

**SRAM**

## G2 Ultimate and RSC



SERVICE MANUAL

## 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](http://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 hardware and main seals | • 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](http://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!

# TABLE OF CONTENTS

<b>SRAM G2 BRAKE SYSTEMS SERVICE.....</b>	<b>5</b>
SERVICE PROCEDURES.....	6
<b>TROUBLESHOOTING .....</b>	<b>7</b>
<b>CALIPER SERVICE .....</b>	<b>10</b>
PARTS AND TOOLS NEEDED FOR SERVICE.....	10
CALIPER EXPLODED VIEW .....	10
CALIPER BRAKE PAD REMOVAL.....	11
CALIPER PISTON REMOVAL.....	12
CALIPER PISTON INSTALLATION .....	16
<b>LEVER SERVICE .....</b>	<b>19</b>
PARTS AND TOOLS NEEDED FOR SERVICE.....	19
G2 ULTIMATE LEVER EXPLODED VIEW .....	20
G2 RSC LEVER EXPLODED VIEW .....	20
LEVER FLUID REMOVAL .....	21
LEVER BLADE REMOVAL.....	24
PISTON ASSEMBLY REMOVAL .....	26
PISTON ASSEMBLY INSTALLATION.....	29
LEVER BLADE INSTALLATION.....	33
RESERVOIR CAP INSTALLATION .....	35
BRAKE HOSE INSTALLATION .....	36
<b>DISC BRAKE PAD AND ROTOR BED-IN PROCEDURE .....</b>	<b>38</b>
<b>G2 ULTIMATE LEVER BEARING REPLACEMENT.....</b>	<b>39</b>

## SRAM G2 Brake Systems Service

We recommend that you have your SRAM G2 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](http://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](http://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 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 system. Consult the *SRAM MTB Disc Brake Hose Shortening and Bleed Manual* at [www.sram.com/service](http://www.sram.com/service).

### ⚠ 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 contaminated with mineral oil or DOT 5 fluid.

### NOTICE

The G2 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.

## Service Procedures

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

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

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.

Do not apply grease to the caliper piston seals. Grease on the seals will reduce the clearance gap between the pads and rotors when the brake is released (low pad rollback).



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.



Specified torque value in N-m (in-lb)



## 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.  
Remove the wheel from the affected caliper.
- 2 Remove the E-clip from the pad retention bolt.  
Remove the pad retention bolt from the caliper.



- 3 Remove the brake pads and pad h-spring from the caliper.



- 4 Insert two brake rotors into the caliper rotor slot.



- 5** Squeeze the brake lever to advance the pistons until they contact the rotors.  
Remove the rotors.



- 6** Use a plastic tire lever to carefully press the pistons back into the caliper.  
Repeat steps 4-6 one more time.



- 7** With the pistons pressed back into the caliper, install the brake pads, h-spring, pad retention bolt, and E-clip.



- 8** Install the wheel.





**9** Squeeze the brake lever until the contact point is firm and lever throw is acceptable.

Center the caliper on the rotor if necessary.

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 / G2 Brake Pad Kit
- Disc Brake Caliper Piston Kit - (Includes 2-16 mm & 2-14 mm Caliper Pistons, Seals & O-Rings) - Guide R, RS, RSC (A1-B1), G2 RSC/Ultimate

### Safety and Protection Supplies

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

### 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

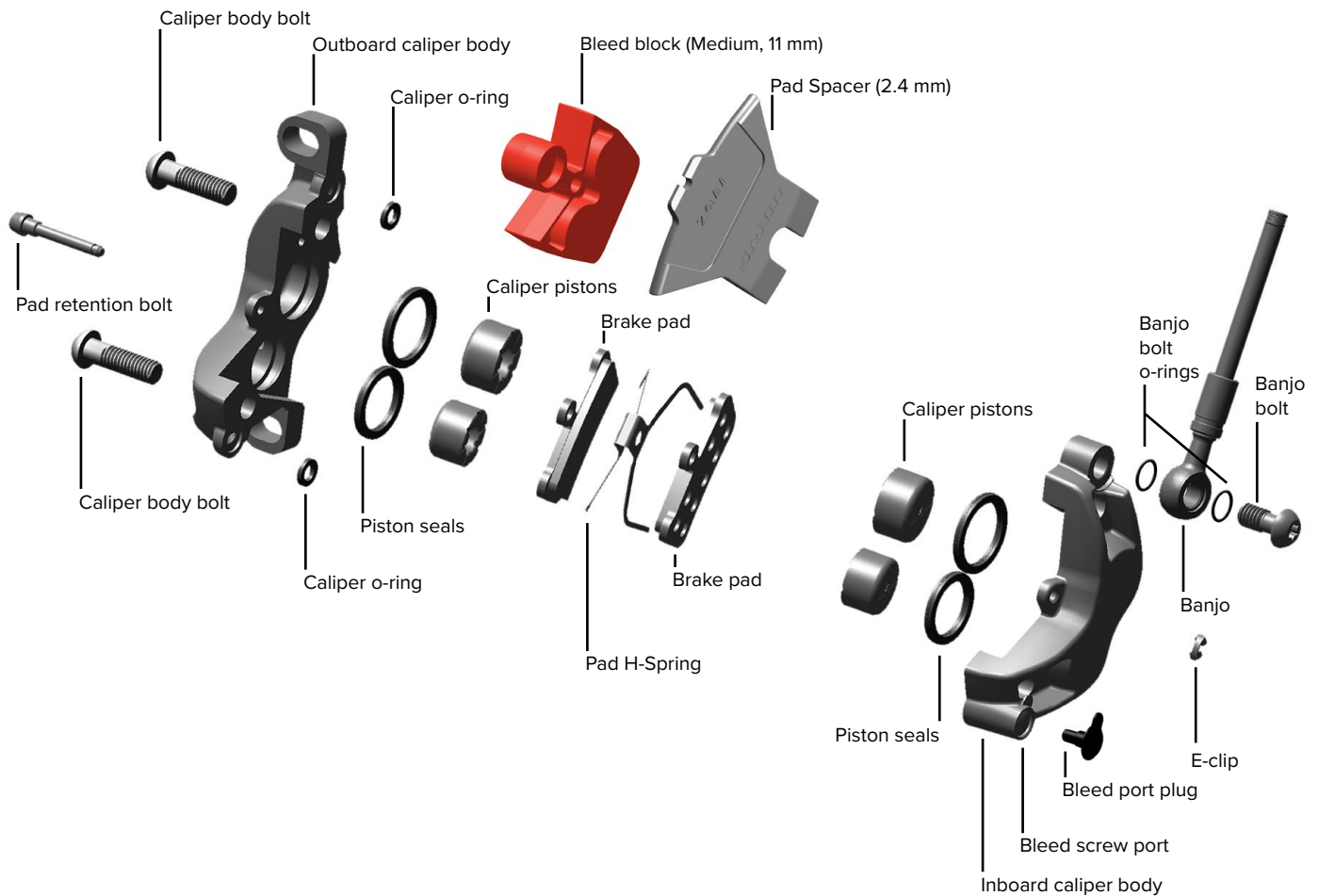
- 2.5 mm hex wrench
- Needle nose pliers
- Pick with a 90 degree bent tip
- T25 TORX wrench
- T25 TORX bit socket
- Torque wrench
- Digital caliper

### SRAM Tools

- SRAM Brake Bleed Kit (includes Medium, 11 mm Bleed Block and Bleeding Edge Fitting)
- SRAM Hydraulic Hose Cutter
- Pad Spacer (2.4 mm)

For piston removal you will need two used brake rotors with a combined total thickness of no more than 3.7 mm.

## Caliper Exploded View



## Caliper Brake Pad Removal

- 1 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 Use needle nose pliers to remove the E-clip from the pad retention bolt.  
Remove the pad retention bolt from the caliper.



- 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.



## NOTICE

Caliper service is only required if the pistons are damaged or if the system has been contaminated with DOT 5 or mineral oil. If the calipers are operating normally, they do not require disassembly and service. Clean the calipers and install brake pads.

## Caliper Piston Removal

## 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 Insert two brake rotors into the caliper and into the rotor slot.



- 2 Squeeze the brake lever to advance the pistons until they contact the rotors.  
Remove the rotors.



- 3 Install the pad retention bolt.  
Insert the pad spacer so that it snaps onto the pad retention bolt.

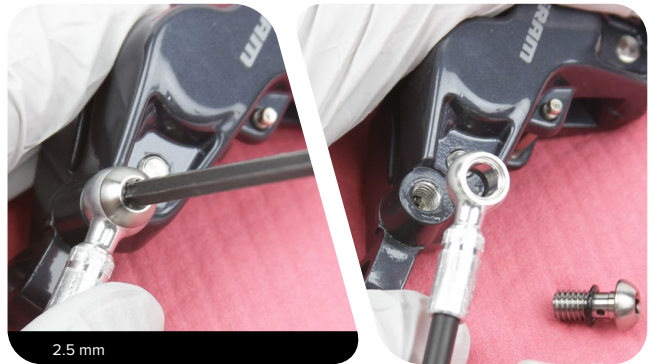


2.5 mm

- 4** Squeeze the brake lever to advance the pistons until they contact the pad spacer.



- 5** Use a T25 TORX wrench to remove the banjo bolt.

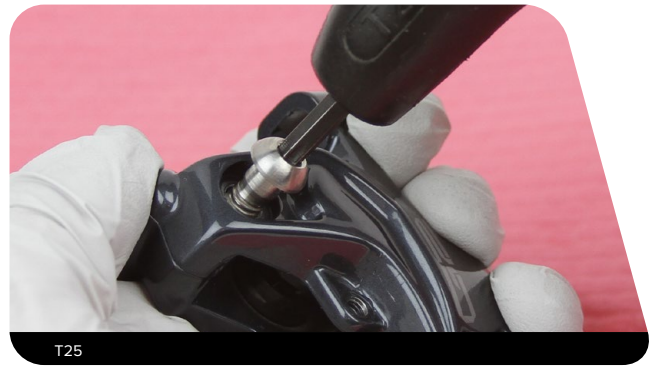


- 6** Remove the pad spacer.  
Remove the pad retention bolt.





- 7** Remove each caliper body bolt.



- 8** Separate the caliper body halves.



- 9** Remove both of the caliper o-rings from the inboard side of the caliper.



- 10** Remove the pistons from each caliper body half.

**NOTICE**

If it is not possible to remove the pistons by hand, soft-jawed pliers may be used to carefully remove the pistons.





11

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.

**NOTICE**

**Do not apply grease to the caliper piston seals. Grease on the seals will reduce the clearance between the pads and rotors when the brake is released (low pad rollback).**



Pick

## 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 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 and seals. Install the pistons into each half of the caliper body.

## 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 apply grease to the caliper piston seals. Grease on the seals will reduce the clearance between the pads and rotors when the brake is released (low pad rollback).**



- 2 Spray isopropyl alcohol on the caliper halves and both of your gloves, and clean them with a shop towel.



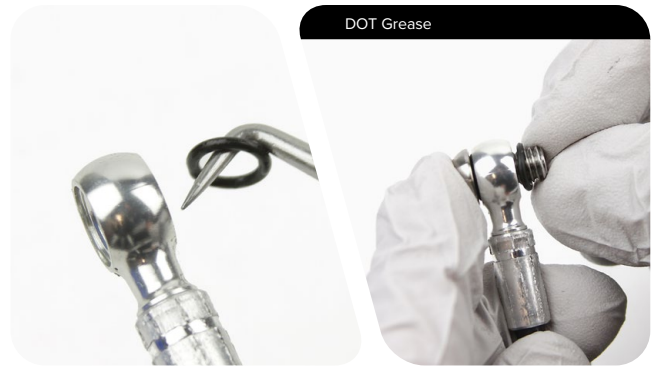
- 3 Apply a small amount of DOT grease to the new caliper o-rings and install them onto the outboard caliper half.



- 4 Align the caliper body halves then thread each body bolt into the caliper. Tighten each bolt to 11.5 N·m (101.5 in-lb).



- 5** Remove the o-rings from the banjo bolt and banjo fitting.  
Apply a small amount of DOT grease to the new o-rings and install them.



- 6** Hold the banjo at the desired angle.  
Tighten the banjo bolt to 5 N-m (44.2 in-lb).



- 7** Insert the bleed block into the caliper.



- 8** 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 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-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](http://www.sram.com/service).

## Parts and Tools Needed for Service

### Parts

- Disc Brake Lever Internals/Service Kit - (Includes Piston Assembly, Bladder & Spring) - G2 RSC/Ultimate

### Safety and Protection Supplies

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

### 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.

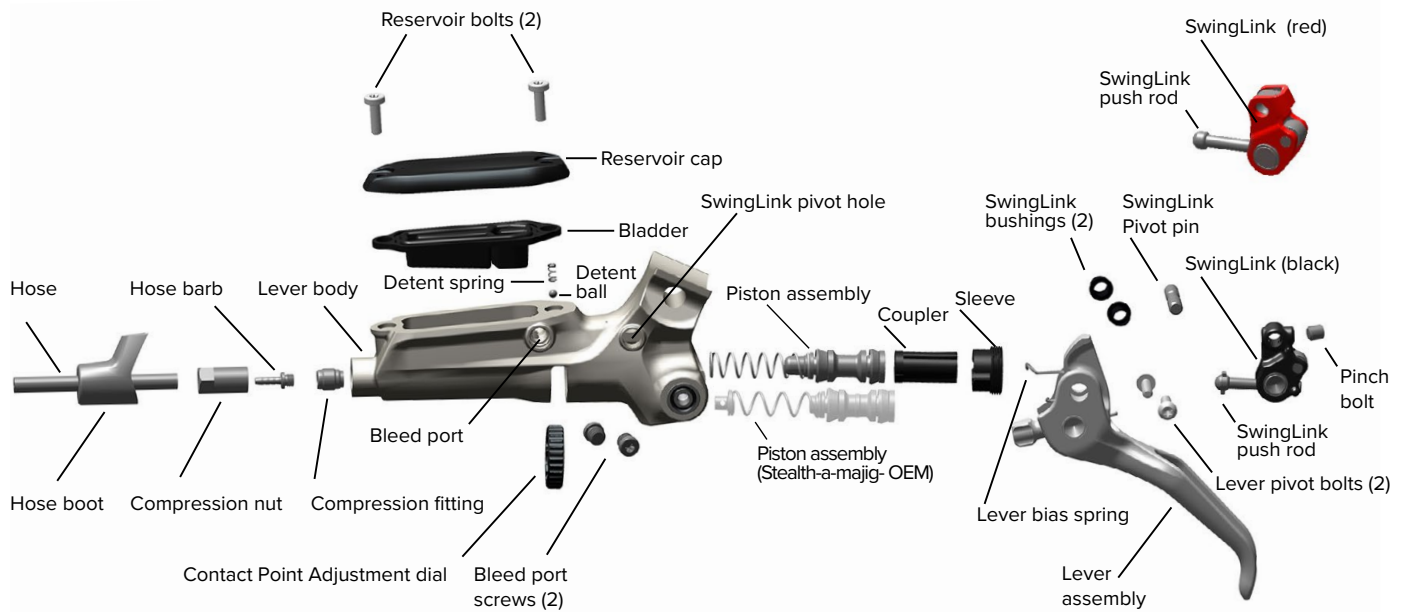
### Common Tools

- Needle nose pliers
- Pick with a 90 degree bent tip
- T8, T10, & T25 TORX wrench
- T8 & T10 TORX bit socket
- 8 mm flare nut crowfoot wrench
- 2, 2.5, & 4 mm hex wrenches
- 6 mm socket
- Torque wrench

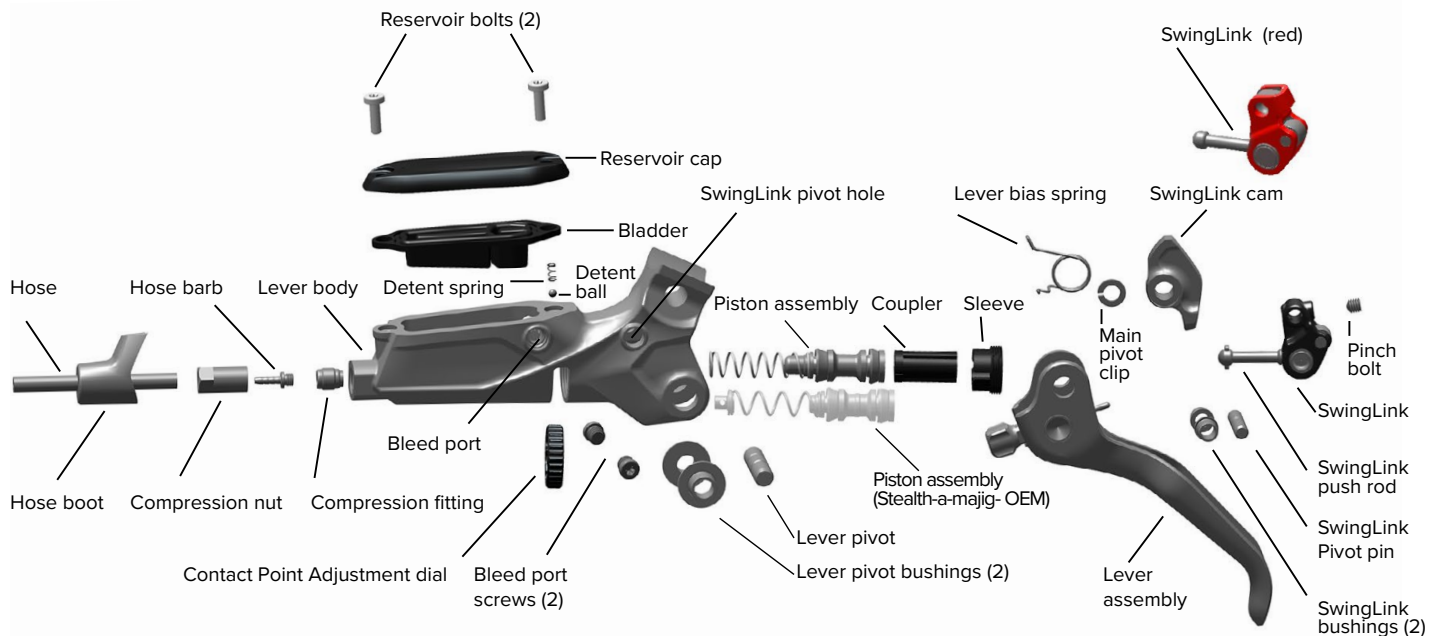
### SRAM Tools

- Lever Internals Assembly Tool - G2 RSC/Ultimate  
*(included in Lever Internals Service Kit)*
- Lever Pivot Bearing Press Tool- *for bearing replacement*
- SRAM Hydraulic Hose Cutter

## G2 Ultimate Lever Exploded View



## G2 RSC Lever Exploded View





## 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.

## NOTICE

G2 Ultimate lever bearing service does not require removal of DOT brake fluid from the lever. If you are only performing lever bearing service, please begin service at [Lever Blade Removal](#)

- 1 Use a T25 TORX wrench or a 4 mm hex wrench to remove the brake clamp bolt from the discrete clamp, MMX, or XLoc (XLoc requires removal of the shifter) and remove the brake lever from the handlebar.
- 2 Pull the hose boot off the compression nut and slide it down the hose.



- 3 Remove the hose compression nut. Pull the brake hose and compression fitting from the brake lever body.



- 4 Pour the brake fluid into an oil pan. Squeeze the lever blade to pump out the excess brake fluid from inside the lever body.

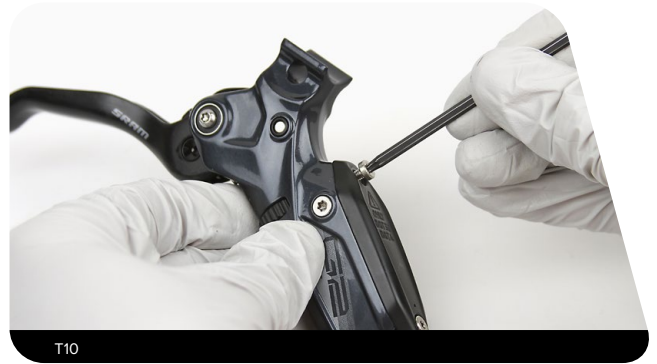
## NOTICE

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 new seals and a new hose.

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



- 5** Remove the reservoir cap bolt nearest to the lever blade.



- 6** Carefully turn the lever body upside down so that the detent spring and ball fall out of the lever body. If they do not initially fall out, gently tap the lever against a clean shop towel.



- 7** Remove the remaining reservoir cap bolt.



- 8** Remove the reservoir cover and bladder from the lever body.



- 9 Pour the fluid from the brake lever body into a pan.



- 10 Remove the two bleed screws.  
Install new o-rings and install the bleed screws into the lever body.



- 11 Separate the bladder from the reservoir cover.  
Spray isopropyl alcohol on the bladder and the reservoir cover and clean them with a shop towel.

**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.



- 1 G2 Ultimate:** Use a T10 TORX wrench to remove the lever pivot bolts.



**G2 RSC:** Place the lever pivot on top of a 6 mm socket. Tap a 4 mm hex wrench with a hammer to remove the pivot pin.



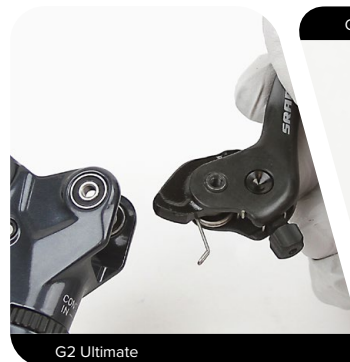
- 2** Remove the lever blade.

**G2 Ultimate:** for bearing replacement go to [G2 Lever Bearing Service, page 37](#).

If bearing service is not required, continue with Piston Assembly Removal, page 24.

**G2 RSC:** The reach adjust assembly will separate into four pieces when removed from the lever body: SwingLink cam, lever bias spring, main pivot clip, and lever assembly.

**Note:** Some versions of the G2 Ultimate and G2 RSC levers have a red SwingLink. The service procedures are the same as with the black SwingLink unless otherwise noted.



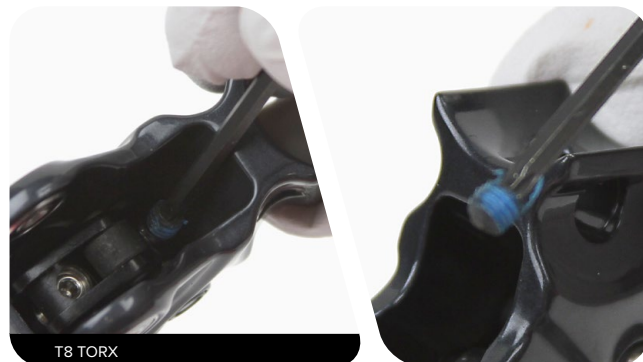
- 3** **G2 RSC:** Use a small flat blade screwdriver to carefully remove the pivot bushings. Clean the bushings and install them into the lever body.



## Piston Assembly Removal

- 1 Use a T8 TORX wrench to remove the SwingLink pinch bolt.

**Note:** The red SwingLink does not have a pinch bolt.



- 2 Use a T8 TORX wrench to push the SwingLink pivot pin out of the lever body.

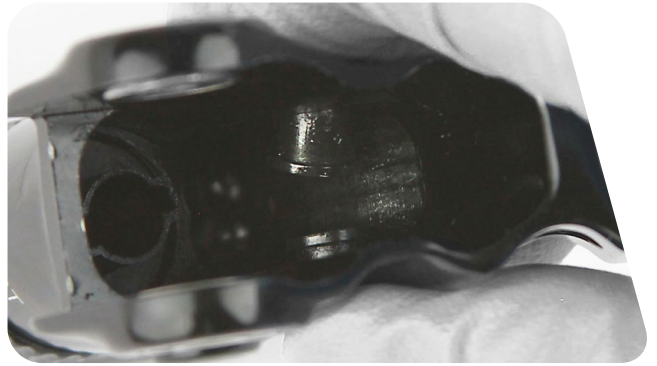


- 3 **Black SwingLink:** Use a T8 TORX wrench to remove the SwingLink.  
**Red SwingLink:** Remove the SwingLink by hand.





**4** Remove the SwingLink bushings by hand.



**5** Use a SRAM Lever Internals Assembly Tool to unthread the piston sleeve and coupler. Insert the SRAM Lever Internals Assembly Tool into the lever body and align the keyslot of the tool with the piston sleeve. Use the tool to unthread the sleeve and remove the sleeve and coupler.

*If the piston sleeve and coupler are stuck in the lever body use needle nose pliers to gently remove them from the lever body.*



**6** Remove the sleeve from the coupler by hand.  
Spray isopropyl alcohol on both the sleeve and the coupler and clean them with a shop towel.



- 7** Place a shop towel over the lever body to prevent the piston assembly spring from forcefully ejecting.

Use your hand to push out the contact adjust knob.

**⚠ CAUTION - EYE HAZARD**

Use safety glasses.

The piston assembly is spring loaded and will forcefully eject from the lever body when the contact knob is removed.



- 8** Remove the piston assembly from the lever body.



- 9** Spray isopropyl alcohol on the lever body and the lever blade and clean them with a shop towel.



## 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 the new piston assembly in SRAM High-Performance DOT brake 5.1 fluid.

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



SRAM High-Performance DOT brake 5.1 Fluid

- 2 Install the new lubricated piston assembly into the lever body. Spray isopropyl alcohol on the lever body and both of your gloves and clean with a shop towel.



- 3 Use the SRAM Lever Internals Assembly Tool to press the piston into the lever body while inserting the contact adjust knob into the contact adjust slot.

*You should hear a pop sound when the contact knob is fully seated in place.*



SRAM Lever Internals Assembly Tool

*Press down on the contact adjust knob and remove the lever internal assembly tool.*



SRAM Lever Internals Assembly Tool

- 4** Apply a thin film of DOT grease to the threads of the sleeve.



- 5** Place the sleeve on the coupler.  
*The sleeve threads must be oriented away from the base of the coupler.*



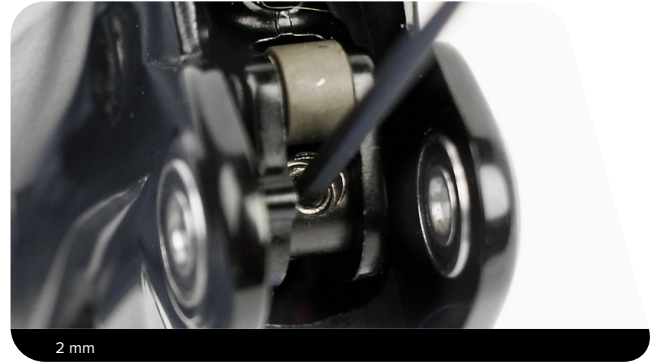
- 6** Use the SRAM Lever Internals Assembly Tool tool to engage and thread the sleeve and coupler onto the piston assembly.  
Engage the slots on the sleeve with the contact adjust knob and continue to thread the SRAM Lever Internals Assembly Tool tool in a clockwise rotation until it stops.



- 7** 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.*



- 8 Black SwingLink:** Adjust the length of the push rod on the SwingLink until it is extended as far as possible. Use a 2 mm hex wrench to place the pushrod into the coupler sleeve.



**Red SwingLink:** Place the SwingLink pushrod into the piston.



- 9** Align the holes of the SwingLink and the SwingLink bushings, then press the pivot pin into the hole until it is flush with the lever body.



- 10 Black SwingLink only:** Apply a small amount of Loctite Threadlocker Blue 242 onto the pinch bolt.



- 11 Black SwingLink only:** Use a T8 TORX wrench to thread the SwingLink pinch bolt into the lever body. Use a torque wrench and a T8 TORX bit socket to torque the bolt to 1.2 N·m (10.5 in-lb).





- 1 Insert the Reach Adjust Screw pin into the SwingLink cam hole.



- 2 Line up the pivot holes of the lever blade with the pivot holes in the lever body.



*Make sure your lever bias 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 spring is not seated properly, you will not be able to adjust the reach of the lever blade.*



**G2 RSC:** Hold the spring and main pivot clip in place while installing the lever blade.



**3**

**G2 Ultimate:** Apply a small amount of Loctite Threadlocker Blue 242 onto each pivot bolt.

Use a torque wrench and a T10 TORX bit socket to tighten each pivot bolt to 1.2 N·m (10.5 in-lb).



G2 Ultimate

Loctite Threadlocker Blue 242



G2 Ultimate

1.2 N·m (10.5 in-lb)

T10

**G2 RSC:** Use a hammer to *gently* tap the pivot pin into the pivot hole.



## Reservoir Cap Installation

- 1 Press the bladder into the reservoir cap, make sure the bladder is properly seated into the reservoir cap. The bladder should be flush with the cap.



- 2 Insert the reservoir cap/bladder assembly onto the lever body.



- 3 Install the detent ball followed by the detent spring into the lever body reservoir hole closest to the lever blade.



- 4 Use a torque wrench and a T10 TORX bit socket to tighten each reservoir cap bolt to 1.2 N·m (10.5 in-lb).



- 1 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 and a new, red SJ compression fitting 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.

Brake hoses assembled with non-Stealth-a-majig hose barbs and compression fittings, will not function.



- 2 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.



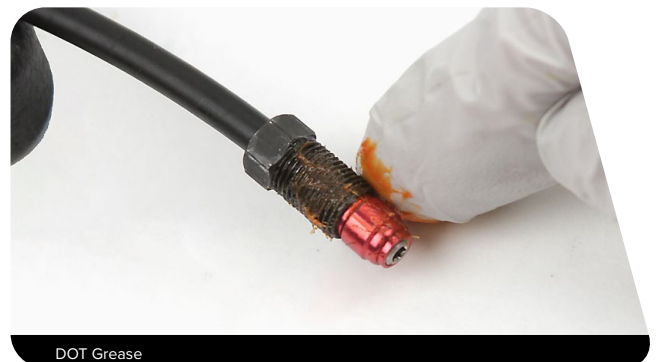
- 3 Install the compression nut onto the hose.



- 4 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.



- 5** Install the compression fitting and nut into the lever.



- 6** 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 shop towel.



**⚠ 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](http://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](http://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.



## G2 Ultimate Lever Bearing Replacement

This service requires the Lever Pivot Bearing Press Tool

- 1 Install the threaded bearing press into the lever body with the recessed face of the press facing the bearing to be removed.



- 2 Install the bearing press onto the bearing press bolt and thread into the threaded bearing press.



- 3 Tighten the bearing press bolt until the bearing is pressed through the lever body and into the threaded bearing press tool recess. Unthread the bearing press bolt to remove the tools and old bearing. Discard the bearing.

Repeat steps 1-3 to remove the other bearing.



- 4 Clean the lever body bearing bores.



- 5** To install a new bearing insert the threaded bearing press into the lever body with the flat face toward the bearing bore.



- 6** Place a new bearing into the bearing bore.  
Install the bearing press onto the bearing press bolt and thread into the threaded bearing press.  
***Do not reuse bearings that have been removed.***



- 7** Tighten the bearing press bolt until the bearing is pressed into the lever body.  
Unthread the bearing press bolt to remove the tools from the lever body.  
Repeat steps 5-7 to install the other new bearing.



To continue with lever service, go to [Piston Assembly Removal, page 24](#).

If you do not need to service your lever internals, go to [Lever Blade Installation, page 31](#) to assemble the brake lever.

**These are registered trademarks of SRAM, LLC:**

1:1®, Accuwatt®, Avid®, ATAC®, AXS®, Bar®, Bioposition®, Blackbox®, BoXXer®, DoubleTap®, eTap®, Firecrest®, Firex®, Grip Shift®, GXP®, Holzfeller®, Hussefelt®, Iclico®, i-Motion®, Judy®, Know Your Powers®, NSW®, Omnium®, Osmos®, Pike®, PowerCal®, PowerLock®, PowerTap®, Qollector®, Quarq®, RacerMate®, Reba®, Rock Shox®, Ruktion®, Service Course®, ShockWiz®, SID®, Single Digit®, Speed Dial®, Speed Weaponry®, Spinscan®, SRAM®, SRAM APEX®, SRAM EAGLE®, SRAM FORCE®, SRAM RED®, SRAM RIVAL®, Stylo®, TIME®, Truvativ®, TyreWiz®, UDH®, Varicrank®, Velotron®, X0®, X01®, X-SYNC®, XX1®, Zipp®

**These are registered logos of SRAM, LLC:**



**These are trademarks of SRAM, LLC:**

10K™, 1X™, 202™, 30™, 30 Course™, 35™, 302™, 303™, 353™, 404™, 454™, 808™, 858™, 3ZERO MOTO™, ABLC™, AeroGlide™, AeroBalance™, AeroLink™, Aire™, Air Guides™, AKA™, AL-7050-TV™, Atmos™, Automatic Drive™, AxCad™, Axial Clutch™, Base™, BB5™, BB7™, BB30™, Bleeding Edge™, Blipbox™, BlipClamp™, BlipGrip™, Blips™, Bluto™, Bottomless Tokens™, Cage Lock™, Carbon Bridge™, Centera™, Charger 2™, Charger™, Charger Race Day™, Cleansweep™, Clickbox Technology™, Clics™, Code™, Cognition™, CoLab™, Connectamajig™, Counter Measure™, CYCLO™, DD3™, DD3 Pulse™, DebonAir™, Deluxe™, Deluxe Re:Aktiv™, Descendant™, DFour™, DFour91™, DH™, Dig Valve™, DirectLink™, Direct Route™, Domain™, DOT 5.1™, Double Decker™, Double Time™, Dual Flow Adjust™, Dual Position Air™, DUB™, DUB-PWR™, DZero™, E300™, E400™, Eagle™, E-Connect4™, ErgoBlade™, ErgoDynamics™, ESP™, EX1™, Exact Actuation™, Exogram™, Flight Attendant™, Flow Link™, FR-5™, Full Pin™, G2™, G40™, Giga Pipe™, Gnar Dog™, Guide™, GS™, GX™, Hard Chrome™, Hexfin™, HollowPin™, Howitzer™, HRD™, Hybrid Drive™, Hyperfoil™, i-3™, Impress™, Jaws™, Jet™, Kage™, Komfy™, LINK™, Lyrik™, MatchMaker™, Maxle™, Maxle 360™, Maxle DH™, Maxle Lite™, Maxle Lite DH™, Maxle Stealth™, Maxle Ultimate™, MicroAdjust™, Micro Gear System™, Mini Block™, Mini Cluster™, Monarch™, Monarch Plus™, Motion Control™, Motion Control DNA™, MRX™, MX™, Noir™, NX™, OCT™, OmniCal™, OneLoc™, Paceline™, Paragon™, PC-1031™, PC-1110™, PC-1170™, PG-1130™, PG-1050™, PG-1170™, Piggyback™, Poploc™, Power Balance™, Power Bulge™, PowerChain™, PowerDomeX™, Powered by SRAM™, PowerGlide™, PowerLink™, Power Pack™, Power Spline™, Predictive Steering™, Pressfit™, Pressfit 30™, Prime™, Qalvin™, R2C™, Rapid Recovery™, Re:Aktiv ThruShaft™, Recon™, Reverb™, Revelation™, Riken™, Roller Bearing Clutch™, Rolling Thunder™, RS-1™, Rush™, RXS™, Sag Gradients™, Sawtooth™, SCT - Smart Coasterbrake Technology, Seeker™, Sektor™, SHIFT™, ShiftGuide™, Shorty™, Showstopper™, SIDLux™, Side Swap™, Signal Gear Technology™, SL™, SL-70™, SL-70 Aero™, SL-70 Ergo™, SL-80™, SL-88™, SLC2™, SL SPEED™, SL Sprint™, Smart Connect™, Solo Air™, Solo Spoke™, Speciale™, SpeedBall™, Speed Metal™, SRAM APEX 1™, SRAM Force 1™, SRAM RIVAL 1™, S-series™, Stealth-a-majig™, StealthRing™, Super-9™, Supercork™, Super Deluxe™, Super Deluxe Coil™, SwingLink™, SX™, Tangente™, TaperCore™, Timing Port Closure™, TSE Technology™, Tool-free Reach Adjust™, Top Loading Pads™, Torque Caps™, TRX™, Turnkey™, TwistLoc™, VCLC™, Vivid™, Vivid Air™, Vuka Aero™, Vuka Alumina™, Vuka Bull™, Vuka Clip™, Vuka Fit™, Wide Angle™, WiFLi™, X1™, X3™, X4™, X5™, X7™, X9™, X-Actuation™, XC™, X-Dome™, XD™, XDR™, XG-1150™, XG-1175™, XG-1180™, XG-1190™, X-Glide™, X-GlideR™, X-Horizon™, XLoc Sprint™, XPLR™, XPRESSO™, XPRO™, X-Range™, XX™, Yari™, ZEB™, Zero Loss™, ZM2™, ZR1™



Specifications and colors subject to change without prior notice.

© 2022 SRAM, LLC

**This publication includes trademarks and registered trademarks of the following companies:**

TORX® is a registered trademark of Acument Intellectual Properties, LLC

Loctite® is a registered trademark of Henkel Corporation. 2760™ is trademark of the Henkel Corporation.



---

ASIAN HEADQUARTERS

SRAM Taiwan  
No. 1598-8 Chung Shan Road  
Shen Kang Hsiang, Taichung City  
Taiwan R.O.C.

WORLD HEADQUARTERS

SRAM LLC  
1000 W. Fulton Market, 4th Floor  
Chicago, Illinois 60607  
U.S.A.

EUROPEAN HEADQUARTERS

SRAM Europe  
Paasbosweg 14-16  
3862ZS Nijkerk  
The Netherlands