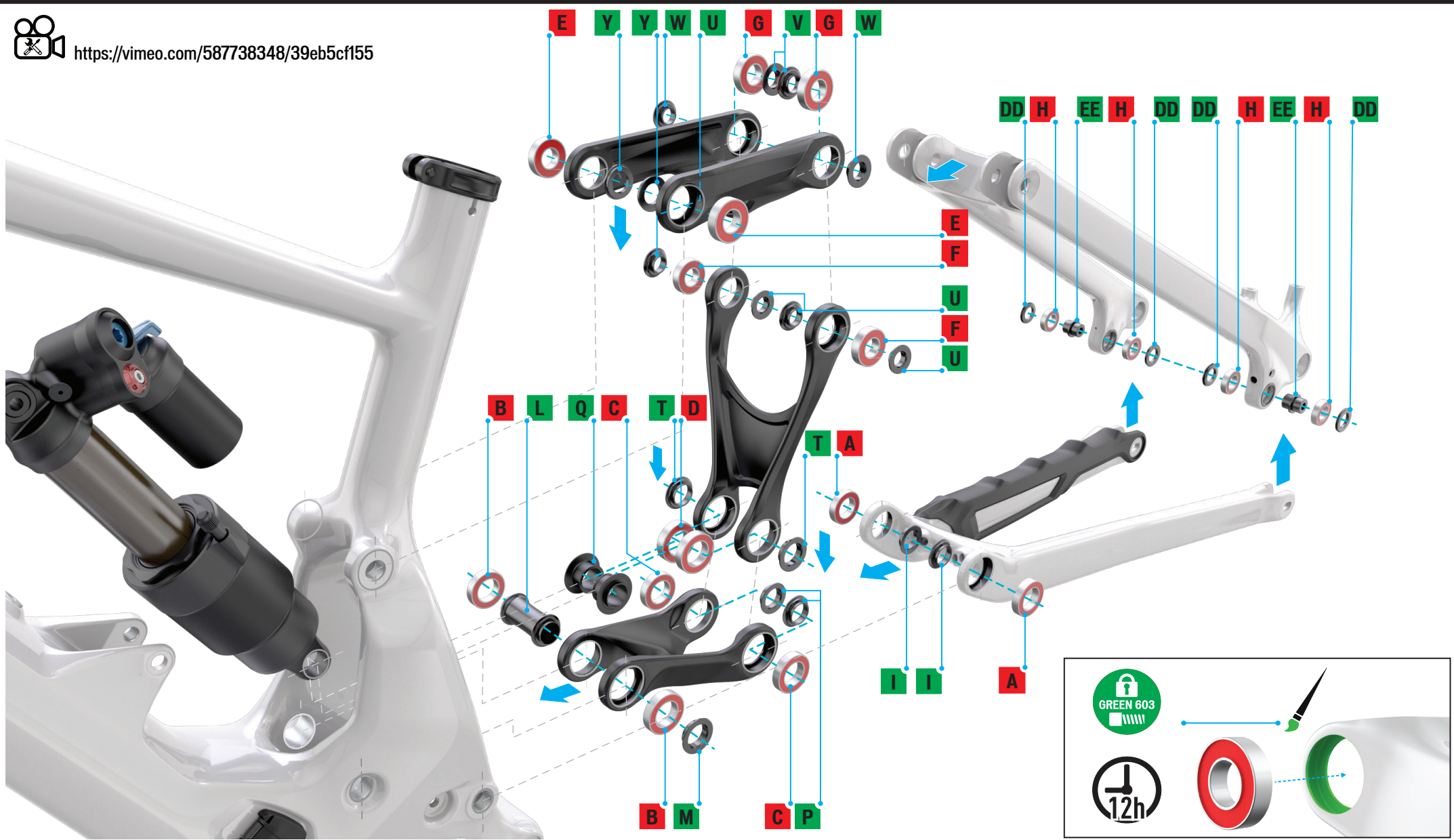
VIDEO GUIDE AVAILABLE



BOLT TORQUE REQUIRED



<https://vimeo.com/587738348/39eb5cf155>



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.

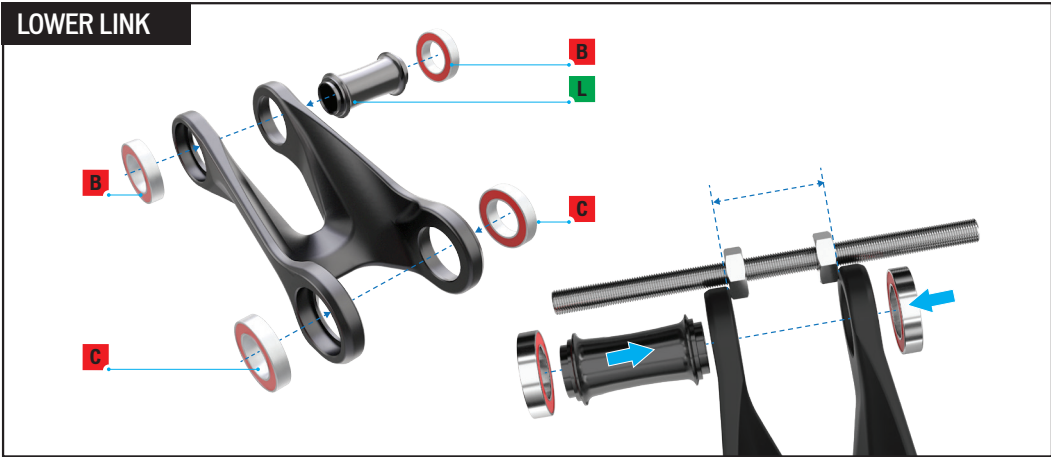


#	PIVOT	PART	QTY	MATERIAL	Ø OD	Ø ID	WIDTH	THREAD	LENGTH	TOOL	BEARING NUMBER
A	MAIN PIVOT @ CHAINSTAY	Bearing	2	Steel	28	17	6				17286V
B	LOWER LINK @ SHOCK TUNNEL	Bearing	2	Steel	28	17	6				17286V
C	LOWER LINK @ MID LINK	Bearing	2	Steel	28	17	6				17286V
D	MID LINK @ LOWER LINK	Bearing	2	Steel	28	17	6				17286V
E	UPPER LINK @ SEAT TUBE	Bearing	2	Steel	24	12	6				6901
F	MID LINK @ SEATSTAY	Bearing	2	Steel	24	12	6				6901
G	UPPER LINK @ SEATSTAY	Bearing	2	Steel	24	12	6				6901
H	DROPOUT (HORST LINK)	Bearing	4	Steel	21	12	5				6801
I	MAIN PIVOT INNER SPACER	Spacer	2	Aluminum	15/17	23	2.5				
L	LOWER LINK @ SHOCK TUNNEL SLEEVE	Spacer	1	Aluminum	40.5	17	2				
M	LOWER LINK @ SHOCK TUNNEL NDS OUTER SPACER	Spacer	1	Aluminum	15/17	23	2.5				
P	LOWER LINK @ MID LINK INNER SPACER	Spacer	2	Aluminum	15/17	23	2.5				
Q	MID LINK @ LOWER LINK/REAR SHOCK EYE INNER SPACER	Spacer	2	Aluminum	15	9.65	6.5				
T	MID LINK @ LOWER LINK/REAR SHOCK EYE OUTER SPACER	Spacer	2	Aluminum	15/17	23	2.5				
U	MID LINK @ UPPER LINK/SEATSTAY SPACER	Spacer	4	Aluminum	10/12	17.5	2.5				
V	UPPER LINK @ MID LINK/SEATSTAY INNER SPACER	Spacer	2	Aluminum	10/12	17.5	2.5				
W	UPPER LINK @ MID LINK/SEATSTAY OUTER SPACER	Spacer	2	Aluminum	10/12	17.5	2.5				
Y	UPPER LINK @ SEAT TUBE INNER SPACER	Spacer	2	Aluminum	12	18.6	2.7				
BB	HORST PIVOT ADJUSTABLE SPACER OUTSIDE	Adjustable Spacer	2	Aluminum							
CC	HORST PIVOT ADJUSTABLE SPACER INSIDE	Adjustable Spacer	2	Aluminum							
DD	HORST PIVOT SPACER	Seal	4	Rubber	12	21	2.5				
EE	HORST PIVOT CENTER SPACER	Spacer	2	Aluminium	6	16	16				
GG	FORWARD SHOCK EYELET	Washer	1	Stainless Steel	8.3	13	0.5				

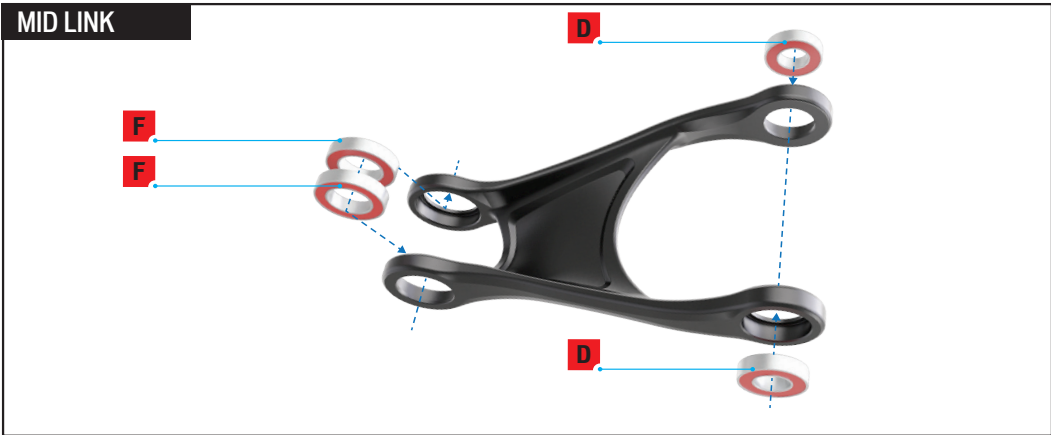




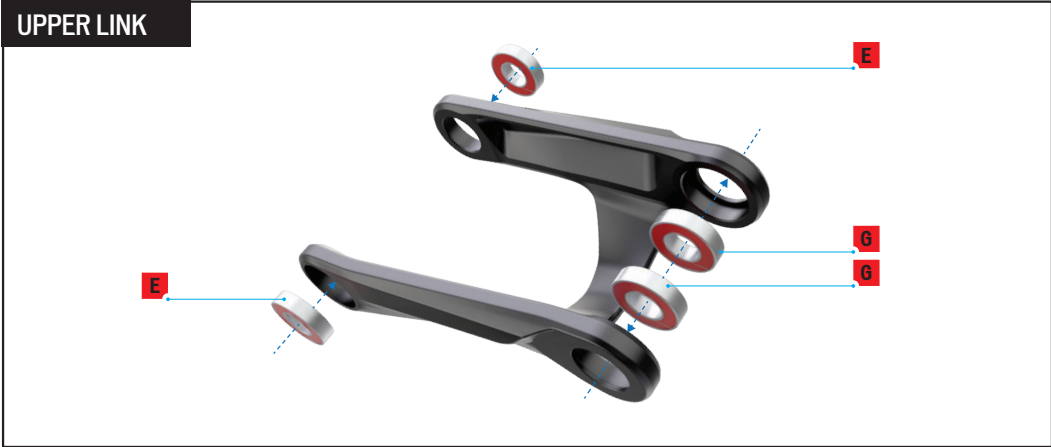
LOWER LINK



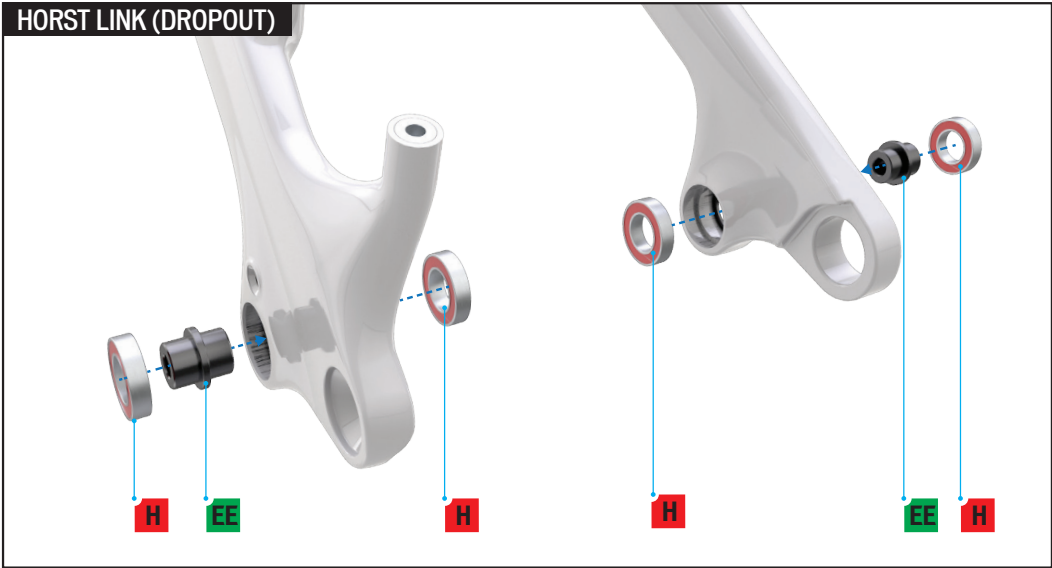
MID LINK



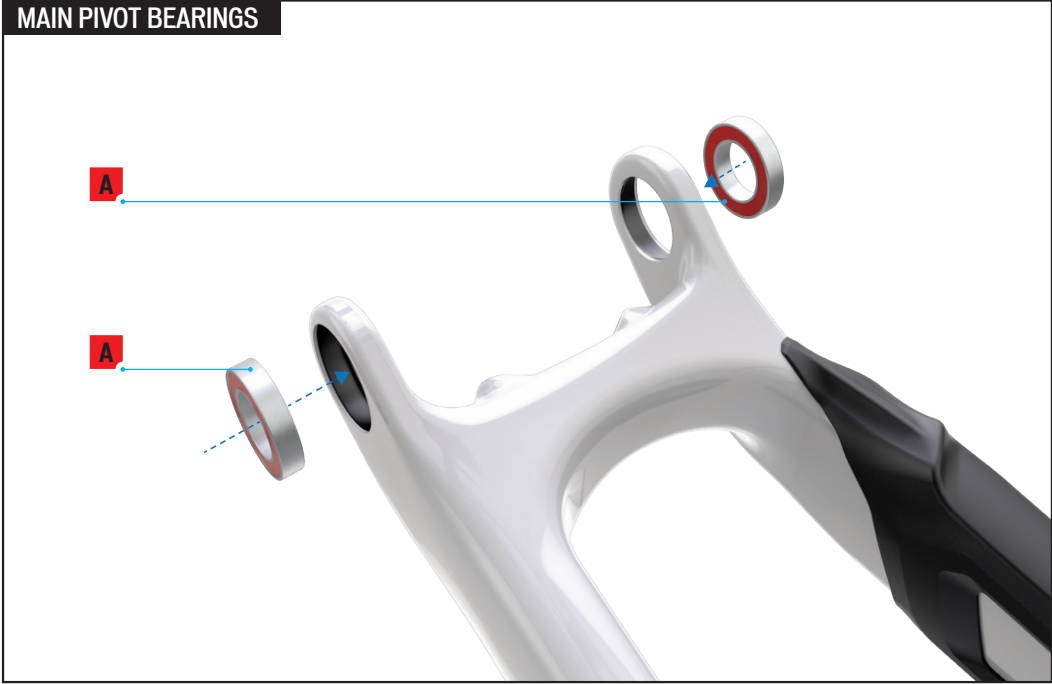
UPPER LINK

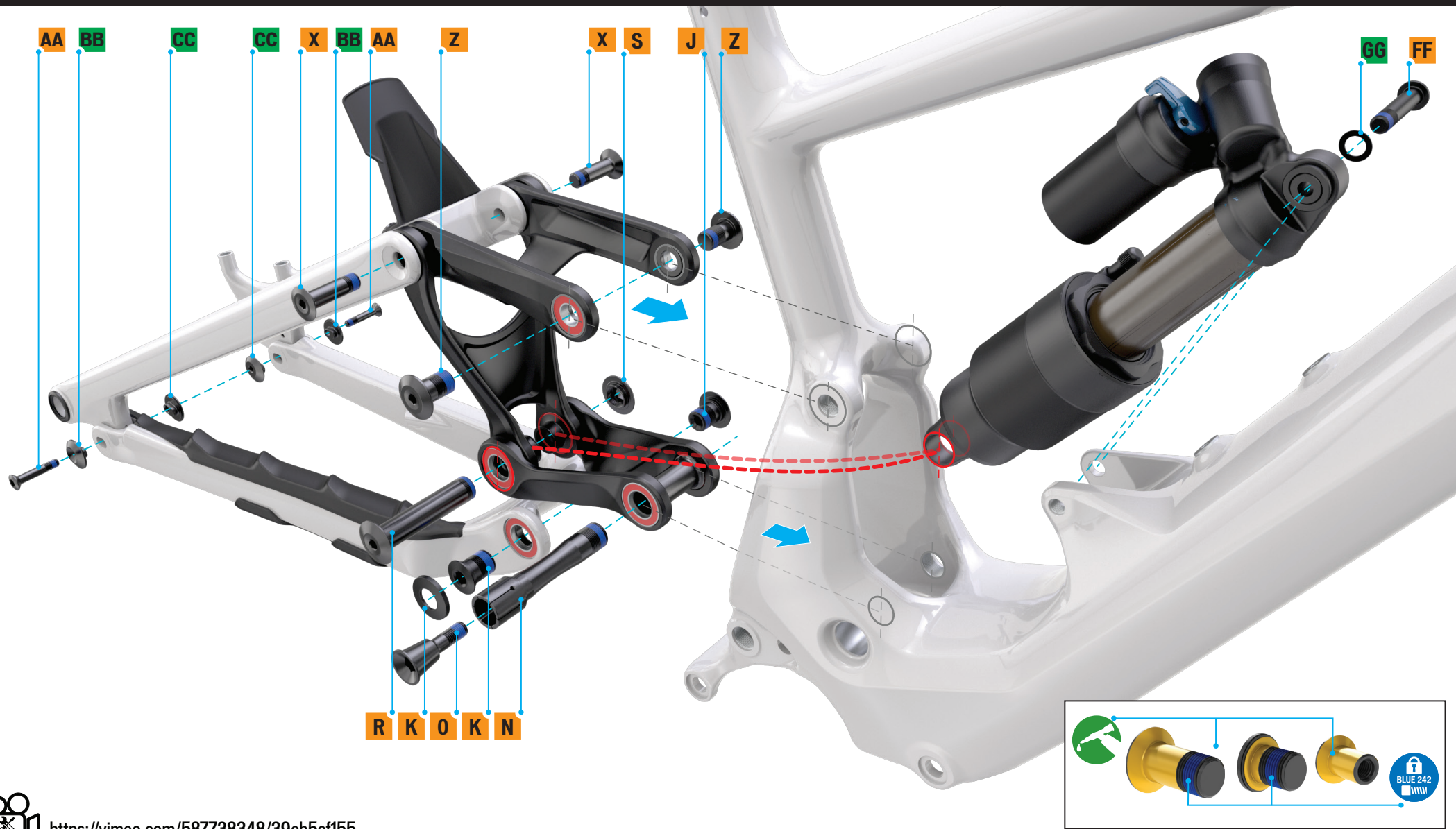


HORST LINK (DROPOUT)



MAIN PIVOT BEARINGS





<https://vimeo.com/587738348/39eb5cf155>



All pivot bolts are factory treated with a threadlocker patch on the threads. If the threadlocker wears off, Remove the old threadlocker and apply a new coat of Loctite 243, or install new bolts with the pre-applied threadlock 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).



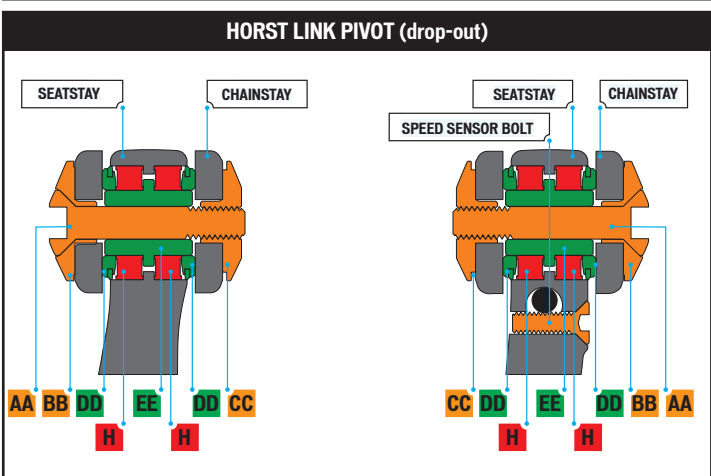
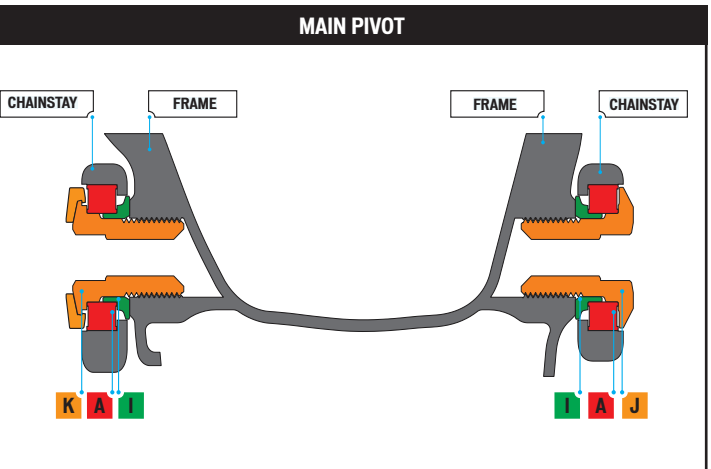
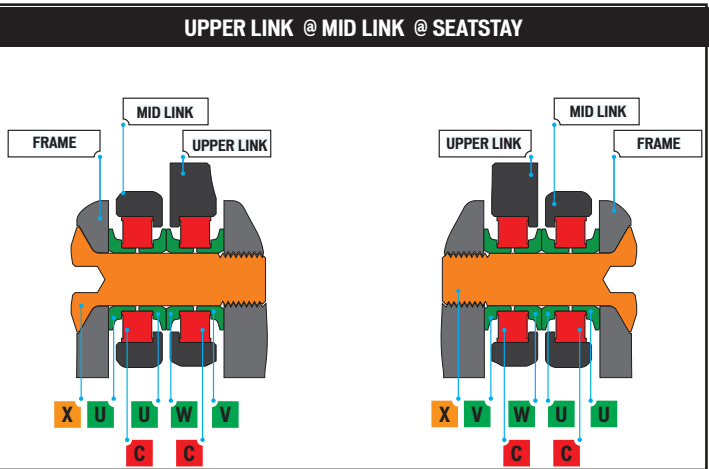
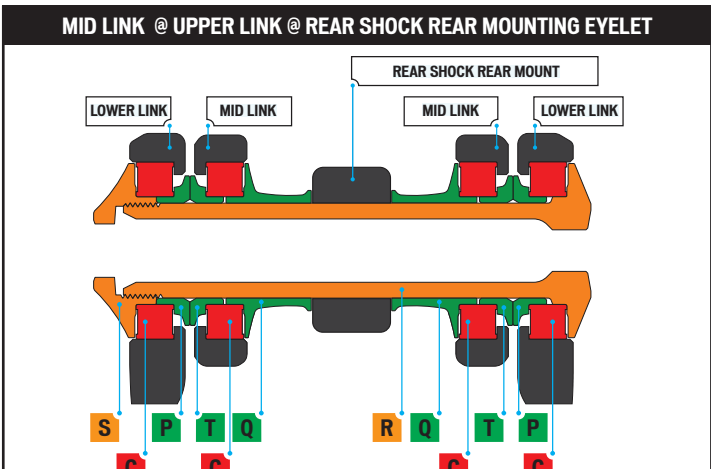
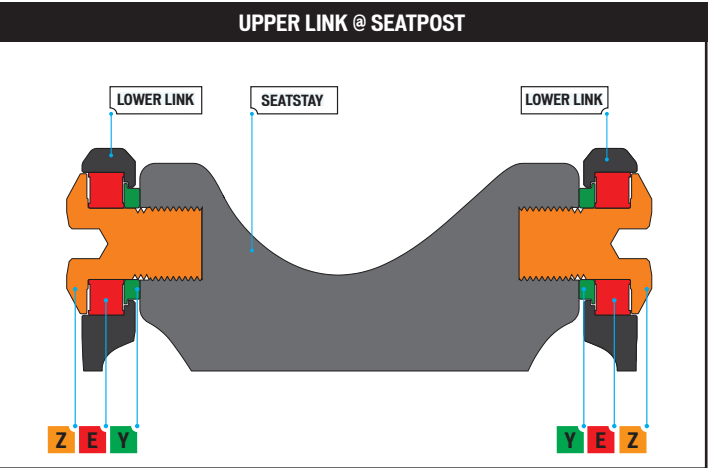
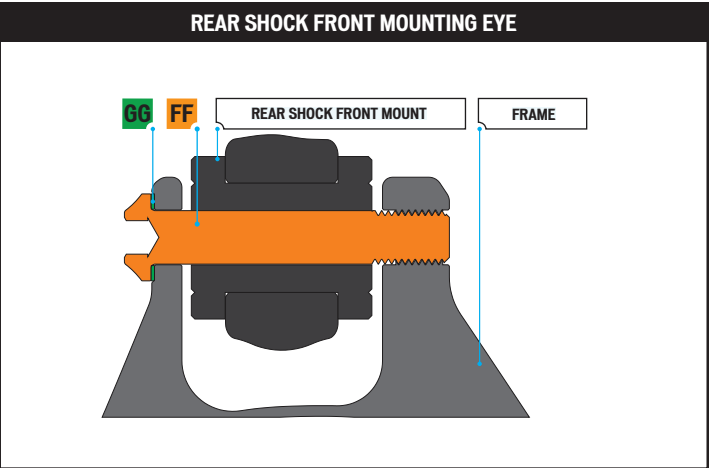
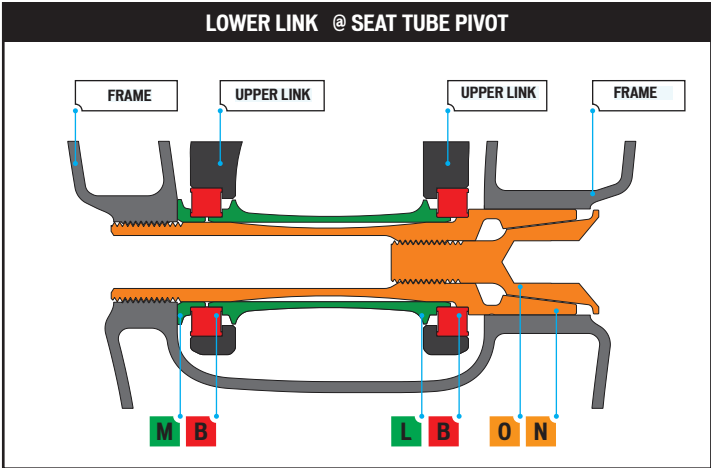
**CAUTION:** Contamination with grease of the thread on any of the pivot bolts could lead to the threadlocker not functioning as intended; the bolts could come loose, causing damage to the bicycle.

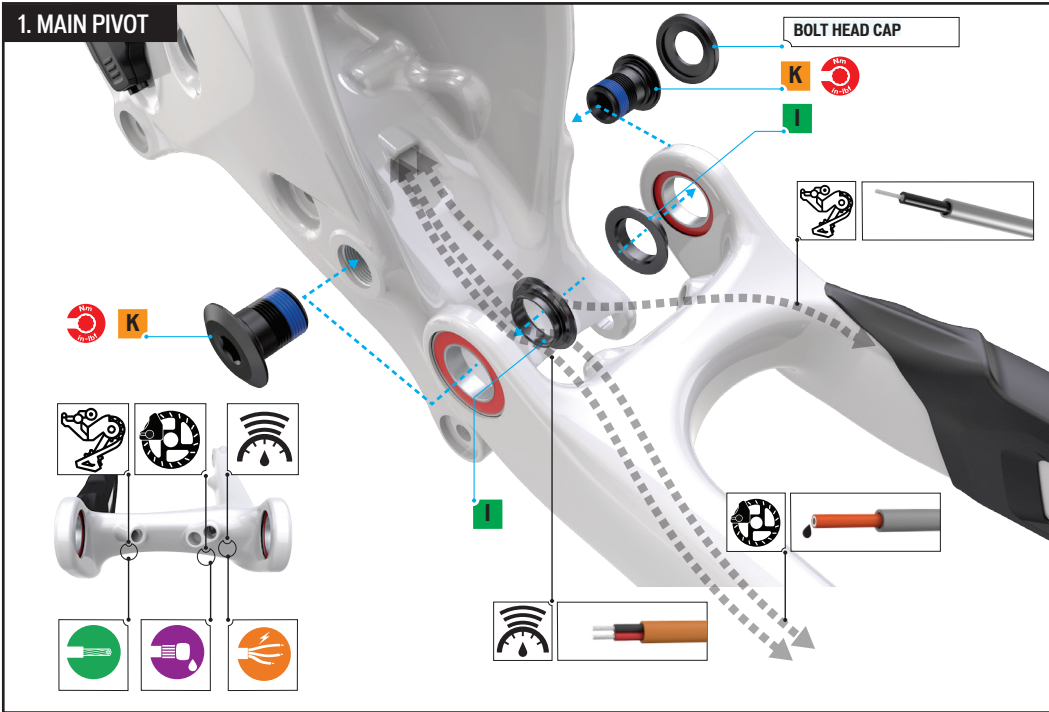


For best alignment results, do not torque any of the rear triangle pivot and shock bolts until the rear triangle is fully assembled to the front triangle.



#	PIVOT	PART	QTY	<div><div>Aluminum</div><div>13</div><div>AI</div><div>20,000</div></div> MATERIAL							TORQUE	
											NM	in-Lbf
J	MAIN PIVOT BOLT NDS	Bolt	1	Aluminum				M15	18.5	8 mm HEX	25	220
K	MAIN PIVOT BOLT DS + CHAIN GUIDE COVER	Bolt + plastic cover	1	Aluminum + acetal				M15	18.5	8 mm HEX	25	220
N	LOWER LINK @ SHOCK TUNNEL DS AXLE BOLT	Axle bolt - expanding	1	Aluminum				M15	67	8 mm HEX	25	220
O	LOWER LINK @ SHOCK TUNNEL DS WEDGE BOLT	Expanding wedge	1	Titanium				M8	38.2	8 mm HEX	17	150
R	MID LINK @ LOWER LINK/REAR SHOCK EYE AXLE BOLT	Axle bolt	1	Aluminum				M15	71	6 mm HEX	25	220
S	MID LINK @ LOWER LINK/REAR SHOCK EYE NUT	Flat nut	1	Coated steel				M15	6	8 mm HEX	25	220
X	UPPER LINK @ MID LINK/SEATSTAY BOLT	Bolt	2	Aluminum				M10	32.5	5 mm HEX	17	150
Z	UPPER LINK @ SEAT TUBE BOLT	Bolt	2	Aluminum				M12	20	5 mm HEX	20	180
AA	HORST PIVOT BOLT	Bolt	2	Coated steel				M6	32.5	5 mm HEX	10	90
FF	FORWARD SHOCK EYE BOLT	Bolt	1	Coated steel				M8	45	5 mm HEX	12.7	113



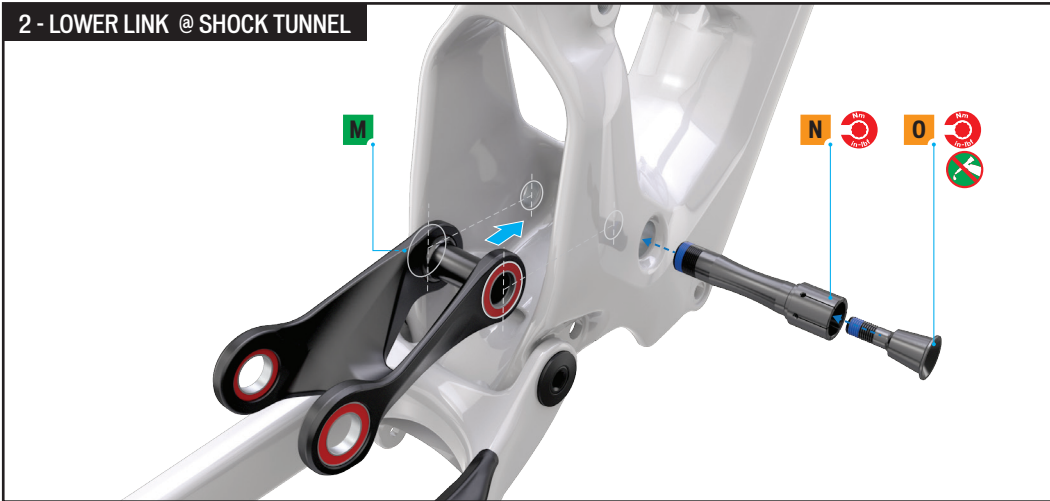


**i** Before beginning the rear triangle build, you should route the sensor cables through the chainstay first.

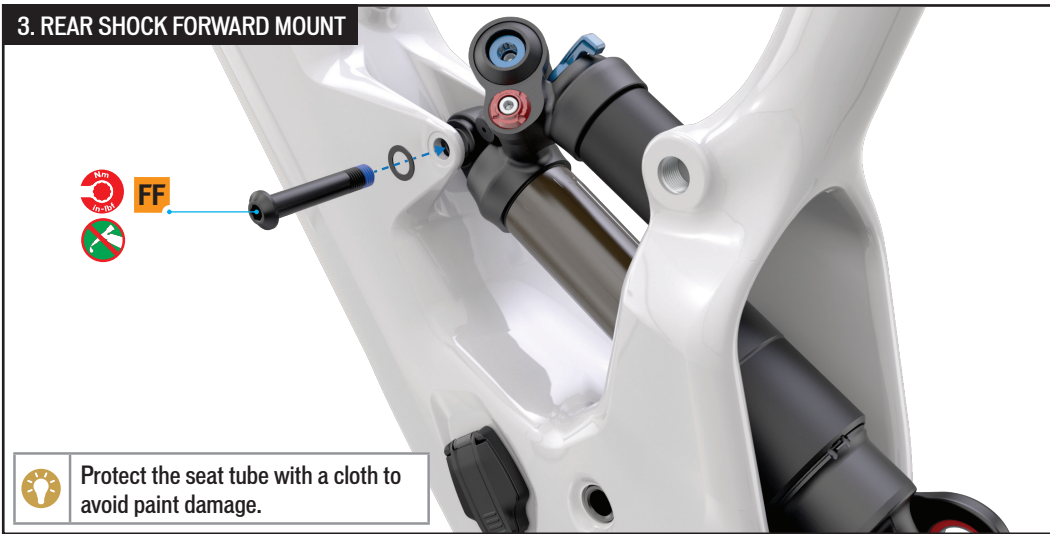
- Starting from the motor area, route the speed sensor cable through the ICR port in the shock tunnel.
- Thread the speed sensor cable through the inner non-drive side ICR porthole on the chainstay bridge, exiting at the Horst pivot. Leave 50 mm of cable protruding from the chainstay.

ASSEMBLE THE MAIN PIVOT.

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

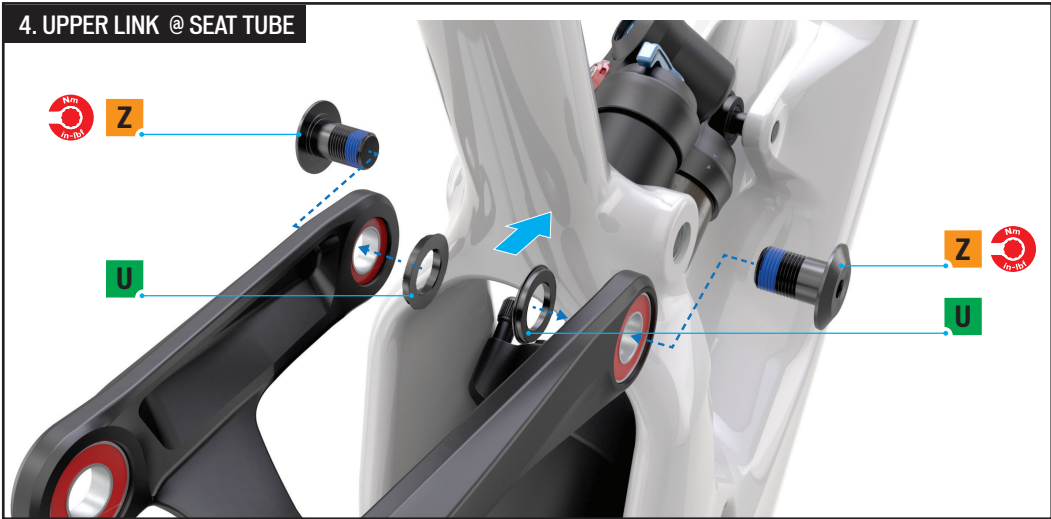


- Place the spacer [M] against the non-drive side link bearing with the reduced edge facing toward the bearing.
- Align the bearings and spacer of the lower link with the bore in the shock tunnel.
- Grease the non-threaded surfaces, then insert the expanding bolt [N] from the drive side into the link.
- Using an 8 mm hex bit, torque the bolt to specification.
- Insert the wedge bolt [O] from the drive side into the link. Do not grease the wedge bolt.
- Using an 8 mm hex key, torque the wedge bolt to specification.



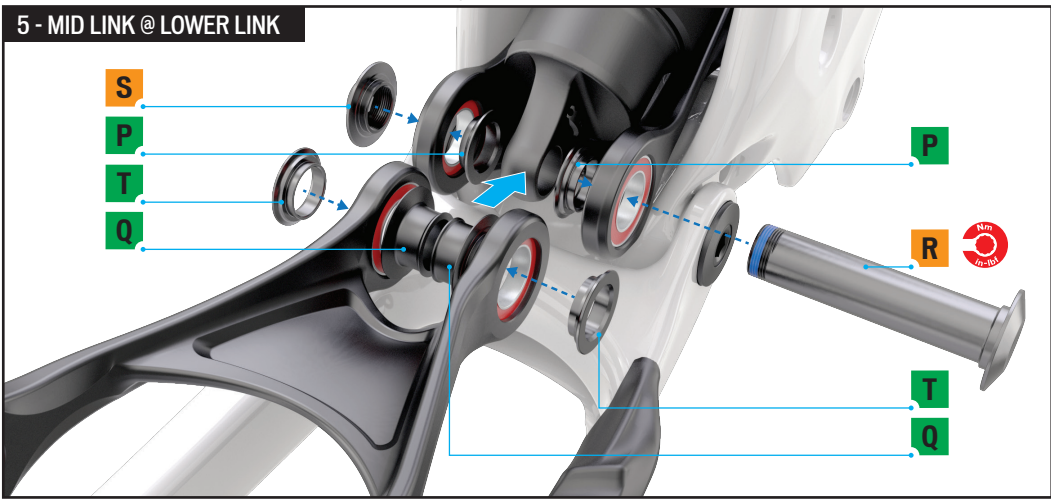
- Insert shock into the shock tunnel area and align the forward shock eyelet with the mounting tabs on the down tube.
- Insert the bolt [FF] through the frame tabs. Do not grease this bolt.
- Torque the bolt to specification.





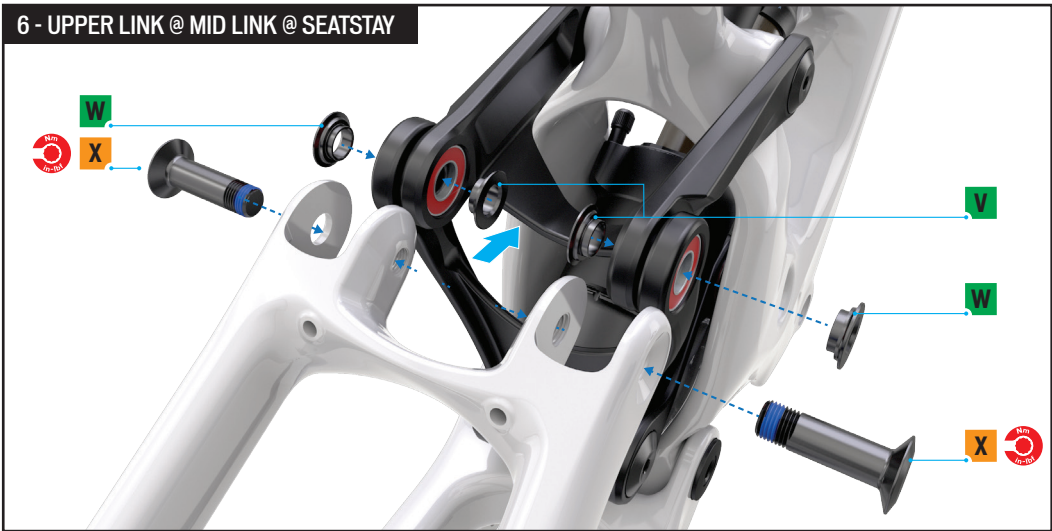
**i** If you have inserted the spacer and bearings into the forward pivot pore as recommended, skip step 1.

- Grease, and place the upper link spacers [U] against the inside link bearings with the reduced edge facing toward the bearing.
- Align the upper link with the seat tube pivot bore, then grease the non-threaded surfaces. Insert the upper link bolts [Z] into the seat tube; using a 6 mm hex key, torque to specification. Use a rag to protect the frame.



- Grease and place the lower link spacers [P] against the inside surface of the lower link bearings with the reduced edge facing toward the bearing.
- Grease and place the mid link shock eyelet spacers [Q] against the inside surface of the mid link bearings with the short side facing the bearing
- Grease and place the outer mid link spacers [T] against the outside surface of the mid link bearings with the reduced edge facing toward the bearing.

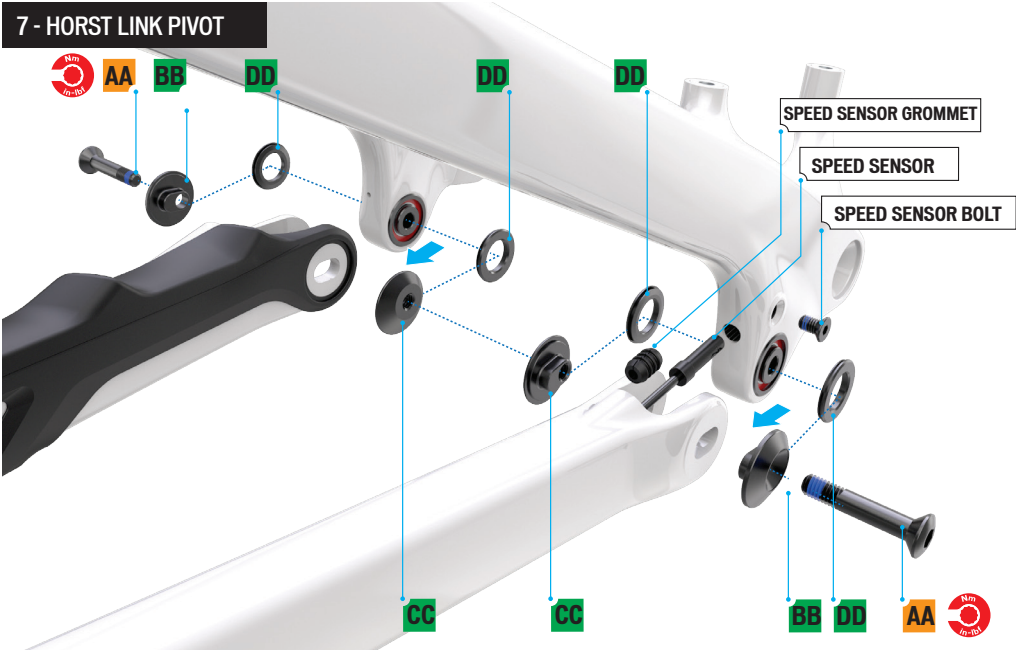
- Align the mid link and lower link holes, then align the rear shock eyelet with lower and mid link assembly.
- Grease the non-threaded surfaces, then insert the axle bolt [R] from the drive side through the mid link, lower link, and lower shock eyelet. When inserting this bolt, do not twist it as it can cause the anodizing to be scratched. This is purely an aesthetic issue.
- Grease the non-threaded surfaces, then place the non-drive side custom nut [S] against the bearing.
- Using an 8 mm hex key on the axle bolt [R] and a 6 mm hex key on the custom nut [S], torque the bolts to specification.




- Grease and place the spacers [V] (x4) with the reduced edge against the bearings of the upper link rear bore bearings.
- Grease and place the spacers (x4) with the reduced edge against the mid-link upper bore bearings.
- Rotate the mid-link into position to align with the upper link bearings.
- Rotate the seatstay into position to align the seatstay bore with the upper link and mid link pivot bore.
- Grease the non-threaded surfaces, then insert the seatstay bolts through the seatstay, mid link, and upper link.
- Using a 5 mm hex key, torque the bolts to specification.




7 - HORST LINK PIVOT





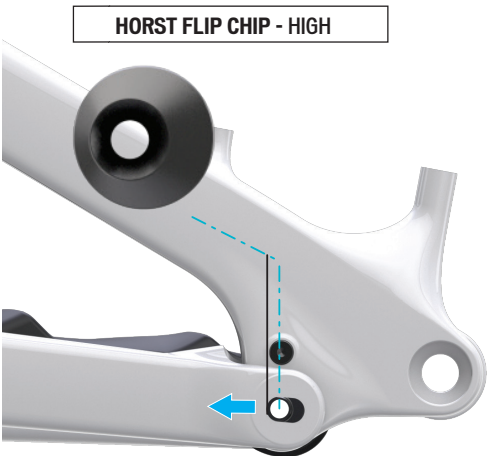
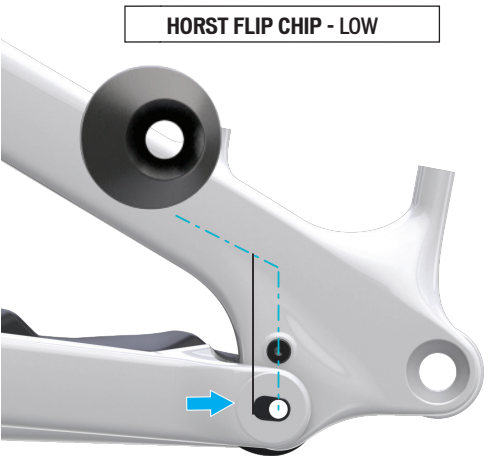
**WARNING:** The drive side and non-drive side Horst flip chips must both be aligned in the same high or low position. Improperly installed flip chips can damage the frame and can also cause you to lose control and fall.



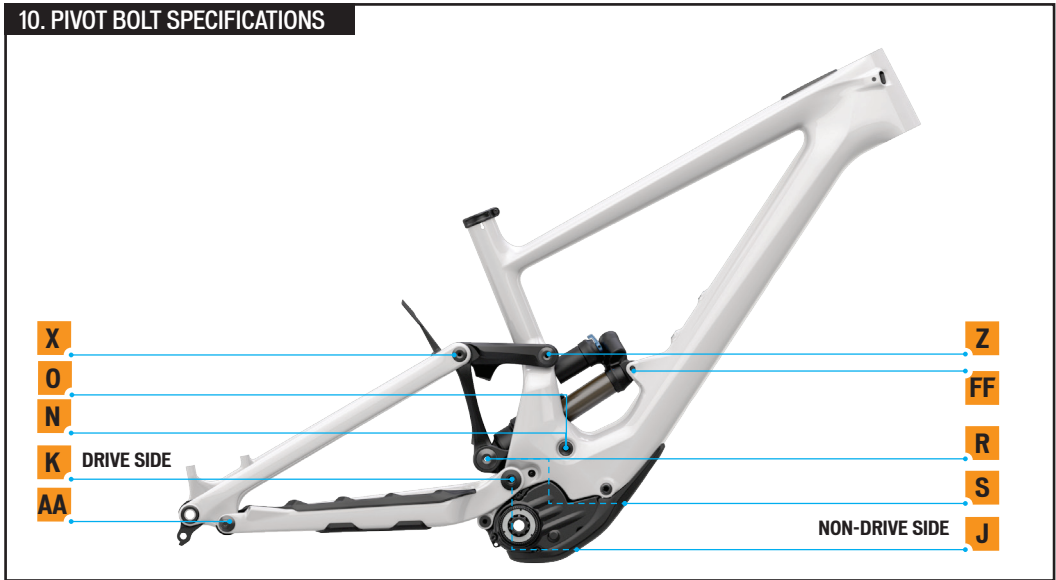
All models are assembled with the flip chip in the high position. Switching to the low position lowers the bottom bracket height by approximately 7 mm and slackens the head tube angle by approximately 0.5 degrees.

- Place the pivot spacers [G] on both sides of the bearings with the tapered side against the bearing.
- Align the chainstay pivot hole with the seatstay pivot hole.
- Insert the flip chips [E] and [F] located in either the high or low position.
- Grease the non-threaded surfaces of the bolts [D] and insert them ensuring the threadlocker does not get contaminated with grease, then torque the bolt to specification.

HORST LINK PIVOT



- ADJUSTING THE FLIP CHIPS
- Remove the Horst pivot bolts [D] from the frame.
  - Remove all four flip chips [E] and [F] and align the Horst pivot spacer in the slot to either “high” or “low” position. When replacing the adjustable spacer, make sure it is correctly located into the chainstay and that both parts of the flip chip are aligned in the same direction.
  - Re-install the flip chips [E] and [F] in the desired position. Make sure they are fully seated and aligned with the chainstay protector before tightening the bolt [D] to specification.



#	LOCATION	TOOL	TORQUE	
			NM	in-lbf
J	MAIN PIVOT BOLT NDS	8 mm HEX	25	220
K	MAIN PIVOT BOLT + CHAIN GUIDE COVER	8 mm HEX	25	220
N	LOWER LINK @ SHOCK TUNNEL DS AXLE BOLT	8 mm HEX	25	220
O	LOWER LINK @ SHOCK TUNNEL DS WEDGE BOLT	8 mm HEX	17	150
R	MID LINK @ LOWER LINK/REAR SHOCK EYE AXLE BOLT	6 mm HEX	25	220
S	MID LINK @ LOWER LINK/REAR SHOCK EYE NUT	8 mm HEX	25	220
X	UPPER LINK @ MID LINK/SEATSTAY BOLT	5 mm HEX	17	150
Z	UPPER LINK @ SEAT TUBE BOLT	5 mm HEX	20	180
AA	HORST PIVOT BOLT	5 mm HEX	10	90
FF	FORWARD SHOCK EYE BOLT	5 mm HEX	12.7	113

PART NAME	NUMBER	PART SPECIFICATION	PART DESCRIPTION	QTY
Chainstay carbon		Chainstay	CS,AS FINISHED,PA TRAIL FSR E1.1,29,CRBN,LT,CRBN	1
Bearing	S211500003	17 mm ID x 28 mm OD x 6 mm W,DBL SLD	BRG,BALL,17MM ID X 28MM OD X 6MM W,DBL SLD	2
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 carbon (gloss carbon)		Seatstay	SS,AS FINISHED,PA TRAIL FSR E1.1,CRBN	
Bearing	S215000001	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		6 mm ID x 16 mm OD x 16 mm W	SPCR,STEP,6MM ID X 16MM OD X 16MM W,7075-T6	2
Bearing suspension kit			BRG MY22 LEVO SUSPENSION BEARING KIT	
Bearing	S210600001	17 mm ID x 28 mm OD x 6 mm W,DBL SLD	BRG,BALL,17MM ID X 28MM OD X 6MM W,DBL SLD	8
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	6
Bearing		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
Kenevo SL lower link kit			SHL MY22 KENEVO SL LOWER LINK, ALY	
Lower link	S214300002	Lower link alloy	LINK C,PA TRAIL FSR E1.1,29,CRBN,LT	1
Bearing		17 mm ID x 28 mm OD x 6 mm W,DBL SLD	BRG,BALL,17MM ID X 28MM OD X 6MM W,DBL SLD	4
Bearing spacer		17 mm ID x 40.5 mm OD x 2 mm W	SPCR,17 ID X 40.5 OD X 2 W,ALY,BLK	1
Kenevo SL upper link kit			SHL MY22 KENEVO SL UPPER LINK, ALY	
Upper link	S214300005	Upper link alloy	LINK A,PA TRAIL FSR E1.1,29,CRBN,LT	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	4
Kenevo SL mid link kit			SHL MY22 KENEVO SL MID LINK, ALY	
Mid link	S214300003	Mid link carbon	LINK B,PA TRAIL FSR E1.1,29,CRBN,LT,ALY	1
Bearing		17 mm ID x 28 mm OD x 6 mm W,DBL SLD	BRG,BALL,17MM ID X 28MM OD X 6MM W,DBL SLD	2
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



Kenevo SL suspension bolt kit			BLT MY22 KENEVO SL SUSPENSION BOLT KIT	
Upper link @ seatstay inner spacer		10/12 mm ID x 17.5 mm OD x 2.5 mm W	BSHG,FLG,10/12MM ID X 17.5MM OD X 2.5MM W,BLK	8
Upper link @ seat tubespacer		12 mm ID x 18.6 mm OD x 2.7 mm W	BSHG,FLG,12MM ID X 18.6MM OD X 2.7MM W	2
Lower link @ mid link inner spacer		15/17 mm ID x 23 mm OD x 2.5 mm W	BSHG,FLG,15/17MM ID X 23MM OD X 2.5 W	7
Mid link @ lower link inner spacer		15 mm ID x 9.65 mm OD x 6.5 mm W	BSHG,FLG,15MM ID X 9.65MM OD X 6.5MM W,ALY	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 outer spacer		12 mm ID x 21 mm OD x 2.5 mm W	HORST PIVOT OUTER SPACER ASSY 12X21X2.5	4
Mid link @ lower link nut		M15 custom nut	NUT CSTM,15MM ID,STL	1
Lower link @ shock tunnel wedge		M8 x 1 mm p expander bolt Titanium	SCR,CUST,EXPANDER WEDGE,M8,TI	1
Lower link @ shock tunnel axle	S210500009	M15 x 67 mm x 1 mm p expanding bolt	SCR,CUST,EXPANDING,M15X1.0 X 67,7075,BLK	1
Upper link @ mid link/seatstay bolt		M10 x 32 mm x 1 mm p bolt	SCR,CUST,M10X1.0 X 32,7075,BLK	2
Upper link @ seat tube bolt		M12 x 20 mm x 1 mm p bolt	SCR,CUST,M12X1.0 X 20,7075,BLK	2
Mid link @ lower link axle bolt		M15 x 71 mm x 0.8 mm p bolt	SCR,CUST,M15X0.8 X 71,7075,BLK	1
Main pivot bolt NDS		M15 x 19 mm x 1 mm p bolt	SCR,CUST,M15X1.0 X 19,7075,BLK	1
Main pivot bolt DS		M15 x 19 mm x 1 mm p bolt + cover	SCR,CUST,M15X1.0 X 19,CHAIN GUIDE,7075,BLK	1
Horst pivot bolt		M6 x 32.5 mm x 1 mm p bolt	SCR,CUST,M6X1.0 X 32.5,STL,BLK	2
Mud flap screw		T25-M4 x 7 mm x 0.8 mm p bolt	SCR,CUST,T25,M4X0.7X8,2024,BLK	2
Lower link @ shock tunnel spacer		17 mm ID x 40.5 mm OD x 2 mm W	SPCR,17 ID X 40.5 OD X 2 W,ALY,BLK	1
Horst pivot inner 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
Speed sensor bolt		M4 x 14 mm x 0.7 mm p bolt	SCR,SKT FLT HD,M4X0.7 X 14,7075-T73,BLK	1
ICR port mounting screw		M3 x 6 mm x 0.5 mm p bolt	SCR,SKT FLT HD,M3X0.5X6,STL BLK ZINC	2
Forward shock mounting bolt	S210500007	M8 x 45 mm x 1 mm p bolt	SCR,CUST,M8X1.0 X 45,STL	1
Forward shock mounting bolt		8.3 mm ID x 13 mm OD x 0.5 mm W	WSHR,FLAT,M8,8.3IDX13ODX0.5THK,304SST	1

Horst pivot geo adjust kit				
Horst pivot bolt		M6 x 32.5 mm x 1 mm p bolt	SCR,CUST,M6X1.0 X 32.5,STL,BLK	2
Horst pivot outer spacer	S210500006	12 mm ID x 21 mm OD x 2.5 mm W	HORST PIVOT OUTER SPACER 12X21X2.5	4
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
SRAM Universal Derailleur Hanger	S202600002		HGR SRAM AC UDH DERAILLEUR HANGER AL BLACK	1