

eTap AXS HRD Caliper, Hose Replacement, and Lever Replacement



SRAM LLC WARRANTY

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AGAINST SRAM, LLC. YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE, COUNTRY, OR PROVINCE. THIS WARRANTY DOES NOT AFFECT YOUR STATUTORY RIGHTS. TO THE EXTENT THIS WARRANTY IS INCONSISTENT WITH THE LOCAL LAW, THIS WARRANTY SHALL BE DEEMED MODIFIED TO BE CONSISTENT WITH SUCH LAW. FOR A FULL UNDERSTANDING OF YOUR RIGHTS, CONSULT THE LAWS OF YOUR COUNTRY, PROVINCE, OR STATE.

THIS WARRANTY APPLIES TO SRAM PRODUCTS MADE UNDER THE SRAM, ROCKSHOX, TRUVATIV, ZIPP, QUARQ, AVID AND TIME BRAND NAMES.

EXTENT OF LIMITED WARRANTY

Except as otherwise set forth herein, SRAM warrants its bicycle components to be free from defects in materials or workmanship for a period of two (2) years after original purchase of the product.

SRAM warrants all Zipp MOTO Wheels and Rims to be free from defects in materials or workmanship for the lifetime of the product.

SRAM warrants all non-electronic Zipp branded bicycle components, Model Year 2021 or newer, to be free from defects in materials or workmanship for the lifetime of the product.

GENERAL PROVISIONS

This warranty only applies to the original owner and is not transferable. Claims under this warranty must be made through the retailer where the bicycle or the SRAM product was purchased or a SRAM authorized service location. Original proof of purchase is required. All SRAM warranty claims will be evaluated by a SRAM authorized service location whereupon acceptance of the claim the product will be repaired, replaced, or refunded at SRAM's discretion. To the extent allowed by local law claims under this warranty must be made during the warranty period and within one (1) year following the date on which any such claim arises.

NO OTHER WARRANTIES

EXCEPT AS DESCRIBED HEREIN, AND TO THE EXTENT ALLOWED BY LOCAL LAW, SRAM MAKES NO OTHER WARRANTIES, GUARANTIES, OR REPRESENTATIONS OF ANY TYPE (EXPRESS OR IMPLIED), AND ALL WARRANTIES (INCLUDING ANY IMPLIED WARRANTIES OF REASONABLE CARE, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE) ARE HEREBY DISCLAIMED.

LIMITATIONS OF LIABILITY

EXCEPT AS DESCRIBED HEREIN, AND TO THE EXTENT PERMITTED BY LAW, IN NO EVENT SHALL SRAM OR ITS THIRD PARTY SUPPLIERS BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

LIMITATIONS OF WARRANTY

This warranty does not apply to products that have been incorrectly installed, adjusted, and/or maintained according to the respective SRAM user manual. The SRAM user manuals can be found online at sram.com/service.

This warranty does not apply to damage to the product caused by a crash, impact, abuse of the product, non-compliance with manufacturer's specifications of intended usage, or any other circumstances in which the product has been subjected to forces or loads beyond its design.

This warranty does not apply when the product has been modified, including but not limited to, any attempt to open or repair any electronic and electronic related components, including the motor, controller, battery packs, wiring harnesses, switches, and chargers.

This warranty does not apply when the serial number or production code has been deliberately altered, defaced, or removed.

SRAM components are designed for use only on bicycles that are pedal powered or pedal assisted (e-Bike/Pedelec).

Notwithstanding anything else set forth herein, the battery pack and charger warranty does not include damage from power surges, use of improper charger, improper maintenance, or such other misuse.

This warranty shall not cover damages caused by the use of parts of different manufacturers or parts that are not compatible or suitable for use with SRAM components.

This warranty shall not cover damages resulting from commercial (rental) use.

WEAR AND TEAR

This warranty does not apply to normal wear and tear. Wear and tear parts are subject to damage as a result of normal use, failure to service according to SRAM recommendations, and/or riding or installation in conditions or applications other than recommended.

WEAR AND TEAR PARTS INCLUDE:

- | | | | |
|-----------------------|-----------------------------------|--|---|
| • Aero bar pads | • Chains | • Jockey wheels | • Sprockets |
| • Air sealing o-rings | • Cleats | • Rear shock mounting | • Stripped threads/bolts (aluminum, titanium, magnesium or steel) |
| • Batteries | • Corrosion | • Rubber moving parts | • Tires |
| • Bearings | • Disc brake rotors | • Shifter and Brake cables (inner and outer) | • Tools |
| • Bottomout pads | • Dust seals | • Shifter grips | • Transmission gears |
| • Brake pads | • Free hubs, Driver bodies, Pawls | • Spokes | • Upper tubes (stanchions) |
| • Bushings | • Foam rings, Glide rings | | • Wheel braking surfaces |
| • Cassettes | • Handlebar grips | | |

ZIPP IMPACT REPLACEMENT POLICY

Zipp branded products, Model Year 2021 or newer, are covered under a lifetime impact-damage replacement policy. This policy can be used to obtain a replacement of a product in the event of non-warranty impact damage occurring while riding your bicycle. See www.zipp.com/support for more information.



SAFETY FIRST!

We care about YOU. Please, always wear your safety glasses and protective gloves when servicing SRAM products.

Protect yourself! Wear your safety gear!

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SRAM eTap AXS Hydraulic Brake Systems

We recommend that you have your SRAM eTap AXS components serviced by a qualified bicycle mechanic. Servicing SRAM components requires knowledge of bicycle mechanics as well as the special tools and lubricants/fluids used for service.

SRAM brake systems need to be serviced periodically to optimize braking function. If brake fluid is leaking from any area of the brake there may be damage or wear and tear to the internal moving parts. If the system has been contaminated with the wrong fluid there may be damage to all rubber and plastic internal parts. If your brake was damaged in a crash, there may be damage to the lever blade, pushrod, and housing assemblies. Inspect and replace these parts to restore proper brake function.

Visit www.sram.com/service for the latest SRAM Spare Parts catalog and technical information. For order information, please contact your local SRAM distributor or dealer.



For recycling and environmental compliance information, please visit www.sram.com/en/company/about/environmental-policy-and-recycling.

Information contained in this publication is subject to change at any time without prior notice. Your product's appearance may differ from the pictures contained in this publication.

SAFETY INSTRUCTIONS

Do not use mineral oil or DOT 5 fluid. If the brake system has been contaminated with mineral oil or DOT 5 fluid, the braking system (e.g. the brake-shift lever, caliper, and hose) will need to be replaced.

For best results, use only SRAM High-Performance DOT 5.1 brake fluid. If SRAM brake fluid is not available, only use DOT 5.1 or 4 brake fluid.

Use only DOT compatible grease.

Always wear safety glasses and nitrile gloves when working with DOT brake fluid.

Used DOT brake fluid should be recycled or disposed of in accordance to local and federal regulations.

Never pour DOT brake fluid down a sewage or drainage system or into the ground or a body of water.

Do not allow any brake fluid to come in contact with the brake pads. If this occurs, the pads are contaminated and must be replaced.

Place an oil pan on the floor underneath the area where you will be working on the brake.

Servicing your brakes removes all of the brake fluid from the system. You must bleed your brakes after you service the brake caliper. Consult the eTap AXS HRD Hose Shortening and Bleed Manual at www.sram.com/service.

⚠ WARNING

Do not remove the reservoir bolts on the eTap AXS hood. Bolts that have been removed and reinstalled will damage the hood assembly and make the brakes unsafe to use, which could lead to serious injury and/or death.



NOTICE

Before beginning service, thoroughly clean the exterior of the product to avoid contamination of internal sealing part surfaces.

DOT brake fluids will damage painted surfaces. If any fluid comes in contact with a painted surface (e.g. your frame) or printing on the brakes, wipe it off immediately and clean it with isopropyl alcohol or water. Damage to painted and/or printed surfaces by DOT brake fluid is not covered under warranty.

When using a crowfoot socket and torque wrench, install the crowfoot socket at 90 degrees to the torque wrench.

NOTICE

Do not apply DOT brake fluid or grease to caliper pistons when performing troubleshooting procedures. Use of DOT brake fluid or grease can diminish braking performance and cause rotor rubbing.

If your brakes exhibit excessive lever throw or spongy feel, perform the following steps before bleeding the system:

- 1 Clamp the bicycle into a bicycle work stand and remove the wheel according to the wheel manufacturer's instructions.



- 2 Remove the brake pads and install the pad spacer.



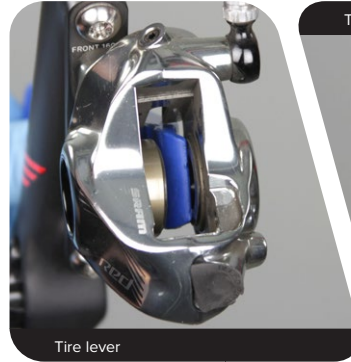
- 3 Squeeze the brake lever several times until both pistons have advanced and contact the pad spreader. One piston may move faster than the other; continue to squeeze the lever until the second piston touches the spacer.



4 Remove the pad spacer.



5 Use a plastic tire lever to push the pistons back into the caliper bores. Repeat steps 3-5 until both pistons move freely.



6 Reinstall the brake pads and install the wheel according to the manufacturer's instructions.



- 7** Loosen the caliper bolts.
Lightly squeeze (approx. 4 lbs) the brake lever several times to position the brake pads to the proper distance from the rotor.
Center the caliper on the rotor, and tighten.



- 8** Spin the wheel and check the brake function. The pistons should move freely and there should not be excessive brake lever throw.



- 9** If there is no improvement in the brake function, proceed to [Caliper Service](#).

Disc Brake Pad Gap Reset

NOTICE

Do not apply DOT brake fluid or grease to caliper pistons when performing troubleshooting procedures. Use of DOT brake fluid or grease can diminish braking performance and cause rotor rubbing.

If the brake lever was squeezed without a pad spacer or rotor installed in the caliper, the pad gap may have been reduced. If this happens the rotor might not have enough clearance in the caliper without rubbing. Perform this procedure to reset the pad gap:

- 1 Remove the wheel from the affected caliper.
- 2 Install the thicker side of a 2 piece caliper pad spacer or a Monoblock pad spacer between the brake pads.
- 3 Squeeze the brake lever *hard* 5 times (approximately 22 lbs).
- 4 Remove the spacer from the caliper, and install the thinner side of the SRAM spacer between the brake pads.
- 5 Squeeze the brake lever *lightly* 5 times (approximately 4 lbs or less).
- 6 Remove the pad spacer.
- 7 Re-install the wheel, and re-center the caliper.



Disc Brake Pad Retraction Reset - Monoblock caliper only

NOTICE

Do not apply DOT brake fluid or grease to caliper pistons when performing troubleshooting procedures. Use of DOT brake fluid or grease can diminish braking performance and cause rotor rubbing.

If there is still insufficient clearance between the brake pads and rotor after performing the pad gap reset procedure, perform this overnight procedure to reset the retraction distance between the caliper pistons:

- 1 Remove the wheel from the affected caliper.
- 2 Install the 3.8 mm side of a Monoblock pad spacer between the brake pads and remove it without squeezing the brake lever.
- 3 Install the 2.4 mm side of the Monoblock pad spacer between the brake pads.
- 4 Squeeze the brake lever *lightly* 5 times (approximately 4 lbs or less).
- 5 Allow the system to sit, untouched, for 12-24 hours.
- 6 Remove the pad spacer.
- 7 Re-install the wheel, and re-center the caliper.



Parts, Tools and Supplies

Parts

- Caliper Piston Kit - eTap AXS Phen. B1 (2 piece calipers)
- Caliper Piston Kit - eTap AXS Monoblock (Monoblock calipers)
- Caliper Piston Kit - Level Ultimate/TLM Phen. B1 (2 piece calipers)

Safety and Protection Supplies

- Apron
- Clean, lint-free shop towels
- Nitrile gloves
- Oil pan
- Safety glasses

Lubricants and Fluids

- Isopropyl alcohol
- SRAM DOT 5.1 Brake Fluid
If SRAM brake fluid is not available, only use DOT 5.1 or 4 brake fluid
- SRAM DOT assembly grease

SRAM Tools

- Level/AXS Caliper Piston Removal Tool
- HRD Bleed Block (2 piece calipers)
- Monoblock Bleed Block (Monoblock calipers)
- Monoblock caliper 21 mm Piston Removal Tool
- Piston plug

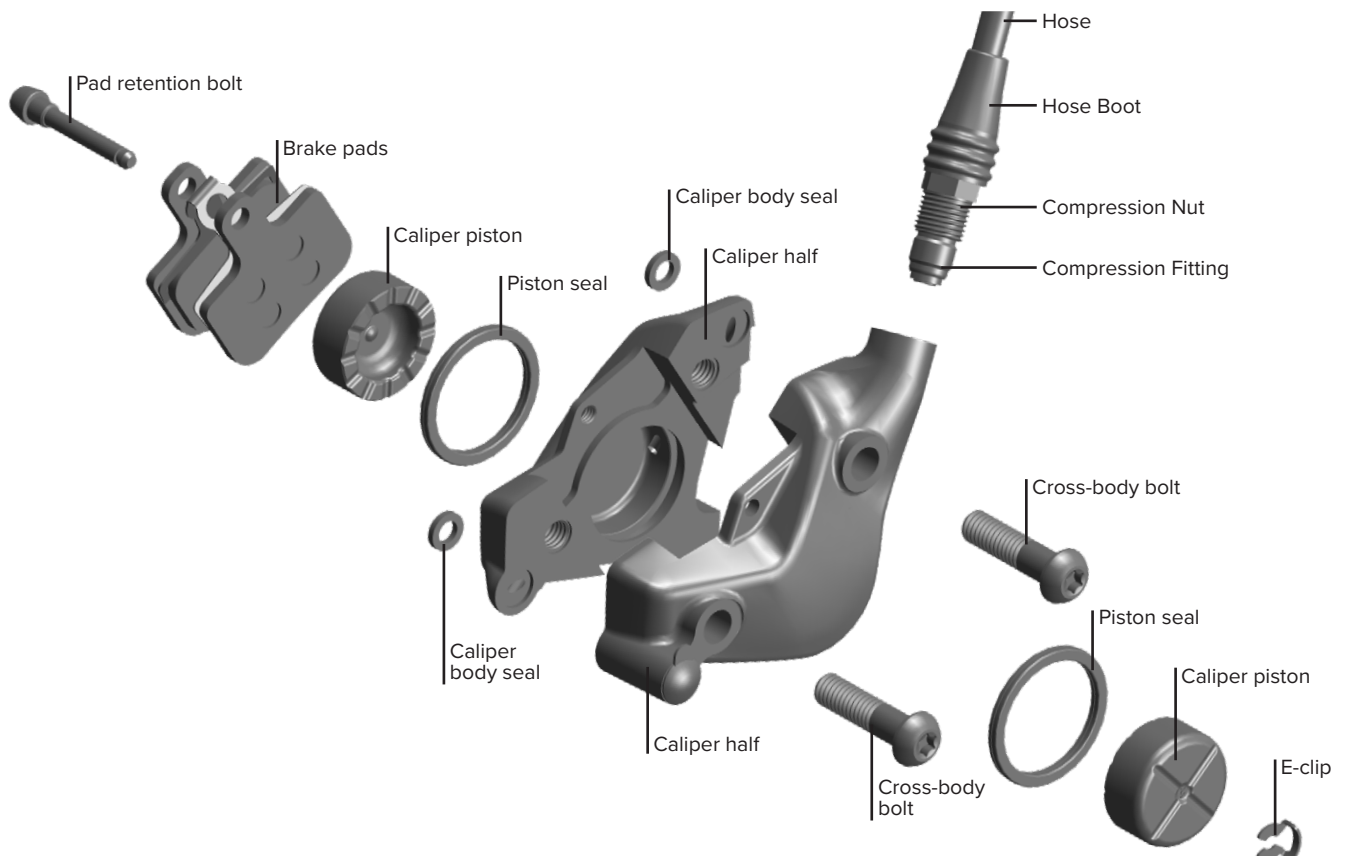
Bicycle Tools

- Bicycle work stand

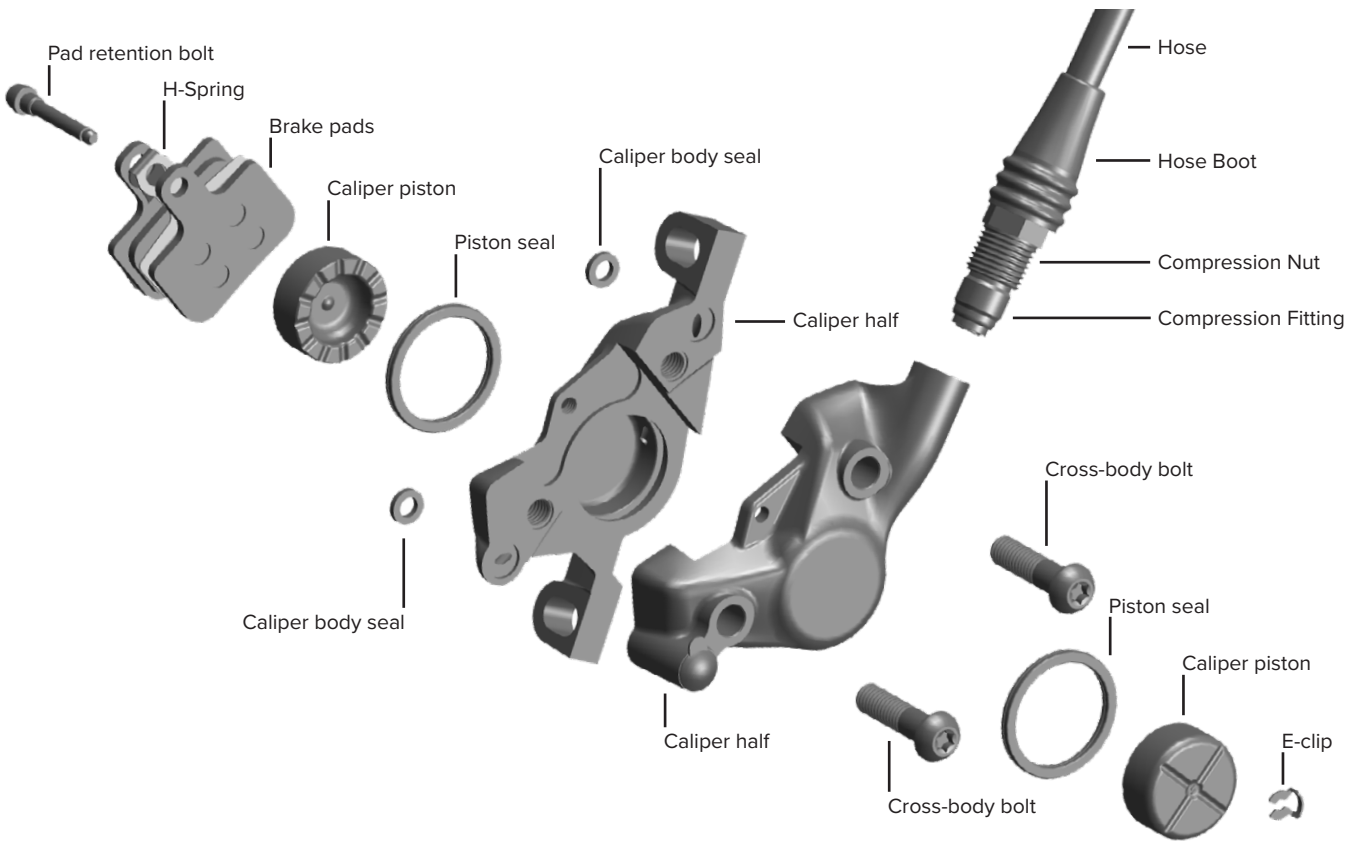
Common Tools

- Air compressor with rubber-tipped air chuck nozzle
- Digital caliper
- Hex wrench: 2.5 mm
- Hex bit socket: 2.5 mm
- Needle nose pliers
- Pick
- Soft rubber or piece of inner tube
- Torque wrench
- TORX wrench: T25
- TORX bit socket: T25

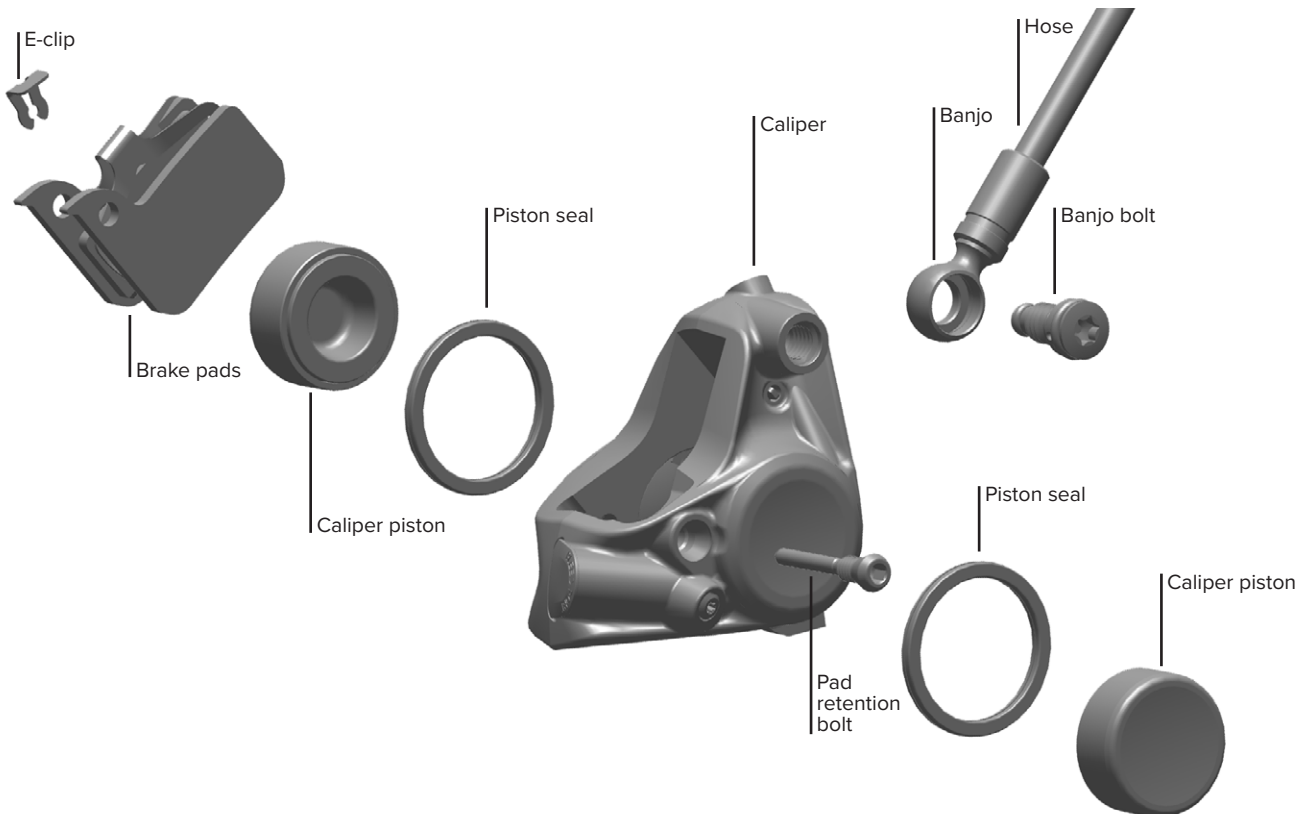
eTap AXS HRD Caliper Exploded View - 2 piece caliper (flat mount)



eTap AXS HRD Caliper Exploded View - 2 piece caliper (post mount)

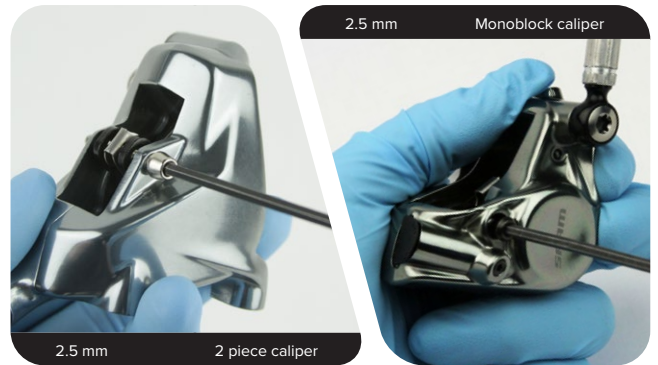
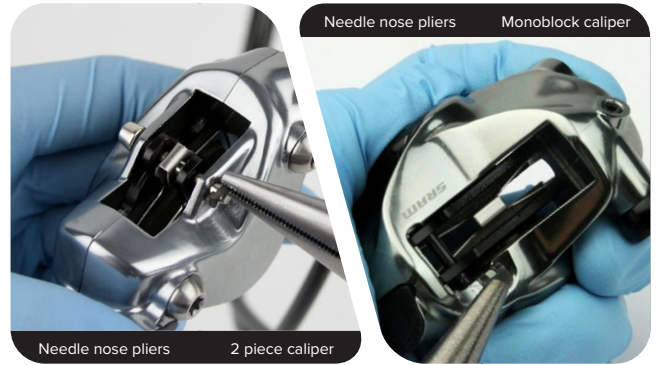


eTap AXS HRD Caliper Exploded View - Monoblock caliper (flat mount)



Caliper Brake Pad Removal

- 1 Remove the caliper from the frame, then remove the mounting bracket and the hardware from the caliper. Set them aside in the order that they were removed.
- 2 Remove the E-clip from the pad retention bolt, then remove the pad retention bolt from the caliper.



- 3 Remove the brake pads from the caliper.

NOTICE

Brake pads must be replaced if the total thickness of the backing plate and pad friction material is less than 3 mm.



NOTICE

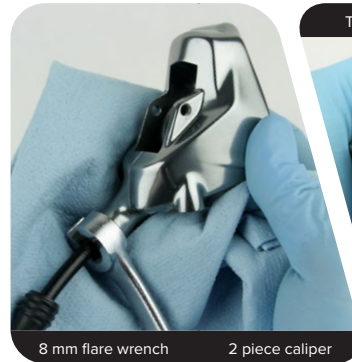
DOT brake fluid will damage painted surfaces. If any fluid comes in contact with a painted surface (e.g. your frame) or printing on the brakes, wipe it off immediately and clean it with isopropyl alcohol or water. Damage to painted and/or printed surfaces by DOT brake fluid is not covered under warranty.

1 2 piece caliper: Remove the compression nut and hose.

Monoblock caliper: Remove the banjo bolt and hose.

NOTICE

Fluid will drip. Place an oil pan and/or shop towel under the hose.



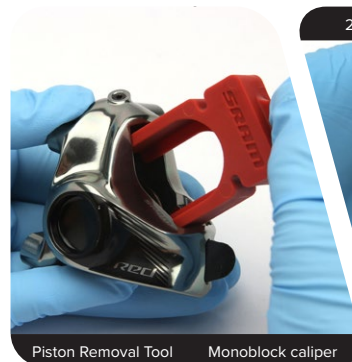
2 2 piece caliper: Insert the Level / AXS Caliper Piston Removal Tool.



Monoblock caliper: Insert the Monoblock caliper 21 mm Piston Removal Tool, then install the pad retention bolt into the caliper.

CAUTION

Monoblock caliper: The pad retention bolt must be installed. If the pad retention bolt is not installed, the piston removal tool may dislodge rapidly from the caliper, which can lead to bodily injury or damage to the parts.



- Firmly press a rubber-tipped air chuck nozzle into the banjo port. Hold the caliper securely against a rubber surface and force air into the banjo port to dislodge the piston from the caliper.

⚠ CAUTION - EYE HAZARD

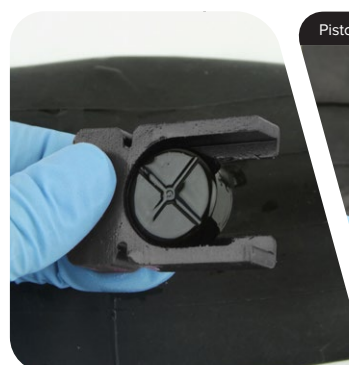
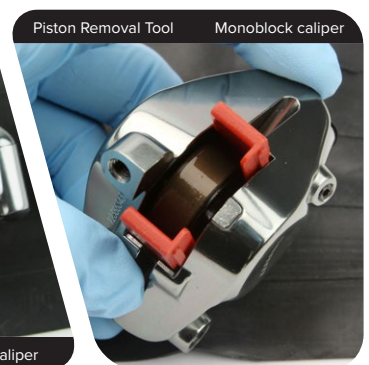
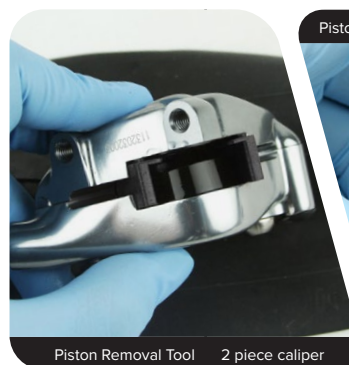
Wear safety glasses. The caliper piston may dislodge rapidly from the caliper, which can lead to bodily injury or damage to the parts. Point the caliper piston toward a rubber surface to prevent the piston from becoming a projectile.



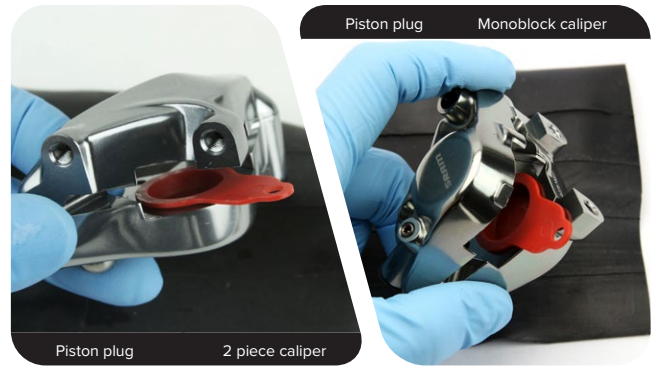
- Monoblock caliper:** Remove the pad retainer bolt.



- Remove the piston and the piston removal tool from the caliper.



6 Insert the piston plug so that it fits snugly into the empty piston bore and is flush with the inside of the caliper.



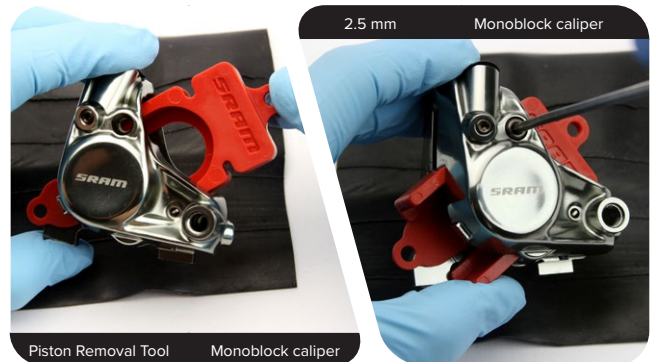
7 Insert the Level / AXS Caliper Piston Removal Tool (2 piece caliper) or the Monoblock caliper 21 mm Piston Removal Tool (Monoblock caliper) so that it will capture the still-installed piston. Make sure the horseshoe opening is aligned with the tab on the piston plug.



Monoblock caliper: Install the pad retention bolt to hold the piston removal tool in place.

⚠ CAUTION

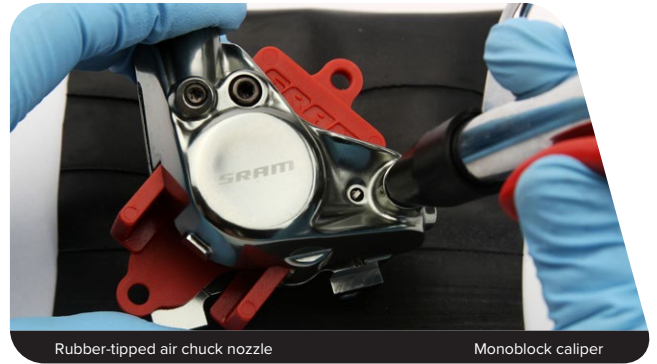
The pad retention bolt must be installed. If the pad retention bolt is not installed the piston removal tool may dislodge rapidly from the caliper, which can lead to bodily injury or damage to the parts.



8 Firmly press a rubber-tipped air chuck nozzle into the banjo port. Hold the caliper securely against a rubber surface and force air into the banjo port to dislodge the piston from the caliper.

⚠ CAUTION - EYE HAZARD

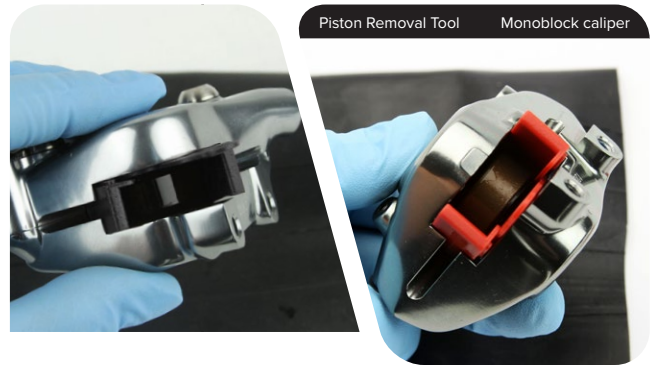
Wear safety glasses. The caliper piston may dislodge rapidly from the caliper, which can lead to bodily injury or damage to the parts. Point the caliper piston toward a rubber surface to prevent the piston from becoming a projectile.



9 **Monoblock caliper:** Remove the retention bolt.



10 Remove the piston removal tool, the piston, and the piston plug from the caliper.



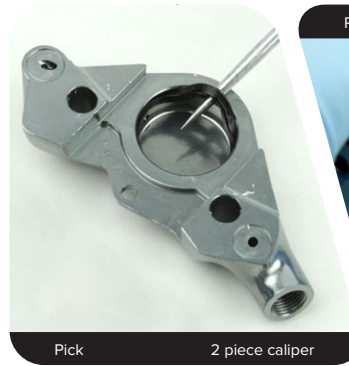
11 **2 piece caliper:** Remove the cross-body bolts from the caliper.
Remove the body seals from the caliper body.



12 Remove the piston seals from each piston bore.

⚠ CAUTION

Do not scratch the seal gland with the pick. Scratches could cause fluid to leak when the brake is applied, which will contaminate the brake pads and could lead to a brake failure.

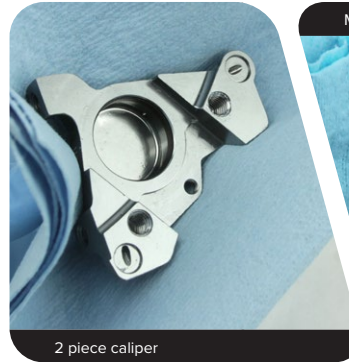


13 Spray isopropyl alcohol inside each piston bore, the inside and the outside of the caliper, and all of the removed parts and clean them with a shop towel.

NOTICE

Do not use mineral oil or DOT 5 fluid. If the brake system has been contaminated with mineral oil or DOT 5 fluid, the braking system (e.g. the brake-shift lever, caliper, and hose) will need to be replaced.

For the best braking performance, use only SRAM DOT 5.1 brake fluid. If SRAM brake fluid is not available, use only DOT 5.1 or DOT 4 brake fluid.



NOTICE

DOT brake fluid will damage painted surfaces. If any fluid comes in contact with a painted surface (e.g. your frame) or printing on the brakes, wipe it off immediately and clean it with isopropyl alcohol or water. Damage to painted and/or printed surfaces by DOT brake fluid is not covered under warranty.

- 1 Apply a small amount of SRAM DOT 5.1 brake fluid to new piston seals and install the piston seals into each piston bore.



- 2 Inspect the caliper pistons for damage and replace the pistons if necessary.

Use your gloved finger to apply a small amount of SRAM DOT 5.1 brake fluid to each piston, then install each piston into each piston bore.

NOTICE

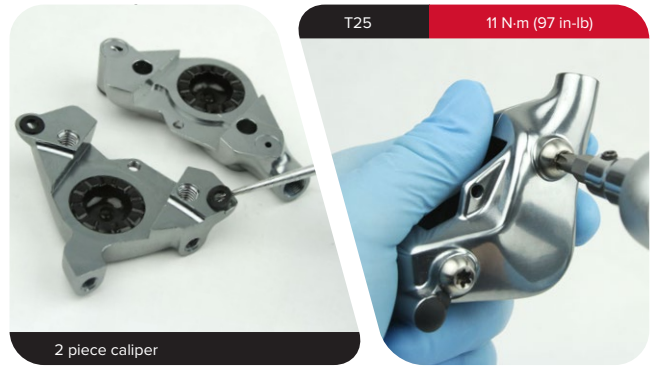
For the best braking performance, use only SRAM DOT 5.1 brake fluid. If SRAM fluid is not available, use only DOT 5.1 or DOT 4 brake fluid. Do not use grease. Grease will prevent the pistons from fully retracting into the caliper bores which will reduce braking performance.



Tip: If a piston is difficult to install into a piston bore, lay the caliper on a flat surface. Slide a thin wrench through the caliper, then gently and evenly press the piston into the bore.



- 3 2 piece caliper:** Install new body seals into the caliper body.
Install the cross-body bolts into the caliper body, then tighten.



- 4 2 piece caliper:** Install the hose boot onto the new hose.



Apply DOT grease to the hose barb threads. Thread the hose barb into the hose until it is flush with the end of the hose.

NOTICE

Do not overtighten the hose barb. Overtightening may cause damage to the hose liner.

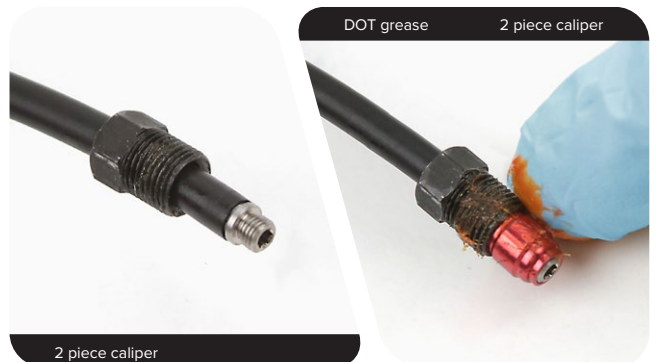


2 piece caliper: Install the compression nut onto the hose.

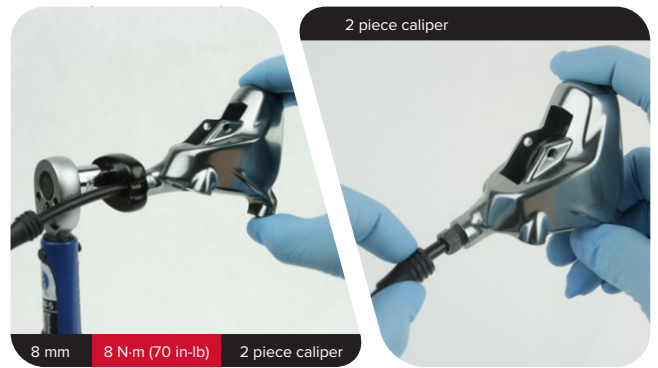
Thread the compression fitting over the hose barb, counter-clockwise, until it is flush or slightly lower than the hose barb.

The compression fitting is reverse threaded.

Apply DOT grease to the outside of the compression fitting and the threads of the compression nut.



2 piece caliper: Install the hose into the caliper while threading the compression nut into the caliper by hand. Tighten the compression nut. Install the hose boot over the compression nut.



Monoblock caliper: Remove the o-rings from the banjo bolt. Install the new o-rings and apply a thin layer of grease. Install the banjo bolt into the banjo boot.



Monoblock caliper: Tighten the banjo bolt with the banjo boot at the desired angle.



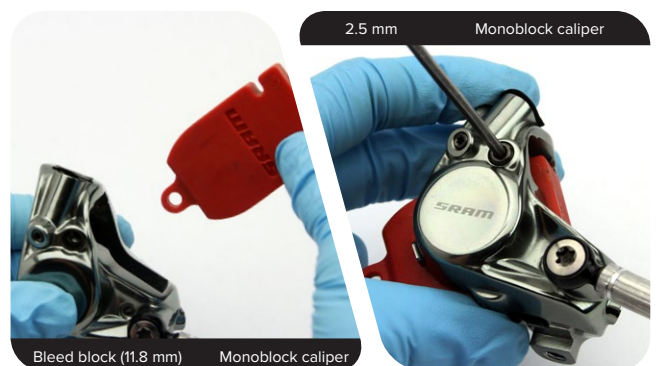
5 2 piece caliper: Install the bleed block (11.2 mm) into the caliper.



Monoblock caliper: Insert the bleed block (11.8 mm) into the caliper, then install the pad retention bolt.

CAUTION

You must bleed your brakes before reinstalling the brake pads. Installing the brake pads prior to bleeding the brakes could contaminate the brake pads and could lead to brake failure.



6 Spray isopropyl alcohol on the caliper and clean it with a shop towel.



Visually check your work. If any of the o-rings protrude from the banjo fitting or banjo bolt, remove and replace the o-ring, then repeat the installation process.

⚠ CAUTION

Servicing your brakes removes all of the brake fluid from the system. You must bleed your brakes after you service the brake caliper. Consult the *eTap AXS HRD Hose Shortening and Bleed Manual* at www.sram.com/service.

SRAM eTap AXS HRD Hose Replacement

Perform the hose replacement service if the hose needs to be replaced. For hose shortening instructions, consult the *eTap AXS HRD Hose Shortening and Bleed Manual* at www.sram.com/service.

Parts, Tools and Supplies

Parts

- Disc Brake Hose Hood Assembly - SRAM RED eTap

Safety and Protection Supplies

- Apron
- Clean, lint-free shop towels
- Nitrile gloves
- Oil pan
- Safety glasses

Lubricants and Fluids

- Isopropyl alcohol
- SRAM DOT assembly grease

SRAM Tools

- Monoblock bleed block (Monoblock calipers)
- HRD bleed block (2 piece calipers)
- SRAM hydraulic hose cutter tool

Common Tools

- Crowfoot wrench: 8 mm
- Flare nut wrench: 8 mm
- Hex wrench: 2.5 mm
- Hex bit socket: 2.5 mm
- Marker
- Needle nose pliers
- Open end wrench: 10 mm
- Torque wrench
- TORX wrenches: T8, T25
- TORX bit socket: T25

Hose Removal

- 1** Remove the wheel from the bicycle according to the manufacturer's instructions.
- 2** Remove the E-clip from the pad retention bolt, then remove the pad retention bolt from the caliper.



3 Remove the brake pads from the caliper.

NOTICE

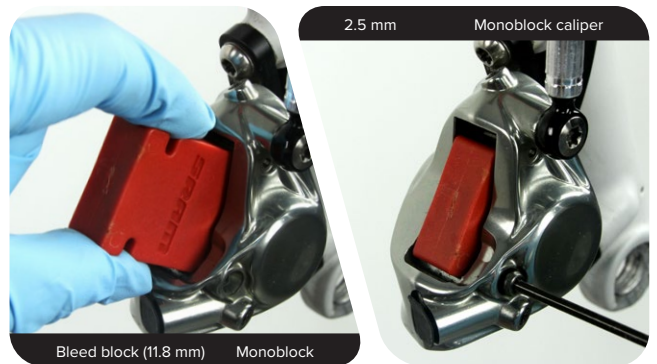
Brake pads must be replaced if the total thickness of the backing plate and pad friction material is less than 3 mm.



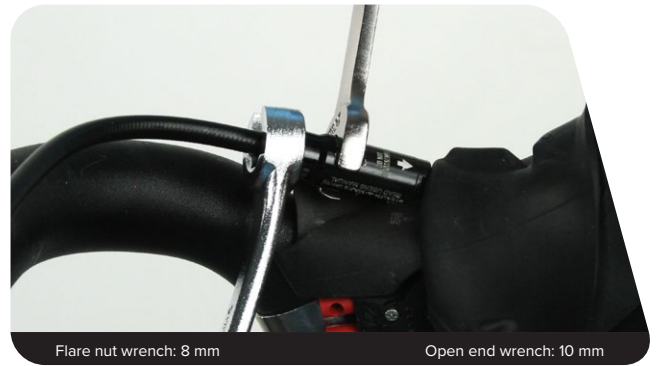
4 **2 piece caliper:** Install the HRD bleed block (11.2 mm) into the caliper.



Monoblock caliper: Install the Monoblock bleed block (11.8 mm) into the caliper, then install the pad retention bolt.



- 5** Loosen and remove the compression nut and hose from the valve body.



- 6** **2 piece caliper:** Remove the compression nut and hose.
Monoblock caliper: Remove the banjo bolt and hose.

NOTICE

Fluid will drip. Place an oil pan and/or shop towel under the hose.



- 7** Remove the hose from the frame, according to your frame manufacturer's instructions.
To remove the hose from internally routed frames, first cut the hose near the compression fitting and remove the compression nut from the hose.

Hose Installation

1 Internally routed frames: Insert the hose and route it through the frame or fork.

Externally routed frames: Loosely connect the hose to the frame or fork.

2 2 piece caliper: Install the hose boot onto the new hose.

Apply DOT grease to the hose barb threads. Thread the hose barb into the hose until it is flush with the end of the hose.

NOTICE

Do not overtighten the hose barb. Overtightening may cause damage to the hose liner.

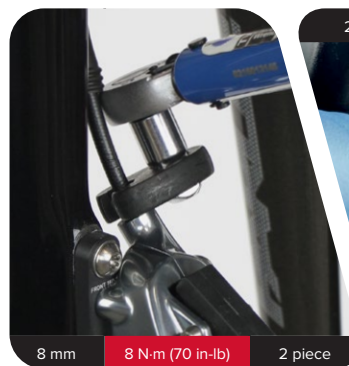
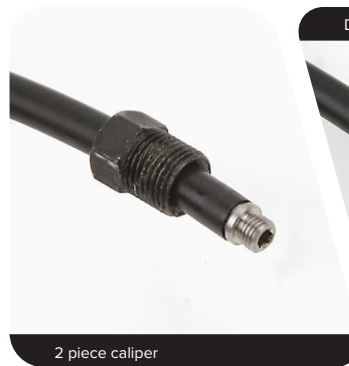
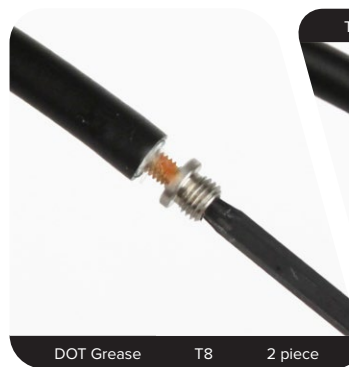
2 piece caliper: Install the compression nut onto the hose.

Thread the compression fitting over the hose barb, counter-clockwise, until it is flush or slightly lower than the hose barb.

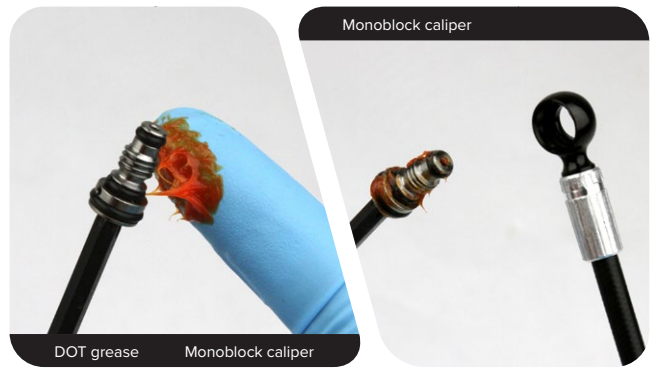
The compression fitting is reverse threaded.

Apply DOT grease to the outside of the compression fitting and the threads of the compression nut.

2 piece caliper: Install the hose into the caliper while threading the compression nut into the caliper by hand. Tighten the compression nut. Install the hose boot over the compression nut.



Monoblock caliper: Apply a thin layer of grease to the banjo bolt o-rings, then install the banjo bolt into the new banjo.



Monoblock caliper: Tighten the banjo bolt with the banjo boot at the desired angle.



- 3** To shorten the hose, hold the hose up to the shift-brake lever with a length that creates a gentle bend in the hose and allows the handlebar to freely turn from side to side.

Mark your cut location, then cut the hose.

NOTICE

You must cut the hose at the lever. Cutting the hose at the caliper will remove the crimped banjo from the hose, and it will need to be replaced.



4 Apply grease to the hose barb threads.



5 Thread the hose barb into the hose until it is flush with the end of the hose.

Install the compression nut onto the hose.

NOTICE

Do not overtighten the hose barb. Overtightening may cause damage to the hose liner.



6 Thread a new compression fitting over the hose barb, counter-clockwise, until it is flush or slightly lower than the hose barb.

The compression fitting is reverse threaded.

NOTICE

You must install a new hose barb and compression fitting before reconnecting the brake lever to the hose.



7 Apply a thin layer of grease to the compression fitting and compression nut.



- 8 Install the hose into the lever body while threading the compression nut into the valve body by hand. Tighten the compression nut.



⚠ CAUTION

Hydraulic hose replacement removes all of the fluid from the system. You must bleed your brakes after you service the brake caliper. Consult the *Road HRD Hose Shortening and Bleed Manual* at www.sram.com/service.

SRAM eTap AXS HRD Stealth-a-majig Hose Hood Replacement

Perform the Stealth-a-majig hose hood replacement service if the hose at the hood needs to be replaced. For hose shortening instructions, consult the *eTap AXS HRD Hose Shortening and Bleed Manual* at www.sram.com/service.

Parts, Tools and Supplies

Parts

- Disc Brake Hose Hood Assembly - SRAM RED eTap AXS, and SRAM Force eTap AXS HRD Stealth-a-majig
- Disc Brake Hose Hood Assembly - SRAM Rival eTap AXS HRD Stealth-a-majig

Safety and Protection Supplies

- Apron
- Clean, lint-free shop towels
- Nitrile gloves
- Oil pan
- Safety glasses

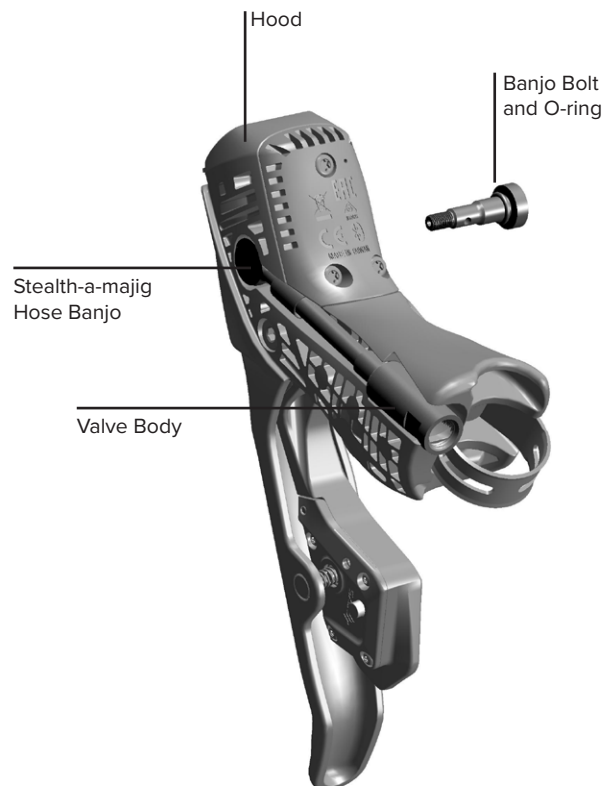
Lubricants and Fluids

- Isopropyl alcohol
- SRAM DOT assembly grease

Common Tools

- Crowfoot wrench: 8 mm
- Flare nut wrench: 8 mm
- Hex wrench: 2.5 mm
- Hex bit socket: 2.5 mm
- Open end wrench: 10 mm
- Torque wrench
- TORX wrenches: T25
- TORX bit socket: T25

Stealth-a-majig Hose Hood Exploded View



⚠ WARNING

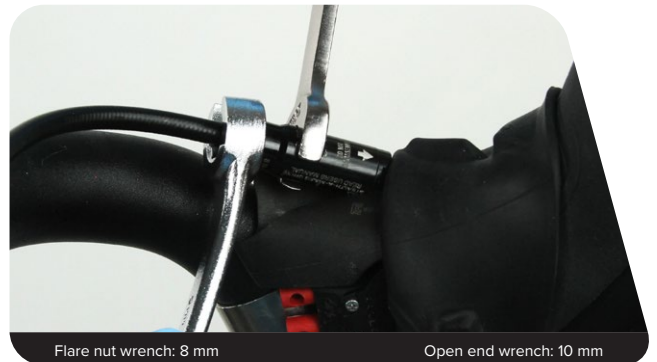
Do not remove the reservoir bolts on the eTap AXS hood. Bolts that have been removed and reinstalled will damage the hood assembly and make the brakes unsafe to use, which could lead to serious injury and/or death.



Hose Removal

If the hood cover has been damaged, remove the hood cover for easier access to the hood. Install a new cover after the service is complete.

- 1 Loosen and remove the compression nut and hose from the valve body.



- 2 Remove the banjo bolt from the outboard side of the hood.

NOTICE

Fluid will drip. Place an oil pan and/or shop towel under the hood.



- 3 Remove the Stealth-a-majig hose hood assembly from the inboard side of the hood.



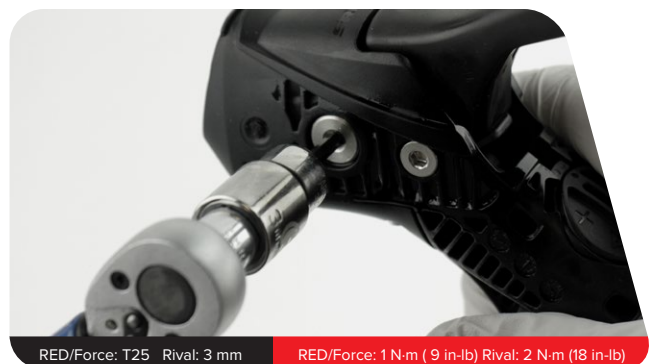
- 4 Install a new o-ring on the new Stealth-a-majig hose banjo. Install a new o-ring on the new banjo bolt.



- 5 Install the Stealth-a-majig hose banjo into the groove in the inboard side of the hood. Install the banjo bolt into the outboard side of the hood and tighten.

NOTICE

Do not overtighten the bolts. Overtightening the bolts can damage the hood assembly.



RED/Force: T25 Rival: 3 mm

RED/Force: 1 N-m (9 in-lb) Rival: 2 N-m (18 in-lb)

6 Install the hood cover.



7 Install the hose into the lever body while threading the compression nut into the valve body by hand. Tighten the compression nut.



⚠ CAUTION

Stealth-a-majig hose hood replacement removes all of the fluid from the system. You must bleed your brakes after you service the lever. Consult the *Road HRD Hose Shortening and Bleed Manual* at www.sram.com/service.

RED eTap AXS and Force eTap AXS Lever and Electronic Subassembly Replacement

Perform the Brake Lever and Electronic Subassembly replacement if your brake lever, shifter, or battery box has been damaged.

Parts, Tools and Supplies

Parts

- SRAM RED eTap AXS Hydraulic Road Brake Lever Assembly - Left or Right
- SRAM Force eTap AXS Hydraulic Road Brake Lever Assembly - Left or Right

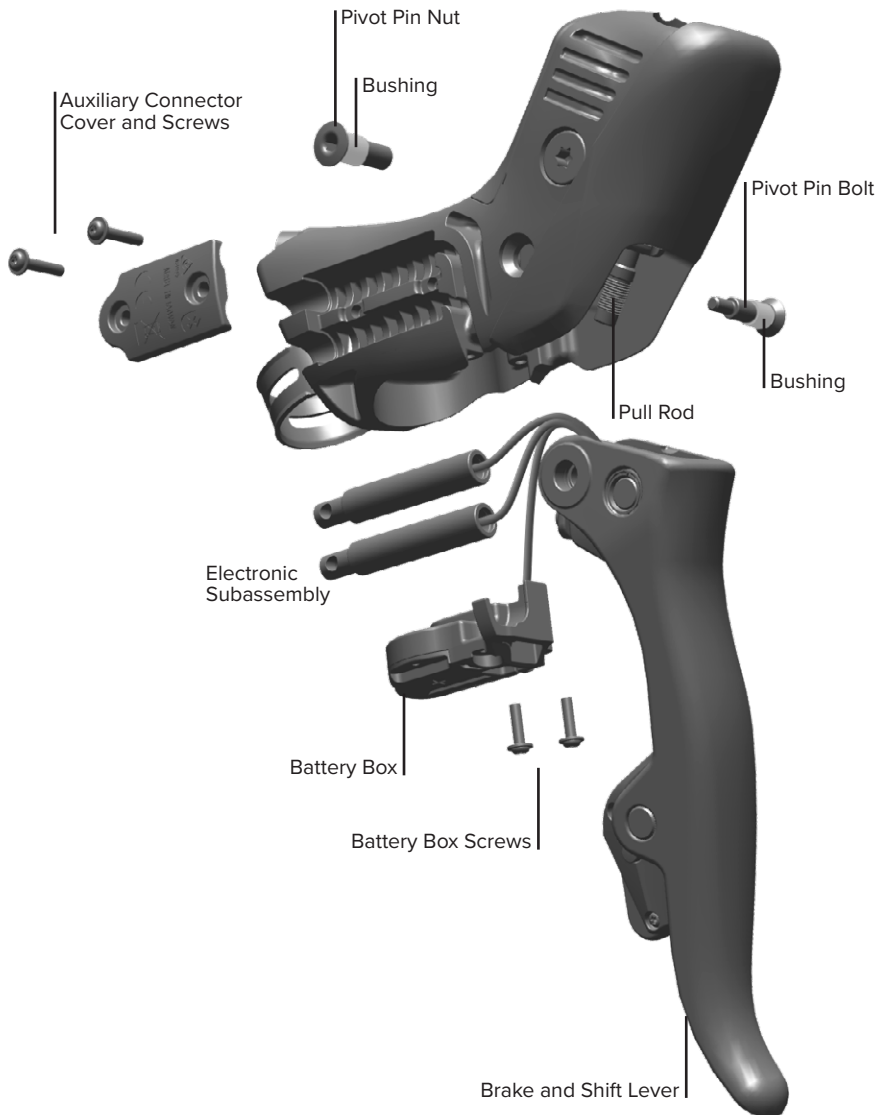
Safety and Protection Supplies

- Apron
- Nitrile gloves
- Safety glasses

Common Tools

- Hex wrenches: (2) 2.5
- Hex bit sockets: 2.5
- Torque wrench
- TORX wrench: T6
- TORX bit socket: T6
- Small flat head wrench

RED eTap AXS/ Force eTap AXS Exploded View



⚠️ WARNING

Do not remove the reservoir bolts on the eTap AXS lever. Removing the bolts may cause your system to leak, and is not necessary for service.



RED eTap AXS and Force eTap AXS Lever Removal

If the hood cover has been damaged, remove the hood cover for easier access to the electronic subassembly. Install a new cover after the service is complete.

- 1** Fold the hood cover forward and remove the SRAM eTap AXS Blips or seal plugs from the electronic subassembly.

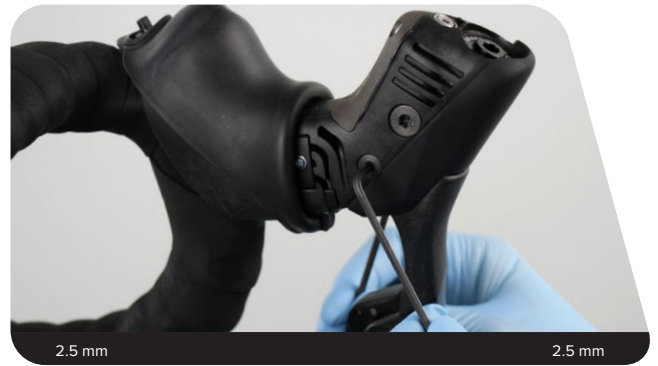


- 2** Remove the screw from the auxiliary connector cover, then fold the hood cover backward.



- 3** Hold the pivot pin nut in place, then unthread the pivot pin bolt from the hood assembly.

For best performance, make sure the pivot pin bushings remain on the pivot pin nut and bolt.



- 4** Rotate the reach adjust bolt clockwise to unthread the lever from the hood.

The reach adjust bolt is reverse-threaded.



- 5** Remove the second auxiliary connector cover screw, then remove the auxiliary connector cover from the hood assembly.



6 Remove the battery box screws.



7 Remove the lever and the battery box from the hood assembly, then remove the auxiliary connectors from the hood assembly.



- 1 Install the auxiliary connectors into the hood so the auxiliary connector with the longer wire is in the top slot. Install the battery box into the hood, making sure the wires are routed beneath the battery box without being pinched.

NOTICE

Do not pinch the electronic subassembly wires when installing the battery block into the hood assembly. Pinching the wires can lead to shifter malfunction or damage to the wires.



- 2 Install the longer screw into the auxiliary connector cover and gently tighten.

NOTICE

Do not overtighten the screws. Overtightening the screws can damage the hood assembly.



- 3 Install the shorter screws into the battery box and gently tighten.

NOTICE

Do not overtighten the screws. Overtightening the screws can damage the hood assembly.



- 4** Insert the lever into the hood assembly. Insert a 2.5 mm hex wrench into the reach adjust bolt hole in the lever and align the wrench with the pull rod. Push the lever into the hood assembly, and rotate the bolt counter-clockwise to tighten the bolt to hand tight.

The reach adjust pull rod is reverse-threaded.



- 5** Install the pivot pin nut and the pivot pin bolt into the hood. Hold the nut in place, then tighten the pivot pin bolt.



- 6** Adjust the reach to your desired setting. Rotate the reach adjust screw clockwise to move the lever toward the handlebar, or counter-clockwise to move the lever away from the handlebar.



- 7** Fold the hood cover forward. Install the second cover screw into the auxiliary connector cover and gently tighten. Install SRAM eTap AXS Blips into the auxiliary ports, or leave the seal plugs in place. Fold the hood cover down.

NOTICE

Do not overtighten the screws. Overtightening the screws can damage the hood assembly.

Do not use SRAM AXS shifters without Blip or Clic wires or seal plugs installed. Moisture will damage the electronic components.



Your eTap AXS system must be paired before riding. Consult the *eTap AXS Systems User Manual* for pairing information at www.sram.com/service.

Rival eTap AXS Lever and Electronic Subassembly Replacement

Perform the Lever replacement if your brake lever, shifter, or battery box has been damaged.

Parts, Tools and Supplies

Parts

- SRAM Rival eTap AXS Hydraulic Road Brake Lever Assembly - Left or Right

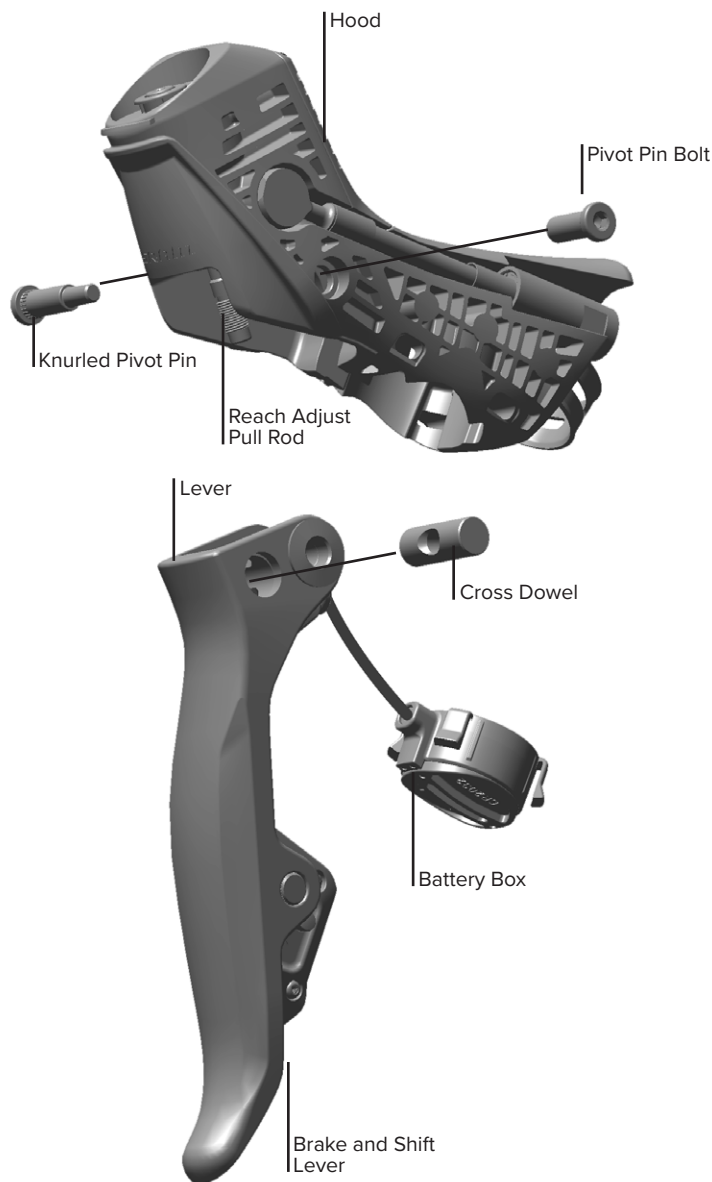
Safety and Protection Supplies

- Apron
- Nitrile gloves
- Safety glasses

Common Tools

- Hex wrenches: 2.5, and (2) 3 mm
- Hex bit socket: 3 mm
- Mallet
- Small flat blade screwdriver
- Torque wrench

Rival eTap AXS Exploded View



⚠ WARNING

Do not remove the reservoir bolts on the eTap AXS lever. Removing the bolts may cause your system to leak, and is not necessary for service.



Rival eTap AXS Lever Removal

- 1 Remove the hood cover.



2 Hold the knurled pivot pin in place on the inboard side of the lever, then unthread the pivot pin bolt from the outboard side of the lever.

Thread the pivot pin back in 3 or 4 turns.

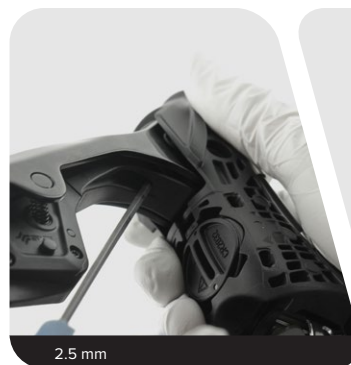
Tilt the lever against a flat surface and use a mallet to tap the pivot pin and dislodge the knurled pivot pin from the inboard side of the lever.

Remove the pivot pin and knurled pivot pin from the lever.

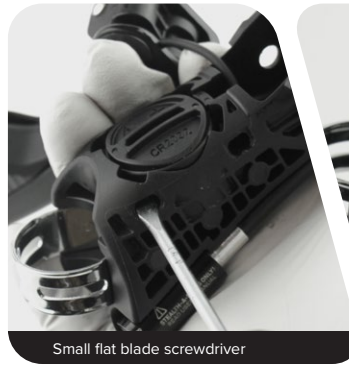


3 Rotate the reach adjust pull rod clockwise to unthread the lever from the hood.

The reach adjust pull rod bolt is reverse-threaded.



- 4** Insert a small flat blade screwdriver into one of the four grooves around the battery box. Push inward and upward to begin releasing the battery box. Repeat this step in each groove, in a circular pattern, until the battery box releases. Remove the battery box and lever assembly.



Rival eTap AXS Lever Installation

- 1 Install the battery box into the hood, making sure the wire is routed through the groove in the hood.

NOTICE

Do not pinch the wire when installing the battery box into the hood. Pinching the wire can lead to shifter malfunction or damage to the wire.



- 2 Install the cross dowel into the cross dowel bushing in the lever. Hold in place while the lever is installed.



- 3 Insert a 2.5 mm hex wrench through the hole in the cross dowel and into the reach adjust pull rod. Rotate the bolt counter-clockwise to tighten the bolt to hand tight.

The reach adjust pull rod is reverse-threaded.



- 4** Install the knurled pivot pin into the inboard side of the hood. Hold the knurled pivot pin in place, then install and tighten the pivot pin bolt on the outboard side of the hood.



- 5** Install the hood cover. Adjust the reach of the lever to your desired setting.

Rotate the reach adjust screw clockwise to move the lever toward the handlebar, or counter-clockwise to move the lever away from the handlebar.



Your eTap AXS system must be paired before riding. Consult the *eTap AXS Systems User Manual* for pairing information at www.sram.com/service.

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