

Rev. A June 2021

2022 SESSION

SERVICE MANUAL SUPPLEMENT

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Safety

WARNING

Always tighten hardware to the specified torque. Over-tightening hardware could deform or break the hardware or components. Under-tightening hardware could cause hardware or components to become loose. Either situation could damage the bicycle and result in injury to the rider.

WARNING

All reused-fasteners with pre-applied threadlocker must be cleaned with isopropyl alcohol and have new thread-locker (Loctite 243 or equivalent) applied before re-assembly. If threadlocker is not applied, the fasteners may loosen which could damage the bicycle and result in injury to the rider.

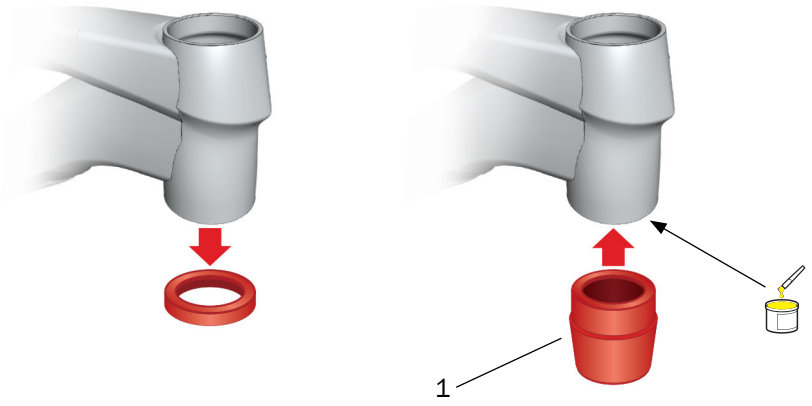
Required adjustments for 27.5" wheels

The Session can accommodate:

- 27.5" front and rear wheels
- 29" front wheel and 27.5" rear wheel

When using 27.5" front and rear wheels an extended headset cup must be installed, and the rocker pivot mino link set to the high position. See the Adjust the geometry section on page 6 for information about adjusting the mino link.

Install the extended headset cup



Item	Description	Part Number
1	Extended headset cup	W5251089

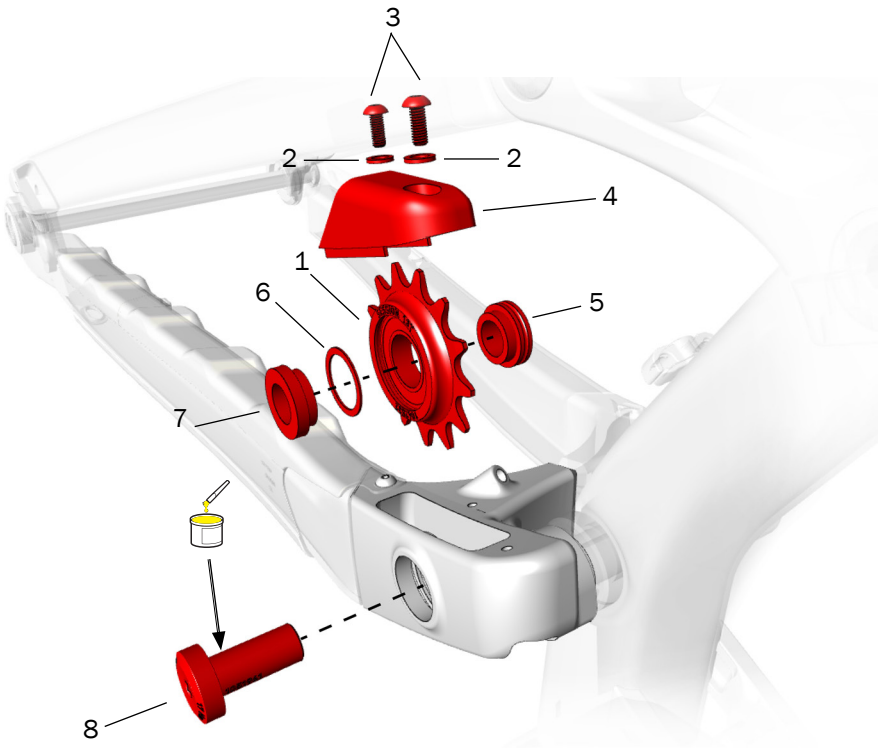
Tools

- Headset cup removal tool
- Grease

1. Use the headset cup removal tool to remove the existing cup.
2.  Apply grease to the lower head tube bearing bore.
3. Press the extended headset cup into the headset.

Idler pulley

The idler pulley and spacers can be repositioned to align the idler pulley with the chainring. For instructions, refer to the Adjust the position of the idler pulley section on page 4.

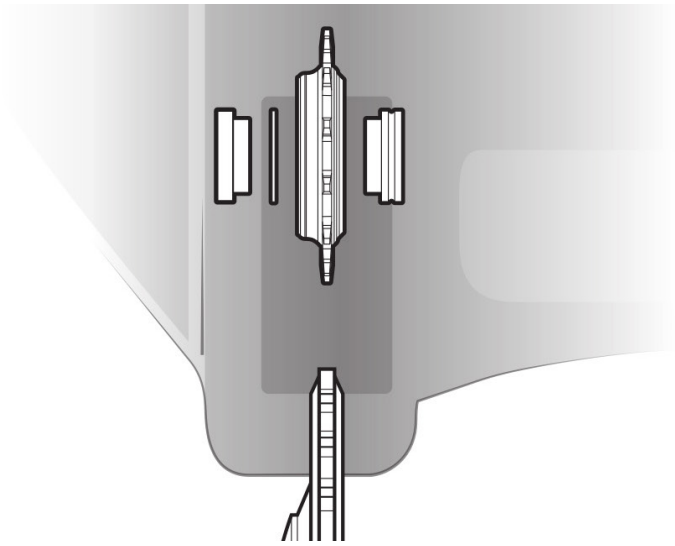


Item	Description	Quantity in Assembly	Part Number	Torque (Nm)
1	Idler pulley	1	W1042533	—
2	Washer	2	W5265886	—
3	Idler guard bolts	2	W1052364	1
4	Idler guard	1	W1052385	—
5	Spacer, black, grooved, 4.5mm	1	W5251169	—
6	Spacer, 0.5mm	1	W5251170	—
7	Spacer, gray, 3.5mm	1	W5251168	—
8	Idler bolt	1	W1051961	17

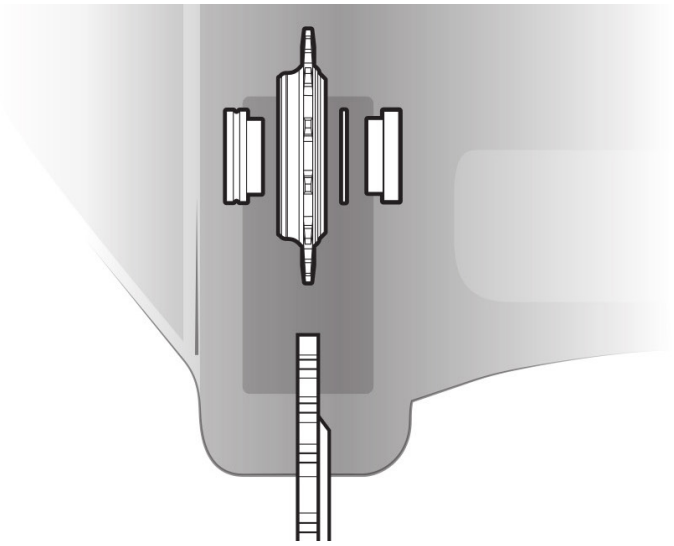
Idler pulley (continued)

Typical idler pulley and chainring alignment

With a SRAM chainring

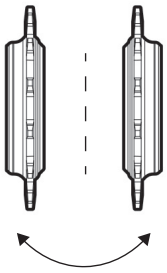


With a Shimano chainring

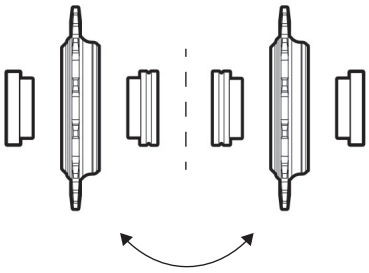


Adjust the position of the idler pulley

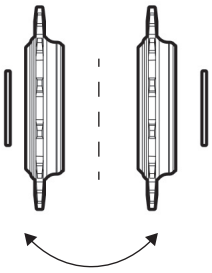
Different chainrings or slight tolerance differences in chainrings, may require the idler pulley and spacers to be repositioned to align the pulley with the chainring. To achieve alignment, do one or a combination of the following:



Flip the idler pulley.



Position the 3.5mm and 4.5mm spacers on either side of the idler pulley.



Position the 0.5mm spacer on either side of the idler pulley.

Tools

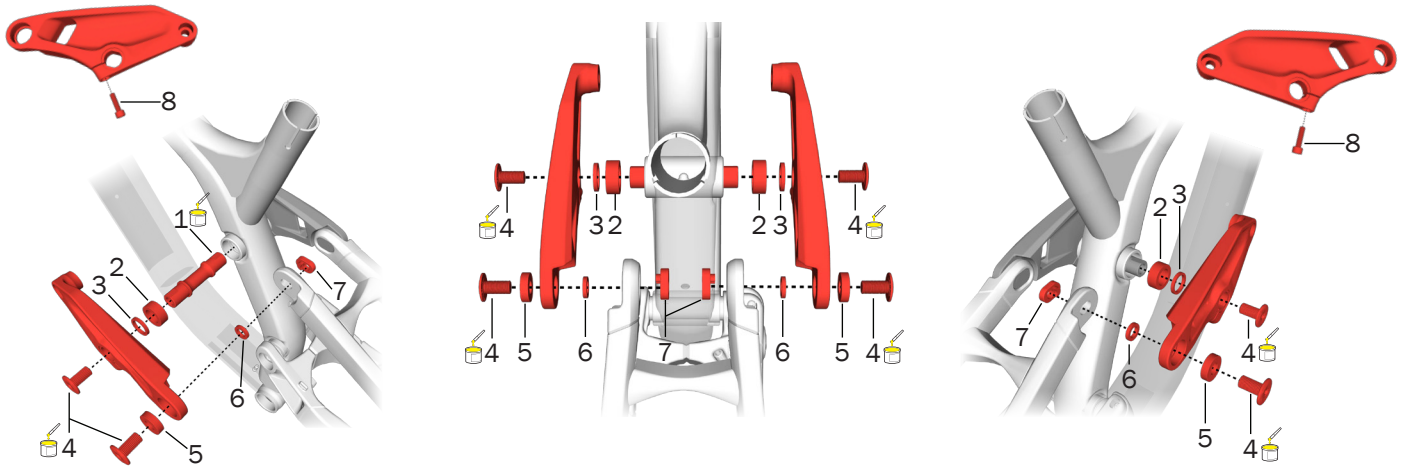
- 6mm hex tool
- Torque wrench with 6mm hex bit
- Grease

1. Inspect the current installation to determine the distance the idler pulley must be shifted to align with the chainring.
2. Remove the idler bolt (8).
3. Remove the idler pulley (1), and spacers (5, 6 and 7) from the chainstay.
4. Reassemble the components, using the options shown in the three illustrations above, to shift the position of the idler.

> **Notice:** When repositioning the components, all spacers must be used in the final configuration.

5.  Apply grease to the shoulder of the idler bolt (8).
6. Place the assembled components into position in the chainstay.
7. Install the idler bolt (8) from the drive side into the frame.
8. Torque the idler bolt (8) to 17Nm.

Rocker pivot



Item	Description	Quantity in Assembly	Part Number	Torque (Nm)
1	Rocker axle	1	W1042544	—
2	Bearing	2	W302025	—
3	Spacer	2	W440921	—
4	Bolt	4	W1051959	17
5	Mino link bearing	2	W275322	—
6	Spacer	2	W529969	—
7	Mino link chip	2	W529223	—
8	Pinch bolt	2	W5256244	5

Tools

- Bearing press
- 4mm and 5mm hex wrenches
- Torque wrench with 4mm and 5mm hex bits

IMPORTANT: For proper alignment of the rocker plates, the shock must be installed and torqued, and the mino link bolts installed and torqued, before the pinch bolts are torqued.

Rocker pivot

1. Press in the driveside bearing (2) .
2. Apply grease to the shoulder of the drive side of the rocker axle (1).
3. Insert the rocker axle (1) into the frame from the non-drive side.
4. Apply grease to the shoulder of the non-drive side of the rocker axle (1).
5. Install the non-driveside bearing (2) over the axle. Press the bearing in from the non-drive side.
6. Install a spacer (3) over the bearing.
7. Position the rocker plate so it aligns with the shoulders of the axle.
8. Apply grease to the shoulder of the bolt (4).
9. Install the bolt into the rocker plate. Tighten, but do not torque the bolt.
10. Repeat steps 1–9 on the other side.

Mino link chip

1. Press the mino link bearings (5) into the rocker plates.
2. Position the seatstay between the rocker plates.
3. Position a spacer (6) between the seatstay tab and the rocker plate. Repeat this step with the other spacer on the other side.

   Tip: Balance the spacer (6) against the bearing by partially inserting the bolt (4).
4. Insert the mino link chips (7) into the notches on the seatstays.
5. Insert the bolts (4) into the mino link bearings (5) on the rocker plates.
6. Tighten, but do not torque the bolts (4).

Pinch bolts

1. Install, but do not tighten the pinch bolts (8).

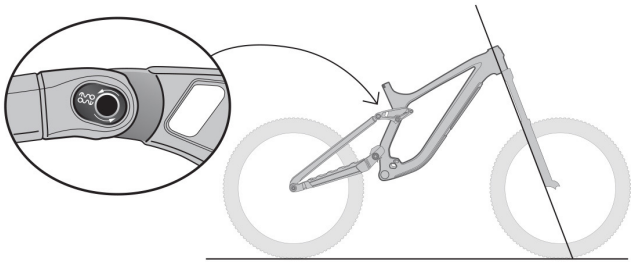
Torque all bolts

1. Torque the bolts (4) to 17Nm.
2. Torque the pinch bolts (8) to 5Nm.

Adjust the geometry

Flip the rocker pivot mino link chip to change the bike's geometry to fit your riding style or the terrain. Flipping the mino link chip from the high to the low position slackens the geometry by moving the head tube angle back 0.5° and lowering the bottom bracket up to 9mm.

Mino link high

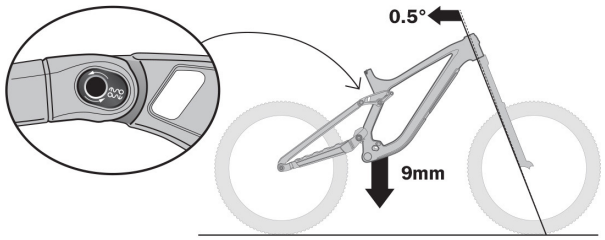


Position the chip with the mino link logo to the back

- Creates a steeper head tube angle
- Pulls in the front fork for quicker steering
- Raises the bottom bracket for improved climbing

Use this position when using 27.5" wheels or a 29" wheel up front and a 27.5" wheel in the back.

Mino link low



Position the chip with the mino link logo to the front

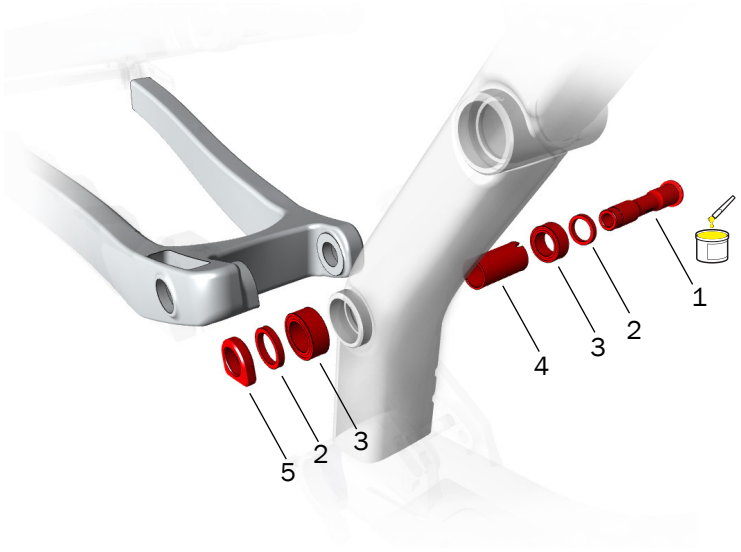
- Creates a slacker head tube angle
- Pushes out the front fork for slower steering that is more stable at high speed
- Lowers the bottom bracket for more stability

Tools

- 5mm hex tool

1. With the bike on the ground, loosen and remove one mino link chip.
2. Loosen and remove the other mino link chip.
3. Position the bike:
   Mino link high: Lift the bike by the seat tube. This will pull the rear triangle up and forward.
   Mino link low: With the chips removed, gravity will pull the rear triangle down and back.
4. Place one mino link chip into the desired position. Slightly tighten the mino link bolt.
5. Install the other mino link chip into the same position. Slightly tighten the mino link bolt.
6. Torque both mino link bolts to 17Nm.

Main pivot



Item	Description	Quantity in Assembly	Part Number	Torque (Nm)
1	Axle	1	5256639	30
2	Spacer	2	W440921	—
3	Bearing	2	W302025	—
4	Sleeve	1	5256639	—
5	Nut	1	W584134	—

Tools

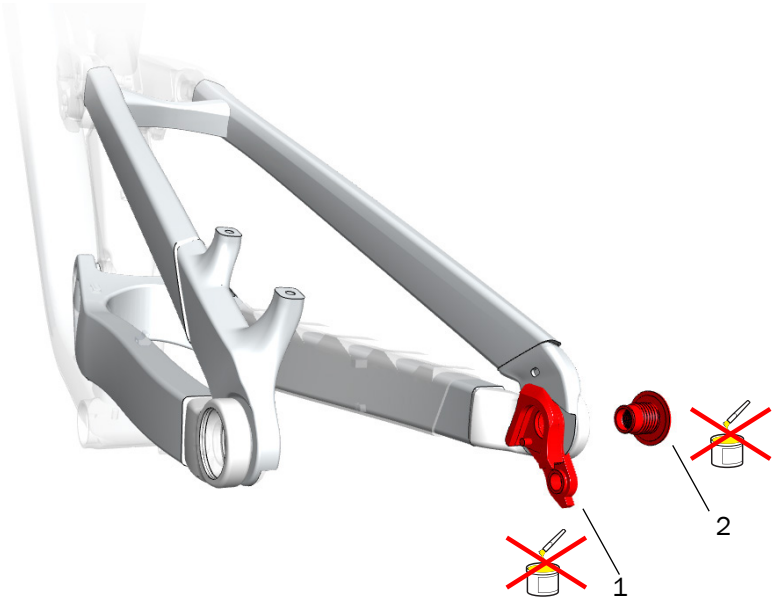
- Bearing press
- 8mm hex tool
- Torque wrench with 8mm hex bit
- Grease

1. Press in the driveside bearing (3).
2. Insert the sleeve (4) from the non-drive side.
3. Press in the non-driveside bearing (3).

Tip: The sleeve and bearing must be properly aligned to allow the axle to pass through. To aid in alignment, use the bearing press to hold the sleeve in position while pressing in the bearing.

4. Install one spacer (2) over the non-driveside bearing (3).
5.  Apply grease to the shoulder of the axle (1).
6. Insert the axle (1) from the non-drive side.
7. Install the other spacer (2) over the driveside bearing.
8. Install the nut (5).
9. Torque the axle to 30Nm.

Derailleur hanger



Item	Description	Quantity in Assembly	Part Number	Torque (Nm)
1	Derailleur hanger	1	W583423	—
2	Hanger bolt, left-handed thread	1		25
	Washer, 25mm	1		

Tools

- 8mm hex tool
- Torque wrench (left-hand thread) with 8mm hex bit

This bicycle frame is designed to use a Universal Derailleur Hanger (UDH).

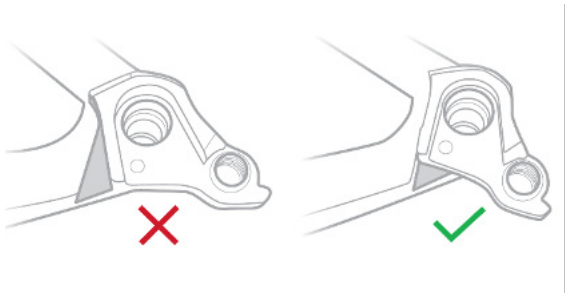
NOTICE: The thru axle must be compatible with a UDH and must be M12x1.0 with a 12.7mm thread.

NOTICE: The washer is frame-specific. Install only the washer compatible with your frame.

WARNING

Do not apply grease to the derailleur hanger or bolt. Apply grease to only the thru axle.

1. Insert the hanger on the inside of the driveside chainstay.
2. Install the washer on the derailleur hanger bolt.
3. Insert the bolt into the frame.
4. Make sure the hanger is positioned as shown below.

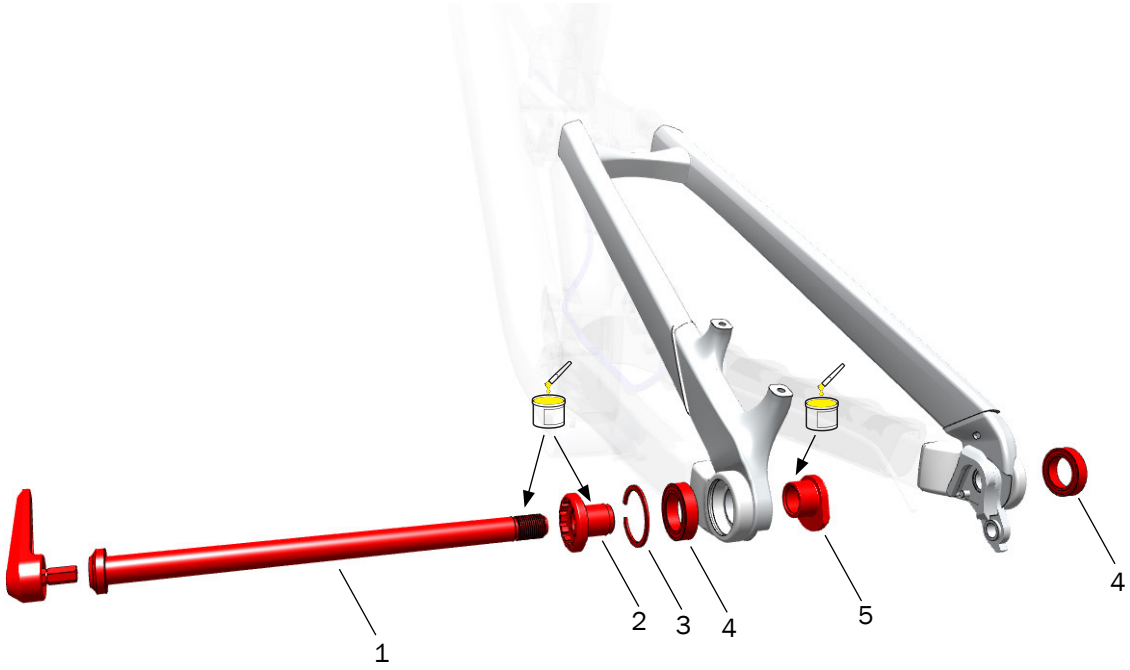


5. Torque the hanger bolt to 25Nm.

NOTICE: Do not over-tighten. Over-tightening the bolt could cause the hanger to break.

For additional information about the UDH, refer to the SRAM user manual at www.sram.com.

Active Braking Pivot Active Braking Pivot



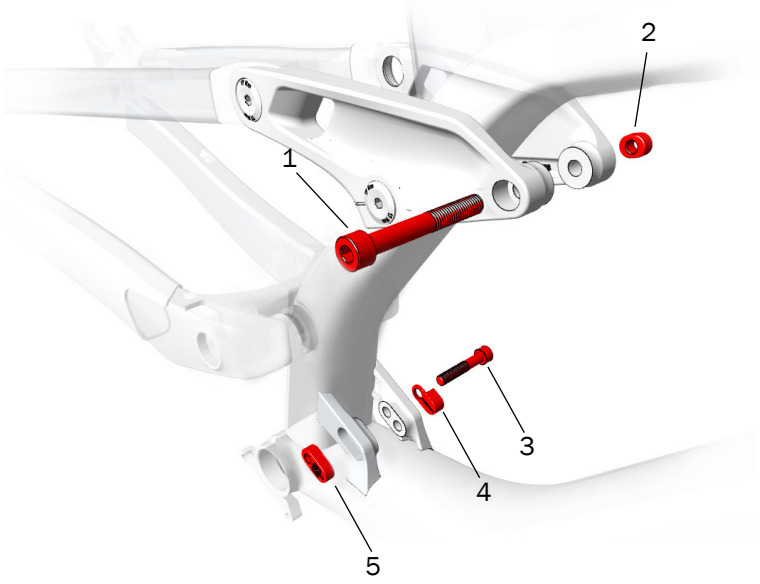
Item	Description	Quantity in Assembly	Part Number	Torque (Nm)
1	Thru axle	1	W598581	10
2	Dropout axle	1	W5251141	15
3	Retaining ring	1	W5251279	—
4	Bearing	2	W583424	—
5	Non-driveside dropout	1	W583419	—

Tools

- Bearing press
- 8mm hex tool
- Torque wrench (left-hand thread) with 8mm hex bit
- Cassette lockring
- Grease

1. Press in the driveside bearing (4).
2. Press in the non-driveside bearing (4).
3. Place the retaining ring (3) over the non-driveside bearing.
4. Apply grease to the non-driveside dropout (5).
5. Install the non-driveside dropout (5).
6. Apply grease to the dropout axle (2).
7. Insert the dropout axle (2) into the outside of the non-drive side.
8. Apply grease to the threads of the thru axle (1), and a lighter amount of grease to the shaft of the thru axle (1).
9. Insert the thru axle into the dropout.
10. Torque the thru axle to 10Nm.

Shock mounts



Item	Description	Quantity in Assembly	Part Number	Torque (Nm)
1	Upper shock bolt	1	5272748	10
2	Nut	1		—
3	Lower shock bolt	1	5272749	10
4	Mino link spacer	1		—
5	Mino link chip	1		—

Adjust the progression

The shock mino link chip can be flipped to fine tune the shock performance for the terrain or rider preference.

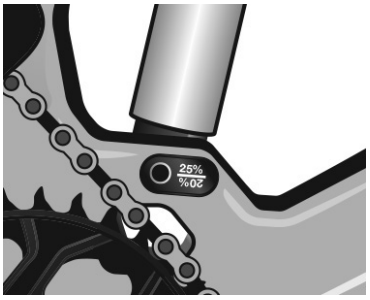
20% progression (softer)



Position the mino link chip with 20% on top

- More reactive to repeated fast mid-size bumps and square-edge hits

25% progression (firmer)



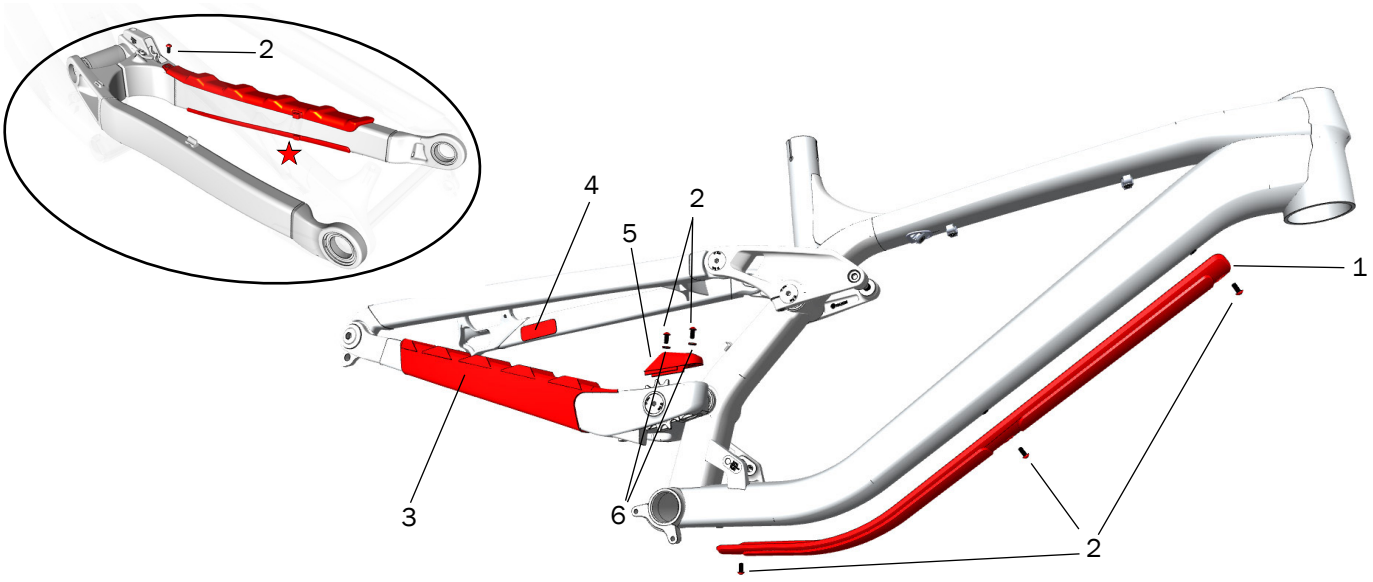
Position the mino link chip with 25% on top

- More bottom out resistance over big hits and drops

Tools

- 6mm hex tool
- Torque wrench with 6mm hex bit

1. Make sure the mino links on the rocker plates are in the low position.
   For instructions, see the Adjust the geometry section on page 6.
2. Remove the lower shock bolt. For the location, see the Shock mounts section on page 10.
3. Flip the shock mino link chip to the desired position.
4. Re-install the lower shock bolt and torque to 10Nm.



Item	Description	Quantity in Assembly	Part Number	Torque (Nm)
1	Down tube guard	1	W1052375	—
2	Screw	6	W1052364	0.8
3	Chainstay guard	1	W1052384	—
4	Brake cable adhesive scuff guard	1	W326986	—
5	Idler pulley guard	1	W1052385	—
6	Washer	2	W5265886	—
★	Zip tie	1	—	—

Brake cable scuff guard

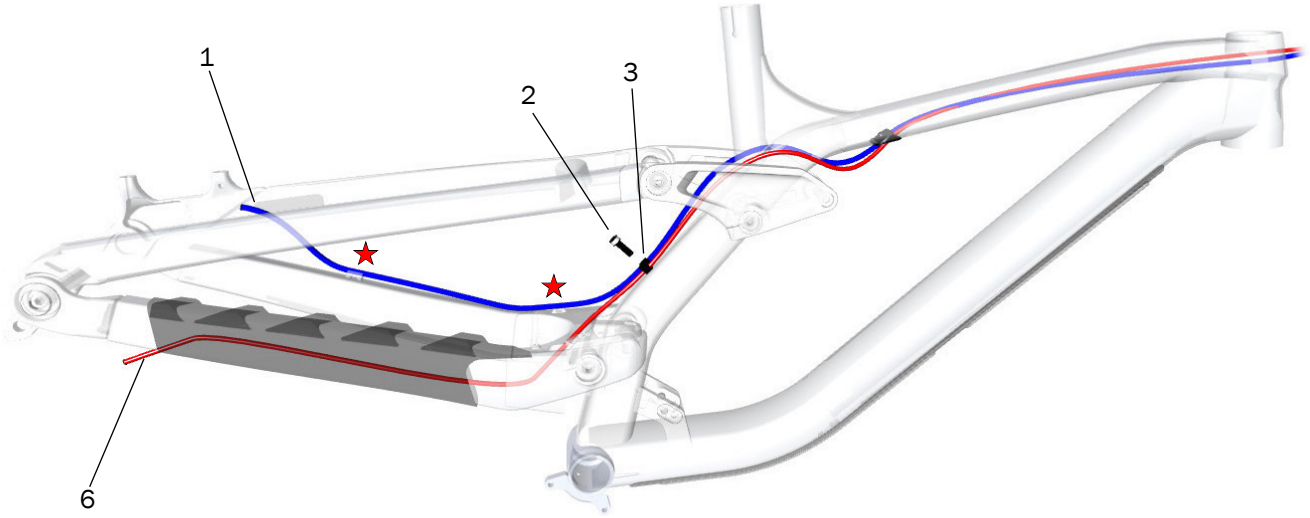
Use isopropyl alcohol to clean the frame surface where the guard (4) attaches. Wait for the alcohol to dry before applying the guard.

Notice: Do not clean the entire frame with isopropyl alcohol. Isopropyl alcohol could damage the paint.

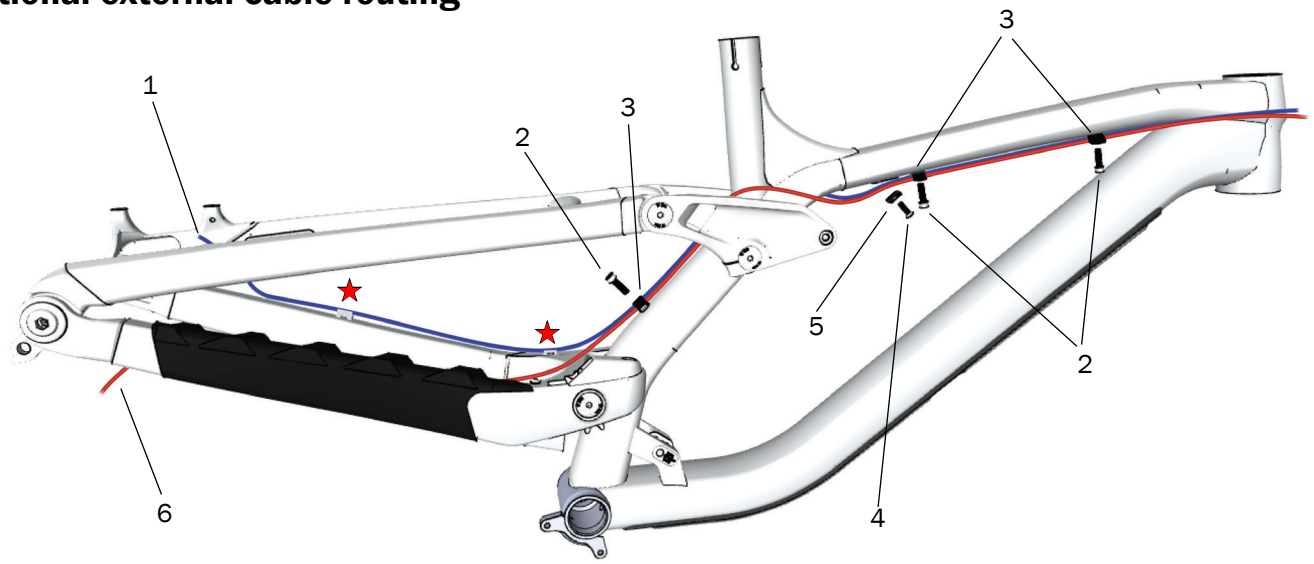
Cabling

The Session ships with cables routed internally, but includes options for routing cables externally for quick component changes or repairs.

Internal cable routing



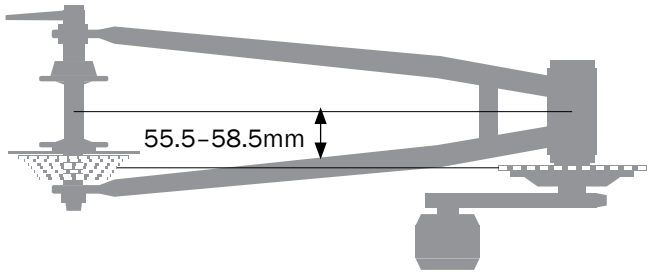
Optional external cable routing



Item	Description	Quantity in Assembly	Part Number	Torque (Nm)
1	Rear brake cable	1	—	—
2	Socket head cap screw	3	W5256244	3
3	Dual cable guide	3	W311726	—
4	Flat head bolt	1	W532763	3
5	Guide assembly	1	W502054	—
6	Derailleur cable	1	—	—
★	Zip tie location	2	—	—

Specifications

Chainline (1x only)



Chainring (1x only)

Minimum	32T
Maximum	38T

Rear brake mount

Minimum	180mm, direct mount
Maximum	220mm

Maximum tire size

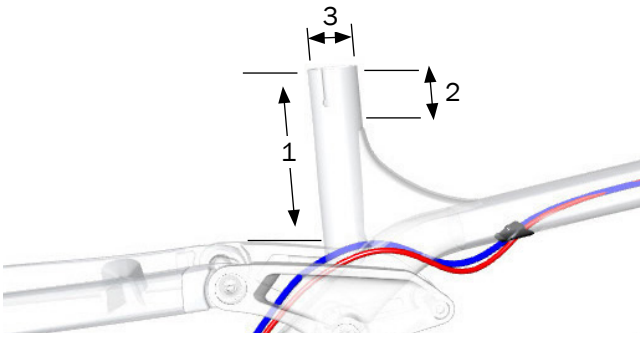
Notice: Measurements of actual tires may vary. Always verify there is sufficient clearance between the tire and the frame. Improper tire size could damage the bicycle frame. Trek recommends 6mm clearance above and on the sides of the tire.

Wheel set	Maximum tire size
29"	29.0" x 2.60"
27.5"	27.5" x 2.60"
Combination of 29" and 27.5"	27.5” x 2.60”

Seat post

WARNING

Always follow the seatpost manufacturer’s minimum insertion recommendation. Failure to follow the recommendation could cause damage to the seatpost and result in injury to the rider.



Item	Measurement		
1	Maximum insertion	R1 frame	131mm
		R2 frame	167mm
		R3 frame	170mm
2	Minimum insertion		75mm*
3	Diameter		31.6mm

*Follow the seatpost manufacturer guidelines.

Bottom bracket

- BSA83 threaded

Suspension

The first step in suspension setup is to determine the sag. All other settings should be adjusted after determining the sag.

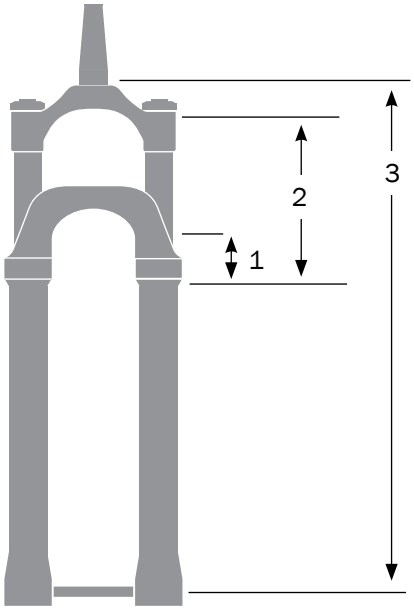
Refer to the suspension setup card included with your bike or the suspension calculator at Trekbikes.com/suspension-calculator.

For recommended rebound settings refer to the suspension calculator at Trekbikes.com/suspension-calculator.

Fork

WARNING

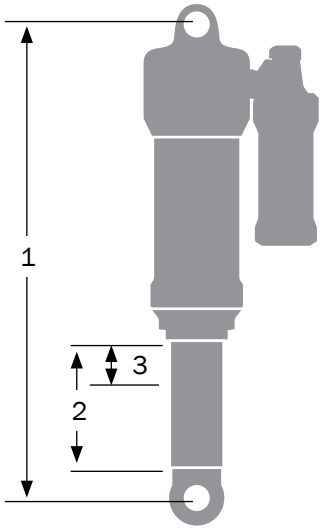
Exceeding the recommended maximum fork length could damage the bicycle and result in injury to the rider.



Item	Description		Dimension
1	Recommended sag		30mm
2	Maximum travel		203mm
3	Maximum length	29" wheels	602mm
		27.5" wheels with extended headset cup installed	586mm

Shock

Mount	Width
Bottom mount	25mm
Top mount	30mm



Item	Description	Dimension
1	Eye-to-eye length	250mm
2	Stroke length	72.5mm
3	Recommended sag	27–30%