

SRAM **i-MOTION 9**

user manual

betriebsanleitung

notice d'utilisation

handleiding

brugsanvisning

bruksanvisning



SRAM

These instructions contain important information about your SRAM i-MOTION 9 System.

Please take the time to read these operating instructions carefully.

Your SRAM i-MOTION 9 System is almost maintenance-free. Should you have any queries that are not answered in these operating instructions, your qualified bicycle specialist will be pleased to help you.

Have a nice time and enjoy your SRAM i-MOTION 9.

Please note:



Precautionary measures, which protect from possible accident, injury or danger to life, or which prevent possible damage to the bicycle.



Special advice to assist in the better handling of the operation, control, and adjustment procedures.

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Information may be enhanced without prior notice.

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THE SRAM i-MOTION 9 SYSTEM

A modern bicycle derailleur should be sporty, load shiftable, intuitive to use and durable! With the new i-MOTION 9, SRAM delivers the first 9-speed internal gear hub that meets and exceeds all these requirements!

The high gear ratio and even gear spacing are perfect for sporty cycling in every terrain. The hub shifts smooth and precise, even under load. Shift and brake lever have been integrated into one housing made out of high-quality aluminum. This results in high shifting comfort packed in a fresh and valuable design.



i-MOTION 9 shifter with brake lever

Intuitive gear indication, high-quality aluminum



i-MOTION 9 gear hub

Load shiftable. Super light shifting forces. Shifting during stand-still is possible: Easy re-start e.g. at a traffic light.



i-MOTION 9 connecting tube

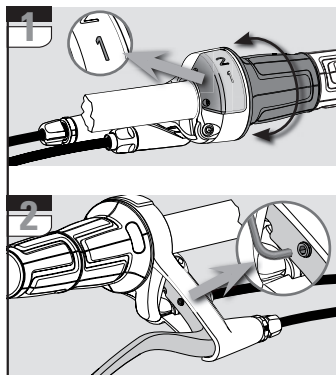
Easy wheel removal:
The gear adjustment remains unchanged.

OPERATION

SHIFTING

1 Shift gears by turning the rotating grip.

- » You can shift while standing still or while riding your bicycle.
- » When approaching inclines shift down in good time.
- » The smoothest and fastest gear change happens when changing gears while pedaling with low force.



BRAKING

On long and steep downhill roads, simultaneously use rear and front brakes to avoid heating up of the brakes.

! Excessive heating of the hub with the back pedal brake may result in loss of lubricant and braking too hard. This will lead to a trip to the repair shop.

Reach adjust of the hand brake lever:

To be able to operate the brake lever on the shifter comfortably, set the handle distance according to your needs.

2 Use a 2 mm Allen wrench to set the distance between the brake lever and the handlebar.

! Check and correct the brake cable tension after each handle change to ensure good brake performance.

! Read the applicable user manual for each bicycle equipped with i-BRAKE or disk brakes.

MAINTENANCE AND CARE

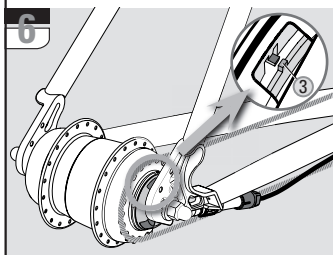
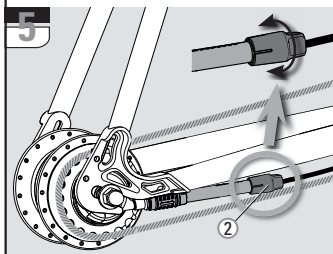
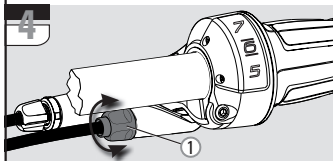
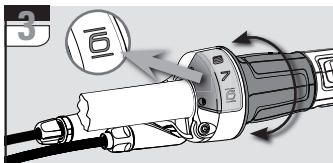
GEAR ADJUSTMENT

3 Shift the twist shifter from the 7th to the 6th gear.

4 Make the adjustment using the barrel adjuster (1) on the shifter

5 or the barrel adjuster (2) on the connecting tube.

6 Turn the barrel adjusters until the yellow / red marks (3) in the window of the gear hub are aligned.



MAINTENANCE AND CARE

REMOVE AND FIT REAR WHEEL

REMOVING THE REAR WHEEL

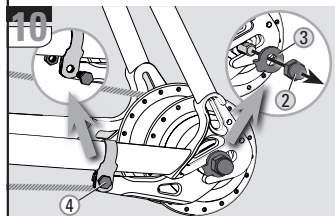
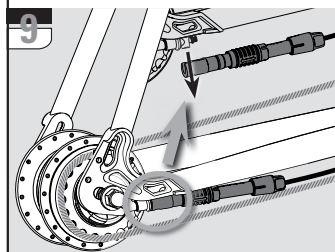
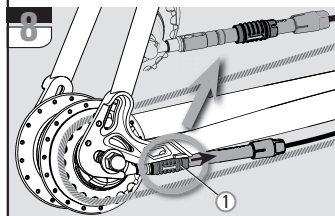
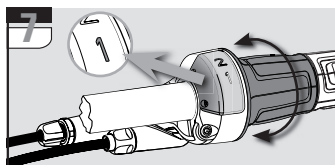
7 Shift the twist shifter to the 1st gear.

8 Slide the quick disconnect (1) on the connecting tube to the right.

9 Disconnect by removing the connecting tube downward.

10 Loosen the axle nuts (2) and remove the nuts and the retaining washers (3) underneath them. If applicable, unscrew the frame clamp connection (4) of the brake lever.

» Remove the rear wheel.



MAINTENANCE AND CARE

REMOVE AND FIT REAR WHEEL

FITTING THE REAR WHEEL


» Place the rear wheel into the rear frame.

11 Slide one retaining washer each (1) onto each axle end.

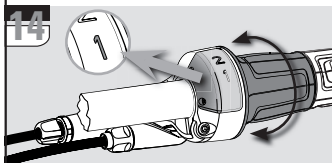
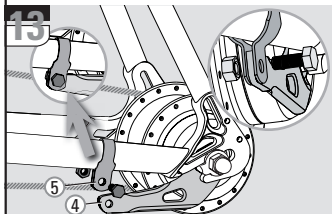
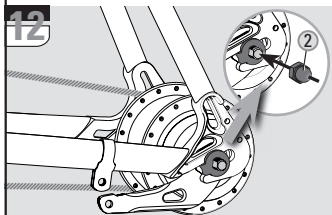
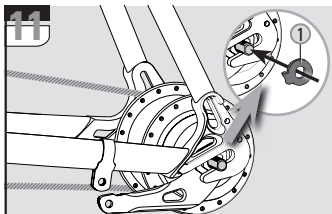
The serrations of the retaining washer must bear against the dropout of the frame. Retaining washers with existing lugs must engage in the dropout of the frame.

12 Mount the axle nuts (2). Tightening torque 30 – 40 Nm (266 – 350 in.lbs.).

13 If applicable, mount the brake lever (4) between the two straps of the frame clamp (5).

 The frame clamp must be seated on the frame with no play. Use only self-locking nuts! Tightening torque: 2 – 3 Nm (18 – 27 in.lbs.).

14 Make sure that the shifter is set to the 1st gear.



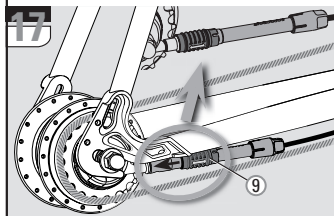
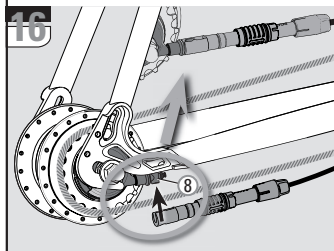
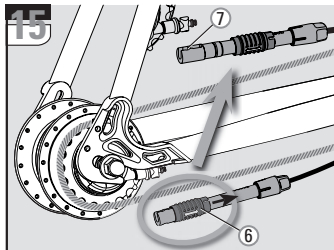
MAINTENANCE AND CARE

REMOVE AND FIT REAR WHEEL

15 Slide the quick disconnect (6) on the connecting tube to the right. The opening (7) should now be visible.

16 Make the connection by sliding the opening of the connecting tube onto the catch (8) on the hub.

17 Slide the quick disconnect (9) on the connecting tube to the left until it snaps into place. The connection is now locked.



MAINTENANCE AND CARE

CLEANING AND LUBRICATION

CLEANING

- » Your SRAM i-MOTION 9 components are well protected from external environmental impacts. However, do not use water under pressure (such as pressure washers or water jets) for cleaning to prevent malfunctions due to water penetration.
- » During the winter season, you should clean your bicycle in shorter intervals so that winter road salt cannot cause any damage.
- » Do not use aggressive cleaners.
- » Clean dirty chains before oiling. Let cleaner set for only a few minutes and rinse with water. Do not oil chain until completely dry.



LUBRICATION

- » The rear wheel hub is provided with permanent lubrication and maintenance-free under normal conditions.
- » Regular lubrication will extend the chain's service life.

MAINTENANCE AND CARE

REPAIR WORK / WEAR PARTS

REPAIR WORK



Only a qualified bike dealer should perform any necessary work on the gear hub, shifter, and brakes.

- » Unauthorized work on your i-MOTION 9 system could endanger you and your warranty may become void.
- » Please contact your qualified bike dealer regarding any questions or problem you may have.

WEAR PARTS

Brake liners or brake jackets, brake cables, shift cables, handlebar grips, sprockets, and bike chains are wear parts. Please check these parts regularly and replace them timely.

Back pedal brake

If the back pedal brake is braking too hard, the brake jacket has to be lubricated with special grease. This work must be performed by a qualified bike dealer.

Cable Change

If a cable must be replaced (shifter cable or brake cable), contact your qualified dealer.

ASSEMBLY OF COMPONENTS

ASSEMBLY HUB

» Spoke the hub as normal.

18 Set the dust cover (1) onto the driver. The curve must point to the outside.

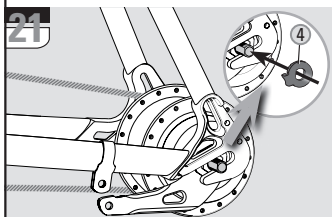
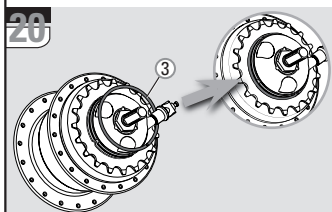
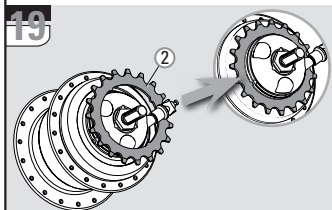
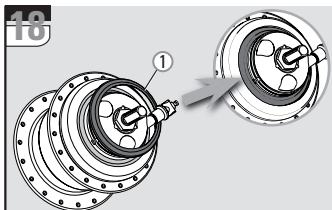
19 Set the sprocket (2) onto the driver.

20 Mount the sprocket retaining ring (3) onto the driver. Check proper seat of the retaining ring.

» Place the rear wheel into the rear frame.

21 Slide one retaining washer each (4) onto each axle end.

The adjoining table shows the correct version (Page 13). The serrations of the retaining washer must bear against the dropout of the frame. Retaining washers with existing lugs must engage in the dropout of the frame.



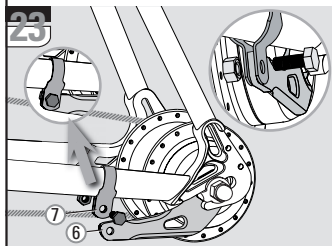
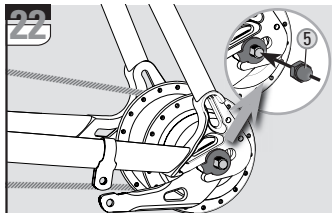
ASSEMBLY OF COMPONENTS

22 Mount the axle nuts (5). Tightening torque 30 – 40 Nm (266 – 350 in.lbs.).

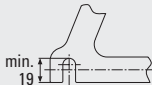
23 If applicable, mount the brake lever (6) between the two straps of the frame clamp (7).



The frame clamp must be seated on the frame without play. Use only self-locking nuts! Tightening torque: 2 – 3 Nm (18 – 27 in.lbs.).



Type of dropout:



Retaining washer for the left axle side (not drive side):



15L – blue dot



30L – yellow dot



white dot



180 – orange dot

Retaining washer for the right axle side (drive side):



15R – red dot



30R – green dot



white dot



180 – purple dot

ASSEMBLY OF COMPONENTS

ASSEMBLY SHIFTER

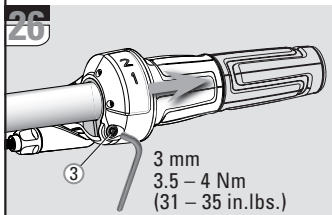
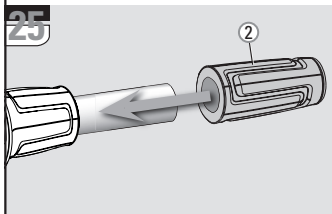
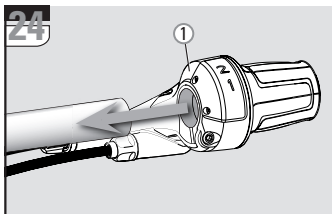
24 Slide the shifter (1) onto the handlebar.

25 Slide the handlebar grip (2) onto the handlebar.

26 Align the shifter on the handlebar grip and position the shifter according to your needs. Tighten the clamp bolt (3). 3 mm Allen wrench, torque 3.5 – 4 Nm (31 – 35 in.lbs.).

! Never use lubricants or solvents to install handlebar grips. Handlebar grips provide an axial safety function and may not become separated from the handlebar.

- » Make sure that the shifter and brake lever function properly and are unobstructed (re-adjust if needed).
- » Never ride without the handlebar grips. The turning grip of the twist shifter could become loose. This can result in severe injury.



ASSEMBLY OF COMPONENTS

ASSEMBLY SHIFT CABLE



Make sure that the cable housing length is sufficient to allow an extreme turning angle.

- » Also consider the influence of adjustable handlebars and stems on the cable housing length.



Fasten the cable housing on the frame.



The cable housing must be movable at the fastening points.

- » Avoid tight bends when installing the shift cable.



Make sure that the shifter is set to the 1st gear.



Slide the quick disconnect (4) on the connecting tube to the right. The opening (5) should now be visible.

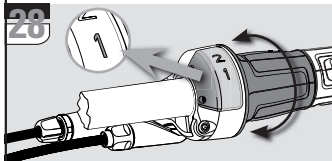


Make the connection by sliding the opening of the connecting tube onto the catch (6) on the hub.

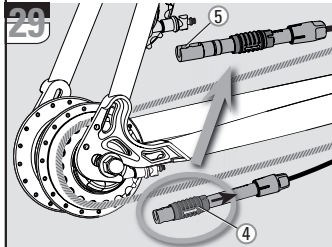
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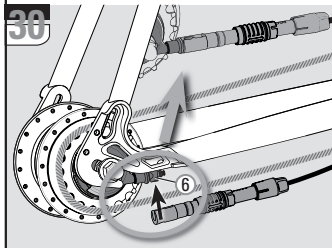
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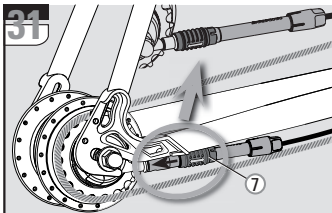


ASSEMBLY OF COMPONENTS

- 31** Slide the quick disconnect (7) on the connecting tube to the left until it snaps into place. The connection is now locked.

GEAR ADJUSTMENT

- » Shift the gears up and down repeatedly before setting the shifter so that the shift cable can settle.
- » Adjust the shifter as described under "MAINTENANCE AND CARE / GEAR ADJUSTMENT" (Page 6).



ASSEMBLY OF COMPONENTS

ASSEMBLY BRAKE CABLE



The brake lever on the i-MOTION IBS shifter is only compatible with the following brakes: i-BRAKE, Avid BB Disc, and Linear-Pull compatible brakes.

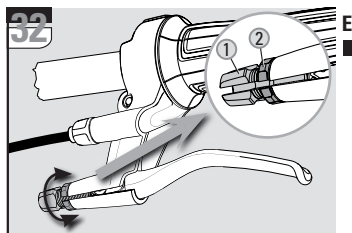


Use only new, high-quality brake cables and cable housings with end caps.

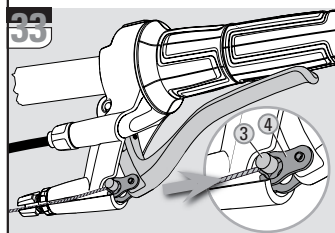
- » Make sure that the cable housing length is sufficient to allow extreme turning angles.
- » Also consider the influence of adjustable handlebars and stems on cable housing lengths.



Turn the cable adjustment screw (1) and the counter nut (2) so that the cable slot is aligned with the slot on the bottom of the brake handle housing.

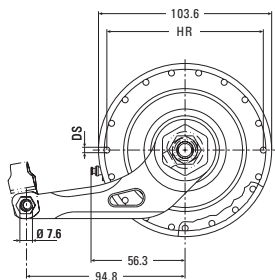
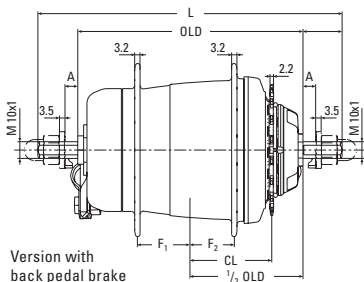


Pull the brake handle toward the handlebar and feed the brake cable into the housing. Attach the nipple (3) of the brake cable in the intake (4) of the brake lever.



- » Follow the brake manufacturer's instructions when mounting the brake cable and adjusting the brakes.
- » Adjust the distance of the brake lever as described under "OPERATION / BRAKING" (Page 5).

TECHNICAL DATA



GEAR HUB

i-MOTION 9 with back pedal brake

Axle	Speeds	9
	Brake	With back pedal brake
	Over Locknut Dim., OLD	135 mm
	Length, L	182 mm
Spoke	Ends Diameter	M 10x1
	Dropout Width Dim., A	min. 4 mm / max. 10 mm
	Holes	36
Chain	Hole Diameter, DS	2.6 mm
	Hole Ref. \varnothing , HR	93.6 mm
	Flange Dist. to $1/2$ OLD	$F_1 = 26.5 \text{ mm}$ / $F_2 = 31.5 \text{ mm}$
Compat- ibility	Total Ratio	340 %
	Gear jump 1 to 9	14%/17%/17%/17%/17%/17%/17%/17%/14%
	Chainline, CL	48,9 mm
Sprocket	Dimension	$1/2" \times 1/8"$ and $1/2" \times 3/32"$
	Shifter	i-MOTION 9 IBS SL and i-MOTION 9 SL
	Tandem	not suitable for tandems and transport bicycles

TECHNICAL DATA

SHIFTER



i-MOTION 9 SL

Shifter type	Twist shifter
Assembly location	Right side of handlebar
Gear indication	Window
Barrel adjuster	Indexed
Clamp diameter	22.3 mm
Straight handlebar ends	Length = min. 150 mm
Cable laying	Continuous cable housing (pre-assembled)

IBS SHIFTER



i-MOTION 9 IBS SL

Shifter type	Twist shifter with integrated brake lever
Assembly location	Right side of handlebar
Gear indicator	Window
Barrel adjuster	Indexed
Clamp diameter	22.3 mm
Straight handlebar ends	Length = min. 150 mm
Cable laying	Continuous cable housing (pre-assembled)
Compatibility	Linear-Pull, i-BRAKE, Avid BB Disc
Ratio	2.32
Cable path	24 mm
Reach Adjust	Yes
Adjusting screw	Yes
Lever size	4-finger
Lever material	Aluminum, forged

Hand brake lever

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