SRAM®

2017-2019 Guide™ RS & R

service manual

GEN.0000000005811 Rev D

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.

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

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.

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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!

SRAM® Guide™ Brake Systems Service

We recommend that you have your SRAM Guide 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/company/environment.

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, flush all of the parts with soapy water, rinse them with clean water, then allow all the parts to dry prior to rebuilding. Install new seals, a new bladder, and replace the hose.

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 groun d 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 system. Consult the *SRAM MTB Disc Brake Hose Shortening and Bleed Manual* at www.sram.com/service.

NOTICE

The Guide caliper must be serviced before the lever. The lever must be connected to the caliper and the brakes must still have fluid in them in order to advance the pistons and service the caliper. Once the lever has been disconnected and the fluid drained it is not possible to advance the pistons.

⚠CAUTION

Do not use mineral oil or DOT 5 fluid. Do not use tools, rags, or syringes that are contaminated with mineral oil or DOT 5 fluid. Using contaminated materials will result in permanent damage to the seals and reduce braking performance. Brakes must be replaced if contaiminated with mineral oil or DOT 5 fluid.

Service Procedures

The following procedures should be performed throughout service, unless otherwise specified.

Clean the part with isopropyl alcohol and a clean, lint-free rag.

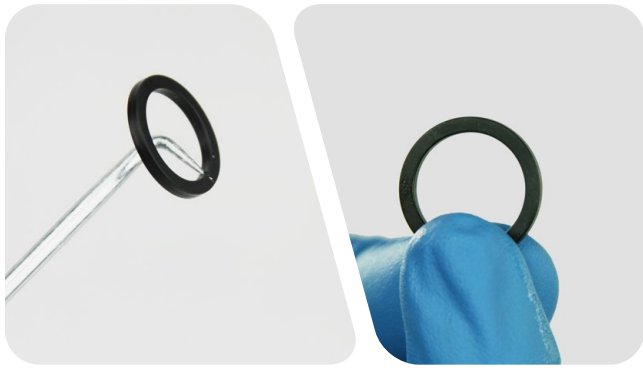
Clean the sealing surface on the part and inspect it for scratches.

Replace the o-ring or seal with a new one from the service kit. Use your fingers, a ziptie, or a pick to pierce and remove the old seal or o-ring.

Apply DOT grease to the new seal or o-ring when instructed.

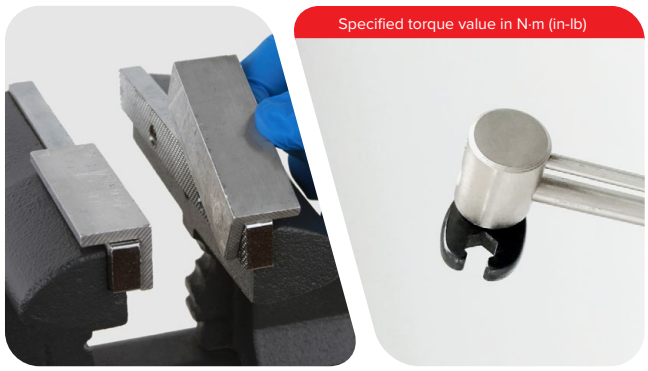
NOTICE

Do not scratch any sealing surfaces when servicing the product. Scratches can cause leaks. Consult the spare parts catalog to replace the damaged part.



Use aluminum soft jaws when placing a part in a bench vise.

Tighten the part with a torque wrench to the torque value listed in the red bar. 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.
2. Remove the wheel from the affected caliper.n
3. Remove the brake pads.
4. Install the pad spacer.
5. Squeeze the brake lever several times until the pistons have advanced and contact the pad spacer. One piston may move faster than the other; continue to squeeze the lever until the pistons touch the spacer.
6. Remove the pad spacer.
7. Use a plastic tire lever to push the pistons back into the caliper bores.
8. Repeat steps 4-7 until the pistons move freely.
9. Install the brake pads and the wheel.
10. Loosen the caliper bolts.
11. Lightly squeeze (approx. 4 lbs) the brake lever several times to position the brake pads to the proper distance from the rotor.
12. Center the caliper on the rotor, and tighten the caliper bolts.
13. Spin the wheel and check the brake function. The pistons should move freely and there should not be excessive brake lever throw. If there is no improvement in the brake function, proceed with caliper service.

Parts and Tools Needed for Service

Parts

- SRAM® Guide™ Brake Pad Kit
- Caliper Piston Kit - SRAM Guide R/RS/RSC

Safety and Protection Supplies

- Safety glasses
- Nitrile gloves
- Oil pan
- Clean, lint-free rag

Lubricants and Fluids

- Isopropyl alcohol
- SRAM High-Performance DOT 5.1 brake fluid. If SRAM fluid is not available, only use DOT 5.1 or 4 brake fluid.
- SRAM or AVID® DOT grease. If SRAM or AVID DOT grease is not available only use a DOT compatible grease.

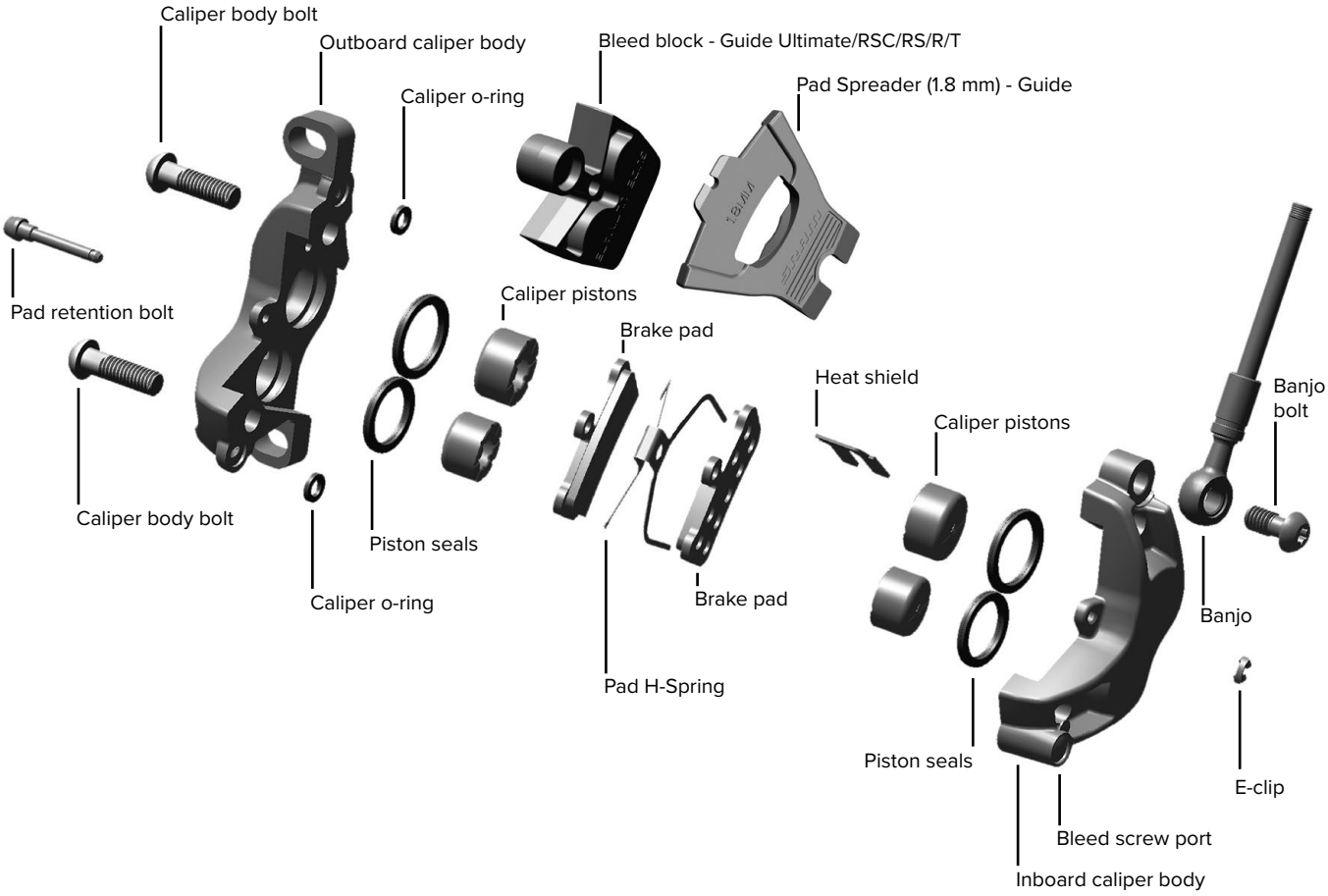
Common Tools

- 2.5 mm hex wrench
- Needle nose pliers
- Pick with a 90 degree bent tip
- T25 TORX® wrench
- T25 TORX bit socket
- Torque wrench
- Digital caliper

SRAM Tools

- SRAM Brake Bleed Kit (includes: Bleed Block and Bleeding Edge™ Fitting)
- Pad Spreader Tool (1.8 mm) - Guide

Caliper Exploded View



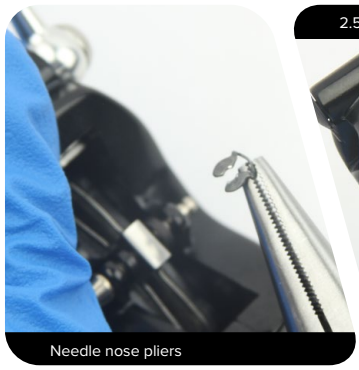
Caliper Brake Pad Removal

1 Use a T25 TORX® wrench to remove the brake caliper from the fork or frame.

Remove the caliper mounting bracket and hardware from the caliper then set them aside in the order that they were removed.

2 Remove the E-clip from the pad retention bolt.

Remove the pad retention bolt from the caliper.


Needle nose pliers


2.5 mm hex wrench

3 Remove the brake pads and pad H-spring 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.

Digital Caliper

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 Install the pad retention bolt.

Insert the Guide™ pad spreader so that it snaps onto the pad retention bolt.

2 Squeeze the brake lever to advance the pistons until they contact the pad spreader.

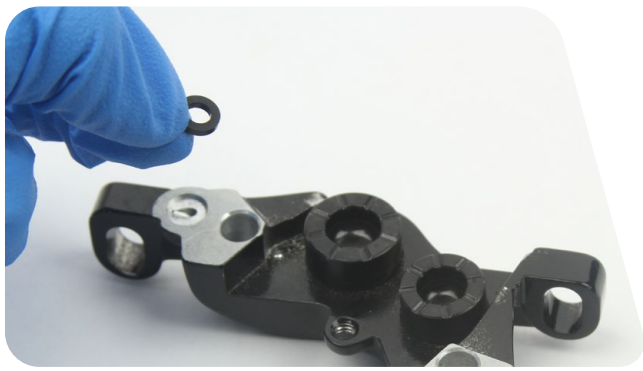
3 Remove the banjo bolt.

4 Remove the Guide™ pad spreader.
Remove the pad retention bolt.

5 Remove each caliper body bolt.

6 Separate the caliper body halves.
Set the heat shield aside.

7 Remove the caliper o-ring from the outboard side of the caliper.

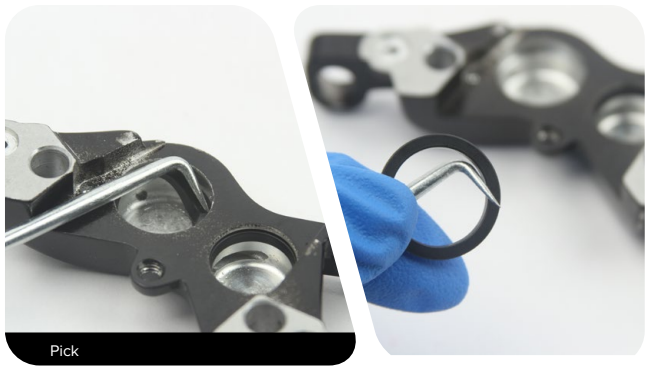


8 Remove the pistons from each caliper body half.

9 Remove the piston seals from each caliper body half. Install new seals inside each caliper body half.

⚠WARNING

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.



Pick

Caliper Piston Installation

NOTICE

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1 Inspect the caliper pistons for damage and replace the pistons if necessary.

Apply a small amount of SRAM® High-Performance DOT 5.1 brake fluid to the circumference of each piston. Install the pistons into the caliper bores.

NOTICE

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


SRAM High-Performance DOT 5.1 brake fluid

2 Spray isopropyl alcohol on the caliper halves and both of your gloves and clean them with a rag.

3 Add a small amount of DOT compatible grease onto a new o-ring, then install onto the caliper.

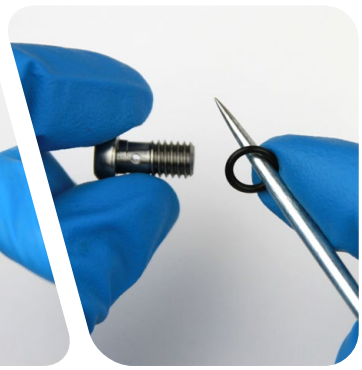
4 Align the caliper body halves then use a T25 TORX® wrench to thread each body bolt into the caliper two full turns.

Install the heat shield.

5 Tighten each bolt to 9.8-11.8 N·m (87-104 in-lb).

6 Remove the o-rings from the banjo bolt and banjo fitting.

Apply a small amount of SRAM® High-Performance DOT 5.1 brake fluid to the new o-rings and install them.



7 Hold the banjo at the desired angle.

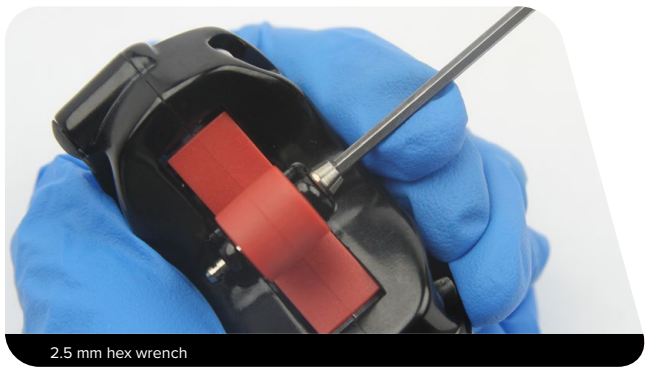
Tighten the banjo bolt to 4.4-5.4 N·m (39-48 in-lb).

8 Insert the Guide™ bleed block into the caliper.

Install the pad retention bolt.

⚠WARNING

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 lead to a brake failure.



9 Spray isopropyl alcohol on the caliper and clean it with a rag.

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

⚠CAUTION

Servicing your brakes removes all of the fluid from the system. You must bleed the brakes after you service the brake caliper and/or lever.

For brake bleed and brake hose shortening instructions, visit www.sram.com/service.

Parts and Tools Needed for Service

Parts

- Lever Internals Guide™ RS or Lever Internals Guide R/RE / DB5™ / Code™ R

Safety and Protection Supplies

- Safety glasses
- Nitrile gloves
- Oil pan
- Clean, lint-free rag

Lubricants and Fluids

- Isopropyl alcohol
- Loctite® Threadlocker Blue 242®
- SRAM® High-Performance DOT 5.1 brake fluid. If SRAM fluid is not available, only use DOT 5.1 or 4 brake fluid.
- SRAM or AVID® DOT grease. If SRAM or AVID DOT grease is not available only use a DOT compatible grease.

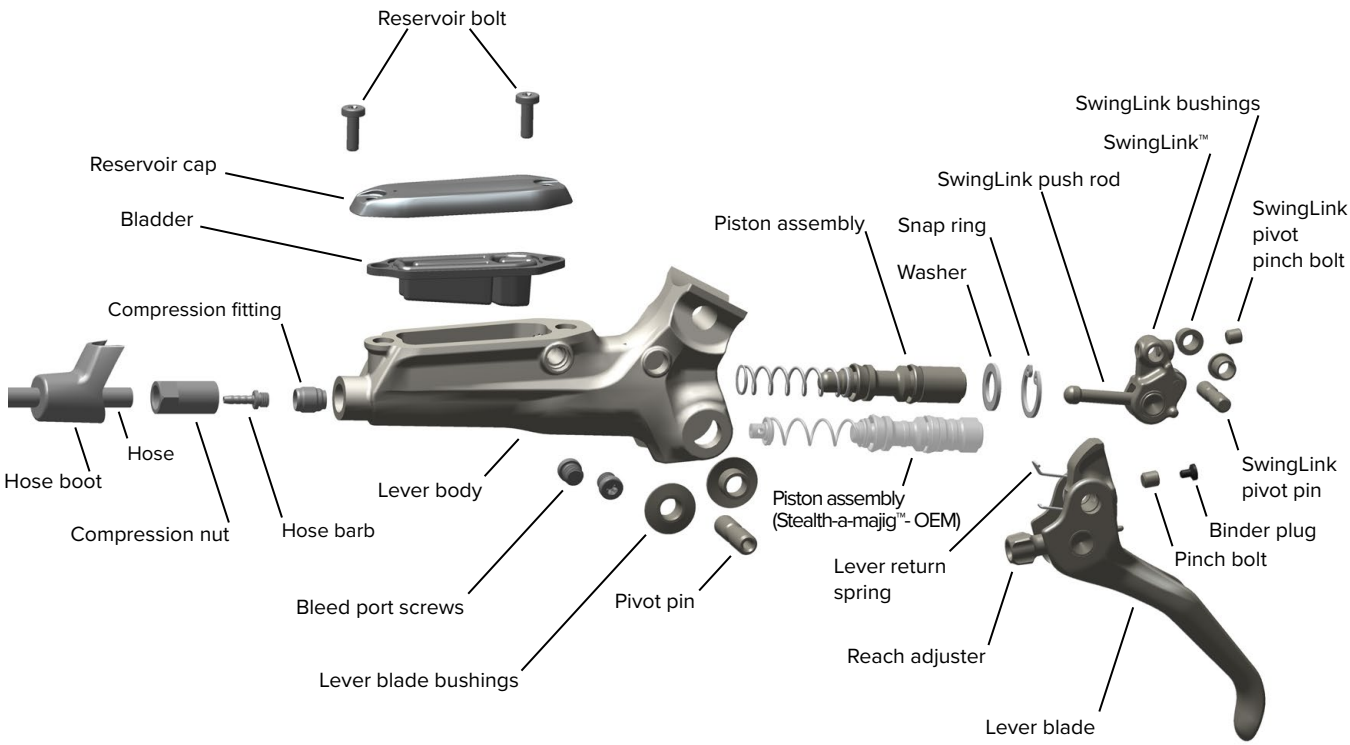
Common Tools

- Pick with a 90 degree bent tip
- T8, T10, & T25 TORX® wrench
- T8 & T10 TORX bit socket
- 8 mm flare nut wrench
- 8 mm flare nut crowfoot wrench
- 2 mm & 4 mm hex wrench
- Needle nose pliers
- Torque wrench
- Internal snap ring pliers

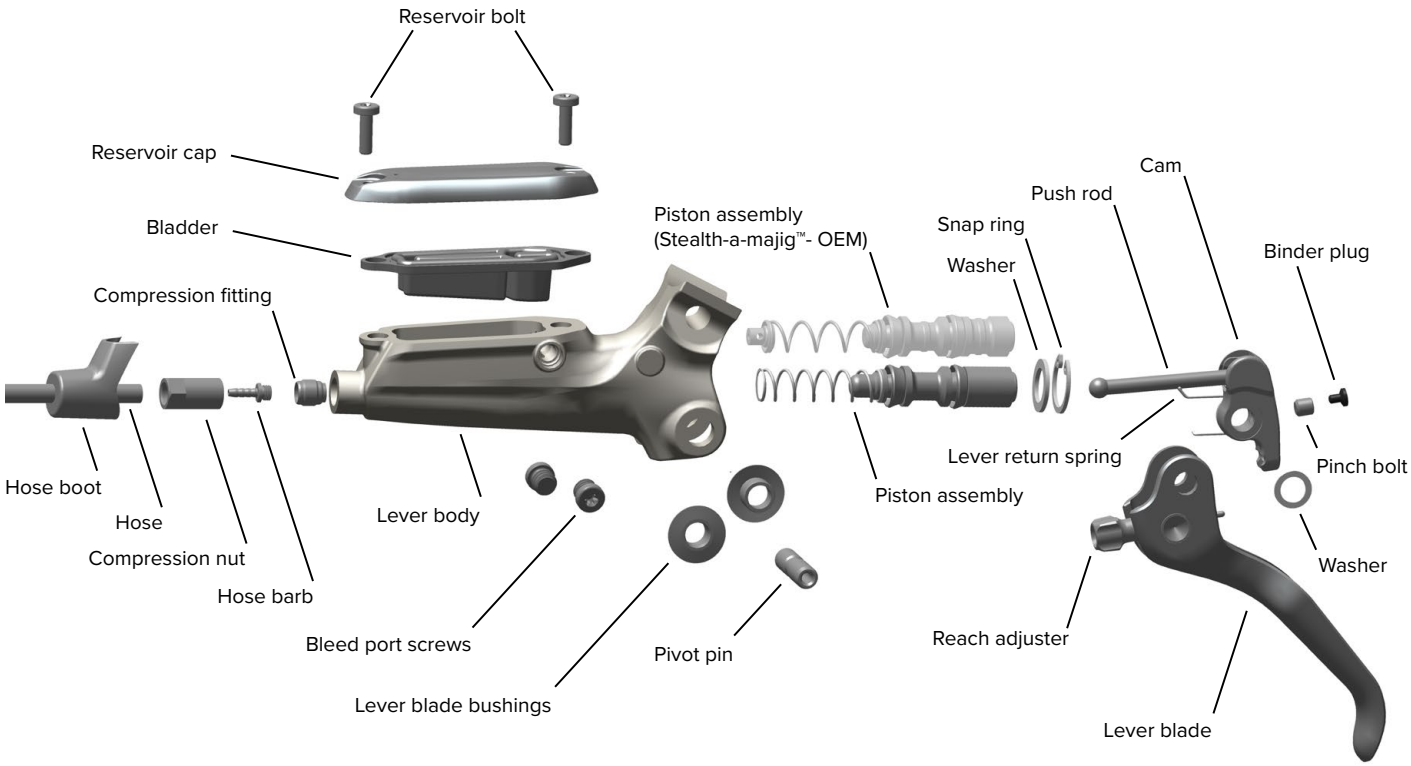
Common Tools

- SRAM Hydraulic Hose Cutter

Guide RS Lever Exploded View



Guide™ R Lever Exploded View



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 Remove the brake clamp bolt and remove the brake lever from the handlebar.

2 Pull the hose boot away from the brake body to expose the compression nut, then slide the boot down the brake hose.

3 Unthread the hose compression nut, then pull the brake hose and compression fitting from the brake lever body.

8 mm flare nut wrench

4 Pour the brake fluid into an oil pan. Squeeze the lever blade to force any remaining brake fluid out of the lever body.

NOTICE

If the system has been contaminated with mineral oil or DOT 5 fluid, flush all the parts with soapy water, rinse, and allow all parts to dry prior to rebuilding. Install all new seals and a new hose.

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

5 Remove the reservoir cap bolts from the reservoir cap.

T10 TORX® wrench

6 Remove the reservoir cover and bladder from the lever body.

7 Pour the fluid from the brake lever body into a pan.

8 Separate the bladder from the reservoir cover.

Spray isopropyl alcohol on the bladder and the reservoir cover, then clean them with a rag.

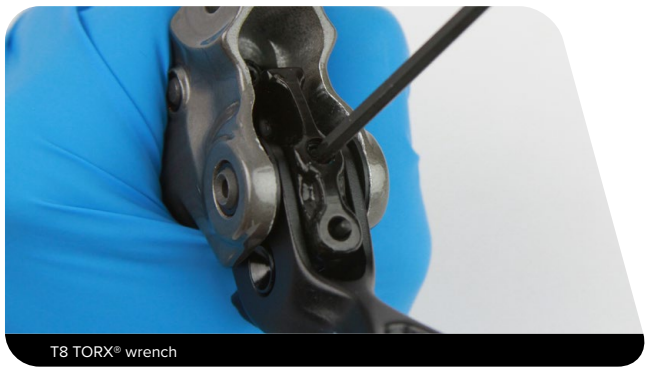
NOTICE

All components must be completely dry before reinstalling them. Moisture residue from cleaning the bladder can leak out of the bladder as it dries, which can be misinterpreted as a system leak.

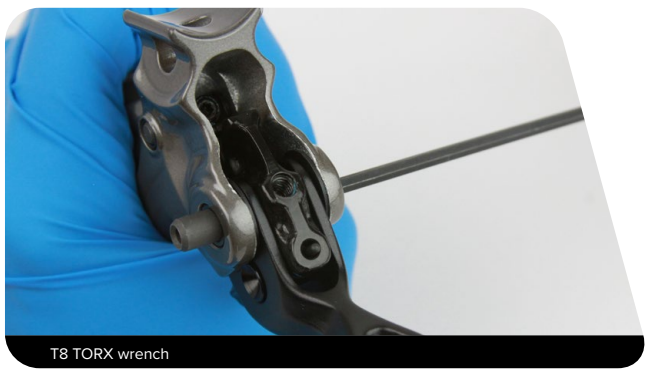
9 Remove the binder plug.


Pick

10 Remove the pinch bolt.


T8 TORX® wrench

11 Use the T8 TORX wrench to push out the pivot pin.

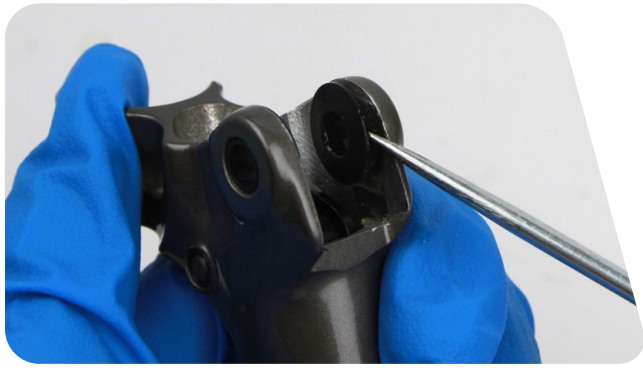

T8 TORX wrench

12 Remove the lever blade from the lever body.

The lever blade has four pieces, the lever blade, the cam/push rod assembly, a washer, and the lever return spring. To hold all pieces together you may reinstall the lever pivot pin and gently set aside.

Piston Assembly Removal

1 Use a pick to remove the lever blade bushings from both sides of the lever.



2 **RS only**: Use a T8 TORX® wrench to remove the SwingLink™ pivot pinch bolt.

T8 TORX wrench

3 **RS only:** Use a T8 TORX wrench to push out the SwingLink pivot pin. The SwingLink will fall out easily.

T8 TORX wrench

4 Remove the SwingLink bushings from both sides of the lever.

5 Use long-tipped internal snap ring pliers to apply downward pressure to the lever body and remove the snap ring.

Turn the lever body upside down to allow the washer to fall out of the body.

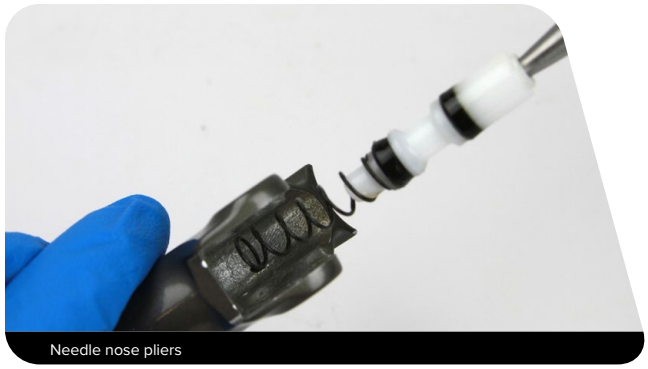
Internal snap ring pliers

6 Use needle nose pliers to remove the piston assembly.

⚠CAUTION - EYE HAZARD

Wear safety glasses.

Do not look directly into the lever body while performing this step. The internal piston/spring assembly is preloaded and will come out of the lever body quickly, which can result in injury.



Needle nose pliers

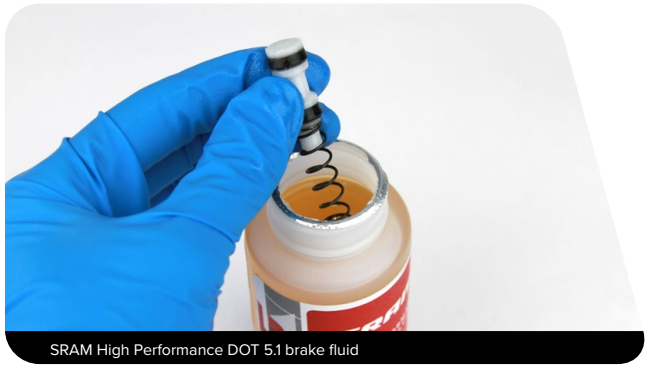
7 Spray isopropyl alcohol on the lever body and the lever blade and clean them with a rag.

NOTICE

DOT brake fluid will damage painted surfaces. If any fluid comes in contact with a painted surface (i.e. 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 Submerge a new piston assembly in SRAM® High-Performance DOT 5.1 brake fluid.

You can also use SRAM DOT Assembly Grease, or DOT 5.1 or 4 compatible grease, as a lubricant.



SRAM High Performance DOT 5.1 brake fluid

2 Install the new piston assembly into the lever body.

Spray isopropyl alcohol on the lever body and both of your gloves and clean them with a rag.

3 Install the washer on the piston assembly.

Use long-tipped internal snap ring pliers to push the piston assembly into the lever body, and secure the snap ring in its groove. Orient the snap ring eyelets opposite the opening in the lever body.

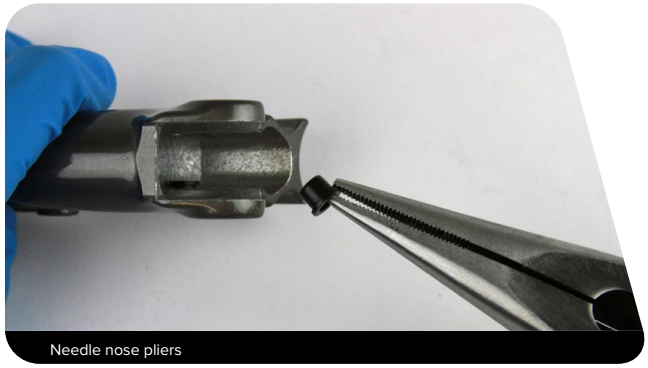
You can also use a 10 mm deep socket against the snap ring to push the piston/washer/snap ring assembly into the lever body.

Internal snap ring pliers

RS Lever Blade Installation

1 Use needle nose pliers to install the SwingLink™ bushings.

If the SwingLink bushings fall out easily, apply a small amount of DOT grease to the bushings to help hold them in place.



Needle nose pliers

2 Insert the lever blade bushings into both sides of the lever.

3 Place the pushrod into the piston.

4 Line up the hole in the SwingLink with the hole in the bushings, then push the pivot pin into the hole until it stops.

5 Apply a small amount of Loctite® Threadlocker Blue 242® onto the threads of the SwingLink™ pivot pinch bolt.

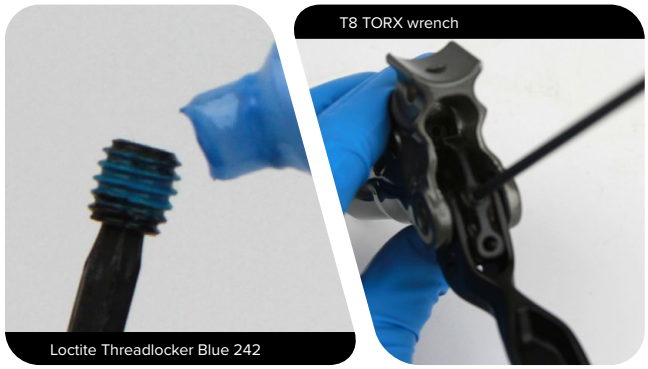
Use a T8 TORX® wrench to thread the SwingLink pivot pinch bolt into the SwingLink. Tighten the SwingLink pivot pinch bolt to 1.1-1.3 N·m (9-12 in-lbs).

6 Insert the lever blade assembly into the lever body, place the lever return spring on the lever body.

Make sure the lever return spring is seated properly in the lever. The outboard end of the spring must press against the lever blade, while the inboard end of the spring must press against the lever body. If the return spring is not seated properly, you will not be able to adjust the reach of the lever blade. The reach adjuster must be seated in the cam hole, if it is not set properly you will be unable to adjust your reach.

7 Line up the cam and lever blade with the holes in the lever body, then press the pivot pin through the holes.

8 Apply a small amount of Loctite® Threadlocker Blue 242® onto the pinch bolt.



9 Use a T8 TORX® wrench to thread the pinch bolt into the lever body. Use a torque wrench and a T8 TORX bit socket to tighten the bolt to 1.1-1.3 N·m (9-12 in-lb).

10 Use a T8 TORX wrench to install a new binder bolt plug.

11 Press the bladder into the reservoir cap so that the bladder is properly seated and flush with the reservoir cap.

12 Insert the reservoir cap and bladder assembly onto the lever body.

13 Use a torque wrench with a T10 TORX® bit socket to tighten each reservoir cap bolt to 1.1-1.3 N·m (9-12 in-lb).

14 Cut the hose to install a new barb and compression fitting.

⚠WARNING

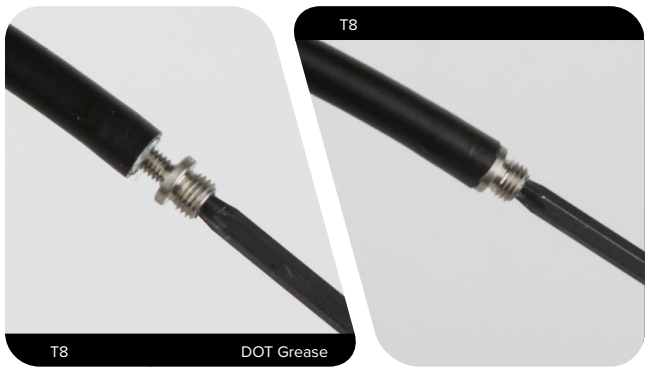
All SRAM brakes that use a compression fitting and hose barb must use a new SJ (Stealth-a-majig) hose barb (A) and a new, red SJ compression fitting (B) upon reassembly.

The factory may have installed a non-red SJ compression fitting, which functioned properly prior to disconnection. Upon reconnection, you must install a new SJ hose barb and a new, red SJ compression fitting.

15 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.

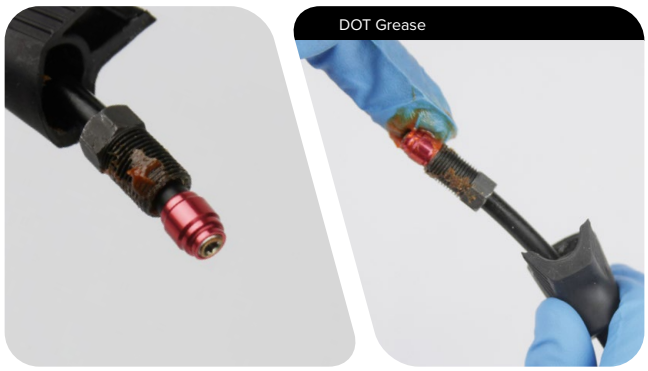


16 Install the compression nut onto the hose.

17 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.



18 Apply SRAM® DOT grease onto the compression nut and install the compression fitting and nut into the lever.

19 Use a flare nut crowfoot with a torque wrench to tighten the compression nut to 8 N·m (71 in-lb).

Spray isopropyl alcohol on the lever body and clean it with a rag.

⚠CAUTION

Servicing your brakes removes all of the fluid from the system. You must bleed the brakes after you service the brake caliper and/or lever.

For brake bleed, brake hose shortening, and brake pad replacement instructions, visit www.sram.com/service.

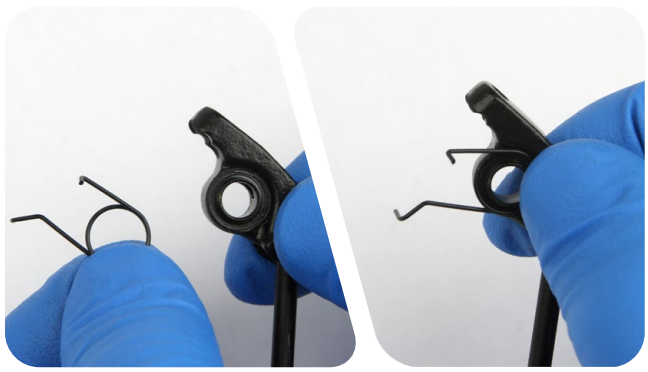
R Lever Blade Installation

1 Insert the lever blade bushings into both sides of the lever.

Steps to reassemble the R lever blade assembly:

Place the washer on the cam/push rod assembly. You may add a dab of SRAM® DOT grease to hold the washer in place.

Install the lever return spring onto the cam/push rod assembly.



While holding the cam/push rod/lever return spring/washer in place, install the assembly onto the lever blade and proceed to step 2.

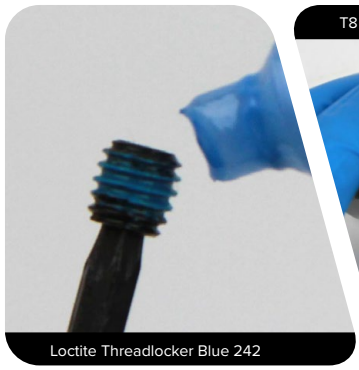
2 Insert the lever blade assembly into the lever body, placing the push rod into the piston and lever return spring on the lever body.

Make sure the lever return spring is seated properly in the lever. The outboard end of the spring must press against the lever blade, while the inboard end of the spring must press against the lever body. If the return spring is not seated properly, you will not be able to adjust the reach of the lever blade.

3 Line up the cam and lever blade with the holes in the lever body, then press the pivot pin through the holes.

4 Apply a small amount of Loctite® Threadlocker Blue 242® onto the pinch bolt.

Use a T8 TORX® wrench to thread the pinch bolt into the lever body.



5 Use a torque wrench and a T8 TORX® wrench to tighten the bolt to 1.1-1.3 N·m (9-12 in-lb).

6 Use a T8 TORX wrench to install a new binder bolt plug.

7 Press the bladder into the reservoir cap so that the bladder is properly seated and flush with the reservoir cap.

8 Insert the reservoir cap and bladder assembly onto the lever body.

9 Use a torque wrench with a T10 TORX® bit socket to tighten each reservoir cap bolt to 1.1-1.3 N·m (9-12 in-lb).

10 Cut the hose to install a new barb and compression fitting.

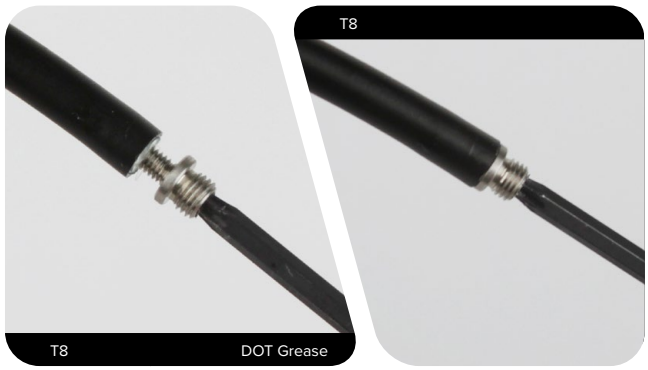
NOTICE

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

11 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.



12 Install the compression nut onto the hose.

13 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.

14 Install the compression fitting and nut into the lever.

15 Use a flare nut crowfoot with a torque wrench to tighten the compression nut to 8 N·m (71 in-lb).

Spray isopropyl alcohol on the lever body and clean it with a rag.

⚠CAUTION

Servicing your brakes removes all of the fluid from the system. You must bleed the brakes after you service the brake caliper and/or lever.

For brake bleed, brake hose shortening, and brake pad replacement instructions, visit www.sram.com/service.

Disc Brake Pad and Rotor Bed-in Procedure

All new brake pads and rotors should be put through a wear-in process called 'bed-in'. The bed-in procedure, which should be performed prior to your first ride, ensures the most consistent and powerful braking feel along with the quietest braking in most riding conditions. The bed-in process heats up the brake pads and rotors, which deposits an even layer of brake pad material (transfer layer) to the braking surface of the rotor. This transfer layer optimizes braking performance. To watch a video of the bed-in procedure, visit www.sram.com/service.

⚠WARNING- CRASH HAZARD

The bed-in process requires you to perform heavy braking. You must be familiar with the power and operation of disc brakes. Braking heavily when not familiar with the power and operation of disc brakes could cause you to crash, which could lead to serious injury and/or death. If you are unfamiliar with the power and operation of disc brakes, you should have the bed-in process performed by a qualified bicycle mechanic.

To safely achieve optimal results, remain seated on the bike during the entire bed-in procedure. Do not lock up the wheels at any point during the bed-in procedure.

- Accelerate the bike to a moderate speed, then firmly apply the brakes until you are at walking speed. Repeat approximately twenty times.
- Accelerate the bike to a faster speed, then very firmly apply the brakes until you are at walking speed. Repeat approximately ten times.
- Allow the brakes to cool prior to any additional riding.
- After the bed-in procedure has been performed, the caliper may need to be re-centered.

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