

SRAM® Road

Welcome to the 2009 SRAM road collection. Featured within these pages are three complete component groupings, each different in their materials, combinations, and details, but all sharing the same purpose: to bring precision, durability, and ease of actuation to you in a light, ergonomic, and aerodynamic package that has no match.





Shifting Positions

Upshifting from the:
A1 Hoods
B1 Drops
C In Sprint

Downshifting from the:
A2 Hoods
B2 Drops

DoubleTap® Technology

What It Is: DoubleTap® is the flagship technology leading SRAM's road gruppo revolution. It's a simple yet elegant and advanced system that addresses issues that serious cyclists have faced for decades - issues that have forced compromises in performance, comfort, and weight - with a truly revolutionary new shift/brake lever design.

What It Does: DoubleTap® makes changing gears easier and faster, eliminating the cumbersome and awkward engagement associated with two-lever systems. DoubleTap's single-lever design handles up- and downshifts in one short, sweeping motion. Positive, accurate, and fast shifting is accomplished with minimal effort and maximum comfort no matter where you are on the bars.

How It Works: DoubleTap® uses two pawls, one for holding the ratchet wheel, and one for transporting it up and down through the gear change. The pawls are arranged in a way so that they can leapfrog each other depending on how far, and with how much pressure, you push the shift lever. With short, rapid taps the transport pawl (04) moves the ratchet wheel (02) up through the shifting range. Downshifting comes via a longer sweep of the lever (in the same inward direction you upshift, but to an ergonomically maximized 15° angle) with the holding pawl (03) and the transport pawl leapfrogging each other quickly and smoothly.

Location, Location, Location: DoubleTap's one-motion unidirectional levers (05) work flawlessly no matter what

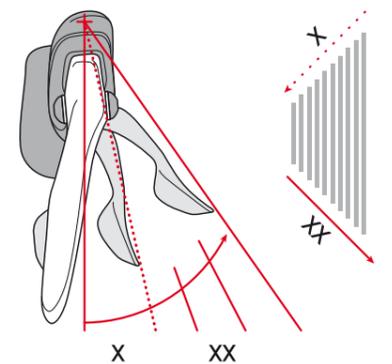
position you're shifting from. Its double-articulated design (01), which is completely separate from the brake pivot, is easily engaged from the hoods or the drops, but unlike all other forward controls, DoubleTap® also lets you pull the shift lever in against the bars so you can upshift while sprinting or attacking without giving up a firm grip or being forced into a power-robbing posture. This zero-compromise competitive advantage is worth its weight in gold whether you're racing for prizes, bragging rights, or championships.

Divide and Conquer: On DoubleTap® controls, the brake and shift levers are completely independent, each operating with their own pivot points. This not only allows for the aforementioned multiposition functionality of the shift lever, it also eliminates the risk of engaging either the brakes or shifters unintentionally - an unfortunate side effect of other shift/brake lever designs.

What It Means To You: The efficient and ergonomic design reduces weight and eliminates bulk while adding comfort. You can shift from any position on the bars, even while sprinting, giving you a critical advantage over your competition, and our new single-lever mechanism also lets you shift faster, easier, and with more accuracy, without risk of scrubbing speed or losing your grip. DoubleTap® is the cornerstone of SRAM's assault on road biking. It's a new way of shifting - and a new way of thinking - that will put you ahead of the competition, no matter where you find it.

- 01** Double-Articulated Design
- 02** Ratchet Wheel
- 03** Holding Pawl
- 04** Transport Pawl
- 05** Shift Lever

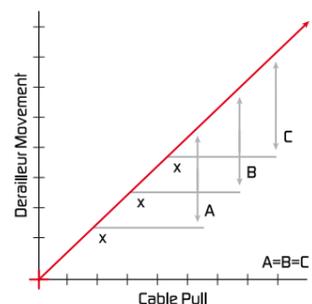
X: Short taps deliver rapid upshifting from the hoods, the drops, or in full sprint.
XX: A slightly longer sweep of the same inboard lever downshifts gears quickly, smoothly, and easily.



Technologies and Features

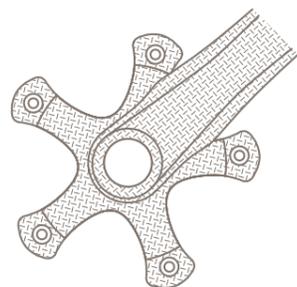
Exact Actuation™

It's a simple concept: precision equals consistency equals victory. We took a hard look at how we could improve upon an already outstanding rear derailleur design and came up with Exact Actuation, an innovation unique to SRAM Red, SRAM Force, and SRAM Rival gruppis. Exact Actuation replaces the slop and variation found in normal rear derailleurs with a system that features an identical 3mm adjustment between each gear in the 10 speed shifting range. This consistent, precise adjustment means smoother, faster, and better shifting with no variation in pull effort from gear to gear.



Integrated Carbon Spider

SRAM's new SRAM Force and SRAM PowerMeter Pro™ Cranksets are based on our new integrated carbon-spider design. The drive-side crank arm is formed with a 6K carbon-weave fabric, creating the type of strong, seamless, and flex-free structure that competitive cycling demands. As well as being exceptionally stiff, the integrated carbon spider means that the SRAM Force Crankset weighs less than cranks that utilize traditional construction techniques. Power transfer is enhanced, effort is reduced, and your riding is improved.



Ergonomics

From an industrial-design standpoint, we faced two challenges when developing the new forward controls for our road gruppis. First, we needed to condense all that technology into a small, light package, and second, we wanted to make it the most comfortable and user-friendly interface cycling has ever seen. Ergonomics became a primary concern that we attacked from three equally important directions.

01 Access:

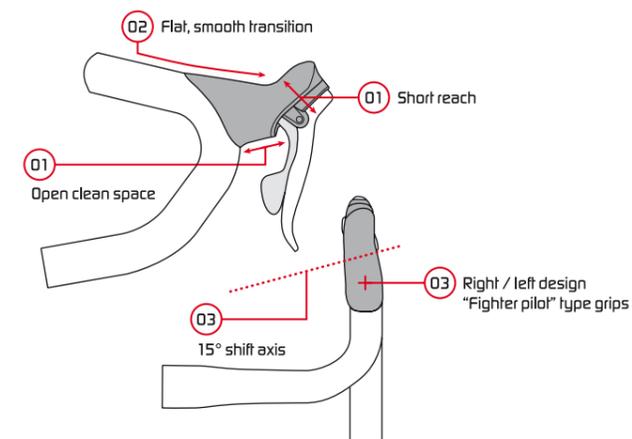
A short reach to the levers, open clean space under the hoods, and smooth, spacious handles provide easy access.

02 Transition:

A flat, smooth transition from the hoods to the bars prevents cramping and fatigue while offering a greater range of riding positions.

03 Interface:

Inspired by fighter-pilot grips, the SRAM Force DoubleTap® Controls feature asymmetric handles with 15° shift axes and optimized hood-nose shapes for unmatched comfort.



Materials



Carbon:

Thanks to our own dedicated carbon-manufacturing facility, we've mastered the fine art of making this exotic substance do exactly what we want it to. Its strategic use throughout the SRAM Red, SRAM Force, and PowerMeter components shaves weight, saves effort, and adds structural stiffness, adding up to quicker, better, and more precise response and power transfer.

- 6000 filaments per thread
- Light and stiff



Titanium:

Without a doubt, one of the strongest and lightest materials in use today, titanium sacrifices nothing when it comes to delivering performance and technological advantages unseen in other metals. Its resistance to corrosion and wear are second only to platinum and we're glad we could put it to good use here in the SRAM Red and SRAM Force lines.

- Aerospace-engineered, with an unmatched strength-to-weight ratio
- Corrosion-resistant



Aluminum:

Heavily utilized thanks to its light weight, durability, and strength, aluminum is a go-to material in both the SRAM Force and SRAM Rival gruppis. Check out SRAM's Open Core Technology on the new SRAM Rival Crankset for a window into where we're heading with this legendary metal.

- Lightweight
- Durable and strong



Magnesium:

Magnesium provides a significant strength-to-weight advantage over other metals and alloys. It has proved itself via widespread use in aerospace and exotic automotive applications and is a natural choice when high performance is your main concern.

- Superior strength and light weight
- 1/3 the weight and 2/3 the density of aluminum





SRAM Red™

See Red. When the pursuit of victory becomes so focused and single-minded that nothing else matters.

Inspired by the search for competition-vanquishing advantages, SRAM has created a world where high-performance race-ready componentry is taken one step beyond. SRAM Red is a living lab focused on the design, development, and improvement of already-revolutionary technology.

SRAM Red components are crafted with three major ideas in mind:

- Light weight: Engineered materials with a balanced minimalist design. The first true sub-1900g* gruppo!
- Higher efficiency: Component interaction, customizability and adjustment, feel, geometry, ergonomics, and fine-tuned gear ranges mean you go faster, longer, with less energy.
- Advanced materials: From materials like carbon, titanium, and ceramic bearings all the way to standard-setting surface finishes.

SRAM Red's holistic approach delivers unmatched responsiveness and optimized gruppo performance with innovative design and feel. SRAM Red is produced in limited runs for riders who truly appreciate and demand every possible advantage.



* with BB30



SRAM RED™



DOUBLETAP® CONTROLS

Competition improves the breed: SRAM Red DoubleTap® controls break new ground in materials applications and design for even better performance and customized comfort.

Driven by the project's goals of light weight, higher efficiency, and advanced materials, for the second year in a row we've created the lightest, most advanced shifter in the world. Built around SRAM's revolutionary DoubleTap® technology, the new SRAM Red DoubleTap® controls are designed to exceed the needs of even the most serious racers. The SRAM Red Shifter uses a highly developed version of DoubleTap®, which is enhanced by new pawl geometry that results in zero-loss travel. Additionally, the SRAM Red front shifter mechanism gains a new trim feature to optimize chainring selection. With less effort, SRAM Red controls deliver faster shifts, more precisely.

The shifter's ergonomic design factors in comfort and light weight, with a ground-breaking brake and shift lever reach adjustment capability that allows you to achieve

a more natural, aggressive, and comfortable riding position. Additional refinements in the lever's design further improve shifting efficiency and performance, as does an even lower weight than its already-light SRAM Force counterpart. These refinements include Dual Cable Routing, so no matter what type of bars you use, you don't have to compromise comfort for performance. SRAM Red DoubleTap® controls also take advantage of a redesigned trim feature that gives you precise adjustment and greater compatibility with the big ring. For riders who want it all, your next gruppo begins here.

SRAM Red controls get even more smooth with the addition of GORE® RideOn® cables. The cables are engineered for the most demanding applications to meet most rigorous performance requirements of all riders. The cables feature a patented coating technology that significantly lowers friction, producing quick, precise and predictable movements.



- 01 Proprietary DoubleTap® mechanism with ZeroLoss™ technology delivers smooth up- and downshifts in one motion
- 02 Revolutionary ergonomic design is comfortable, with the added benefit of custom-tunable reach adjust, while weighing only 280g
- 03 Ultra-strong carbon brake lever and shift lever are light, stiff, and comfortable

Technology	DoubleTap® with ZeroLoss Technology
Speeds	10 rear / Double FC front
Weight	280g
Material	Carbon Brake Lever / Carbon Shift Levers
Compatibility	SRAM Red, SRAM Force, and SRAM Rival Front and Rear Derailleurs SRAM and industry-standard 10 speed cassettes



SRAM RED™

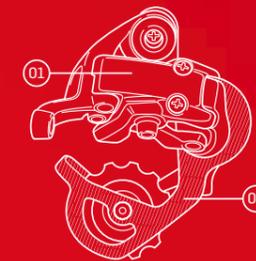


REAR DERAILLEUR

Material makes the difference: Exact Actuation™ combined with materials upgrades yields world-beating performance and weight savings.

Light weight, precision, and fluid performance put the new SRAM Red Rear Derailleur in a class of its own. Based on the already-superior design of the SRAM Force

Rear Derailleur, the Red offering delivers even greater advantages thanks to a diet of structural carbon and titanium. Hybrid ceramic bearing pulleys and titanium parallelogram pivot bearing refinements further supercharge the overall component speed, accuracy, and durability. Amazingly, these design choices yield an astonishing 153g mechanism.



- 01 Exact Actuation means precise, even gear changes throughout the shifting range
- 02 Carbon-fiber cage and carbon-fiber inner link provide strength and light weight

Technology	Exact Actuation
Speeds	10
Weight	153g
Material	Aluminum B-Knuckle, Carbon-Fiber Inner Link, Titanium Parallelogram Spring, Ceramic Cartridge Bearing, Carbon-Fiber Cage, BlackBox™ Ceramic Bearing Pulleys
Compatibility	Max tooth 28T

FRONT DERAILLEUR

SRAM's Red Front Derailleur takes precision shifting to its limits, offering the smoothest up- and downshifting. Bolstered by a NEW hardened titanium cage, shifting and trimming are fast, easy, and smooth as silk across the entire range for both traditional and compact ring sets.



- 01 SRAM actuation maintains proper balance between upshifting and downshifting

Technology	SRAM actuation
Speeds	Double front chainring
Weight	58g braze-on, 72g clamp-band
Material	Aluminum / Hardened Titanium Cage
Compatibility	50/34, 50/36, 53/39, max 16T



SRAM RED™

CRANKSET

Putting the power to the pavement: the stiff, smooth, and strong SRAM Red Crankset is poised to dominate.

Fatigue, flex, and friction, enemies all, and they'll rob you of speed and performance over both the short and long hauls. The SRAM Red Crankset does its part to keep them from affecting your ride. The integrated carbon spider's design is lightweight and extremely stiff, allowing for instant, efficient power transfer.

Speed-sapping friction? The Red Crankset virtually eliminates it with new hybrid ceramic bearings housed within the GXP™ BB's case. Ceramic bearings ride in a stainless steel race, are more efficient, use a lighter seal, and are lighter, stiffer, and longer-lasting than normal bearings.

Matched to the new crankset is an equally revolutionary pair of chainrings. Optimized exclusively for Red components, they're stiffer than anything ever before, for greater efficiency as well as incredible power-transfer ability.

The end result: a crank that's evolutionary in its design and revolutionary in its ability to put you at the front of the pack no matter which size you choose.

NEW: BB30 BOTTOM BRACKET

NEW larger diameter bottom bracket (BB) delivers weight saving stiffness. The SRAM Red group is now the worlds first sub 1900g.

A new international standard option to the bottom bracket market is the BB30, which delivers several advantages over the current 24mm's. From improved stiffness to a narrower profile, numerous leading manufacturers have adopted this new option. SRAM will offer the BB30 in its 2009 product line as part of the RED gruppo, providing both crank and bottom bracket availability.



- 01 The integrated carbon-spider construction is light and stiff for greater power transfer with less effort
- 02 New Red PowerGlide™ chainrings are designed to professional-grade shift, stiffness, and durability standards

The facts of BB30:

- Narrower profile (low Q)
- Lighter than standard 24's
- Improved stiffness
- Larger bearings
- Longer bearing life

Arm Material	Carbon
Chainring Material	AL 7075-T6 Aluminum / Alloy
Weight	760g w/ BB
Available Arm Lengths	165, 170, 172.5, 175, 177.5mm
Available Ratios	53/39 and compact drives 52/36 and 50/34
Compatibility	GXP Team BB w/ BlackBox™ Ceramic Bearings





OG 1090 CASSETTE

We took the standard cassette and turned it inside out!

There are times when the simplest solution is the best one. In the case of the new OG 1090 Cassette, simplicity also means elegance, efficiency, and performance. We took up the challenge of re-engineering the cassette from a component made up of many parts down to stripped-down but exceptionally strong set of cogs that stick firmly to SRAM Red's core principles of light weight, higher efficiency, and maximized technologies.

The main cogset of the OG 1090 cassette is machined out of a single forged form that is heat treated and then shaped in a complex series of CNC-guided operations never before seen in this type of application. This is truly a revolutionary design that will take you by surprise with its ingenious simplicity. The sprockets themselves (including two free cogs) have all been designed with SRAM's proprietary OpenGlide™ design for smooth-as-silk up- and downshifts. Weight, stiffness, and strength-wise, the radical OG 1090 Cassette delivers titanium's desirable weight, with solid steel's superior strength and stiffness.



PowerDome Technology



- lightweight: Innovative CNC'd chromoly steel construction.
- Durable: 35% harder than titanium! Capped with a premium electroless nickel finish.
- Stiff: 15% stronger than its nearest competitor due to the one piece construction.

OpenGlide Technology



- OpenGlide technology allows for the smoother transition between gears when up- and downshifting
- OG 1090 design merges stiffness, durability, and simplicity in a revolutionary new package

Speeds	10
Weight	155g / 11-23, 166g / 11-26
Recommended Chain	PC 1090R, PC 1090, PC 1070
Lock Ring Material	Aluminum Anodized
Sprocket Material	Heat-Treated Steel
Available In	11, 12, 13, 14, 15, 16, 17, 19, 21, 23 11, 12, 13, 14, 15, 17, 19, 21, 23, 25 11, 12, 13, 14, 15, 17, 19, 21, 23, 26 11, 12, 13, 14, 15, 17, 19, 22, 25, 28

PC 1090 POWERCHAIN™

Integration means domination: a chain designed for specific and seamless use with OpenGlide™ technology.

"A chain is only as strong as its weakest link" - SRAM took this to heart when we designed our innovative new 10

speed PowerChain featuring the PowerLock™ connecting link. The HollowPin™ construction provides smooth, precise shifting and weight savings without sacrificing strength. Plus, it's the only 5.9mm chain with a secure, tool-less attachment device that you'll find in cycling today.

PowerLock™ Technology



- PowerLock connecting link PC 1090
- HollowPin construction allows for uncompromised performance, strength, and light weight
- Compatibility extends to industry-standard 10 speed systems
- Easy-to-use tool-less connection is reliable and unique to SRAM

Compatible Gears	10
Model	PC 1090
Closing Link	PowerLock
Outer Plate	Nickel silver
Inner Plate	Nickel silver
Pin Treatment	Chrome-hardened pins
Recommended Group	SRAM Red / SRAM Force / SRAM Rival, HG, EXA-Drive compatible
Chain Weight	257g (114 links)



SRAM Red



BRAKESET

Fine-tuned stopping power you can depend on: the SRAM Red Brakeset.

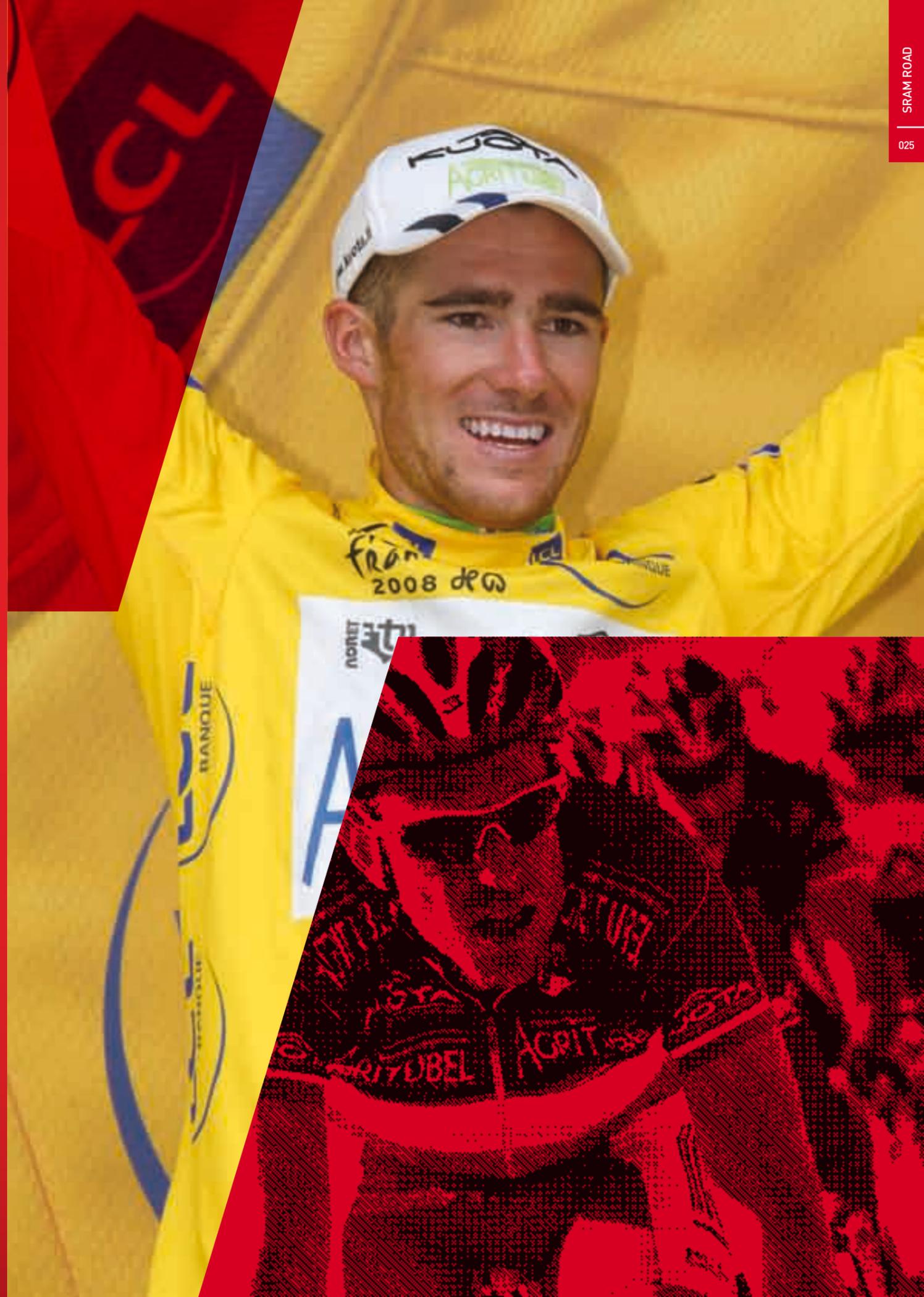
The perfect complement to the Red gruppo's ability to gather and maintain speed, the Red Brakeset offers superior stopping power and modulation in a light, wind-cheating package. Based on a new, upgraded version of

SRAM's race-proven skeletonized Dual Pivot design, these brakes bring cold-forged aluminum arms, alloy pivot bolts, and an easy-to-adjust padset together for maximum effectiveness with minimum weight. Plus, modulation and power control are feather-light and extremely weather-proof, a benefit of their new high-precision bearings.



01 Dual Pivot design increases braking power and enhances progressive feel

Technology	Skeletonized Dual Pivot design w/ convex washers
Weight	265g
Material	Cold-Forged Arms / Alloy Pivot Bolt
Pad / Holder	SRAM compound w / adjustable cartridge holder (Carbon rim pad option available)
QR	Indexed





SRAM FORCE™

Jump in with both feet. Swing for the fences. Shoot for the moon. All clichés aside, when we decided to create a road gruppo, there was only one way - the SRAM way - for us to do it. If you haven't already seen or heard of it, let us introduce you to the SRAM Force gruppo. SRAM Force is the pinnacle: a cost-be-damned collection of components, led by our revolutionary DoubleTap® controls, designed for professionals who value innovation and who seek out each and every competitive advantage they can get. If you live, ride, and thrive at the far end of the cycling spectrum, SRAM Force is for you.





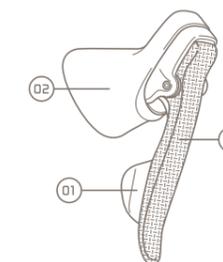
DoubleTap® Controls

SRAM Force DoubleTap® controls put the revolutionary competitive advantage of DoubleTap® technology right at your fingertips. SRAM Force maintains its carbon looks, super lightweight, and ProTour proven durability. Added this year is Zero Loss shifting, which engages front shifts immediately. And, like SRAM Red, SRAM Force moves the front trim position to the big ring. Added cable routing options allows for both brake and shifter cables to run along either side of the handlebar. **SRAM Force also incorporates the popular**

reach adjust feature, which SRAM invented, and allows riders to customize their brake and shift levers. Now every rider has a choice on positioning their DoubleTap® levers. SRAM Force DoubleTap® controls utilize single levers that move in one direction for both up and downshifting, seamlessly and ergonomically combined with dedicated levers for braking; the shift lever is close to the bar with an optimized 15° sweep, providing the rider with superior drivetrain control even in the most demanding competitive situations.

- 01 Proprietary DoubleTap® technology delivers smooth up- and downshifts in one motion
- 02 Ergonomic design is comfortable, aerodynamic, and hides all cables, while weighing only 303g
- 03 Carbon Brake Lever and Magnesium Shift Lever are light, stiff, and comfortable

Technology	DoubleTap®
Speeds	10 rear / Double FC front
Weight	303g
Material	Carbon Brake Lever / Magnesium Shift Lever / Titanium
Compatibility	SRAM Red, SRAM Force and SRAM Rival Front and Rear Derailleurs SRAM and industry-standard 10 speed cassettes





Rear Derailleur

Crisp, clean, correct shifting, always: the most precise gear change in cycling is here in the new SRAM Force Rear Derailleur.

The SRAM Force Rear Derailleur represents the same design philosophy that yielded our best-in-class products for the MTB market. The SRAM Force Rear Derailleur takes advantage of Exact Actuation™, an actuation ratio that delivers precise 3mm shifts in every gear along with the widest range of adjustment available, delivering the best 10 speed performance in the sport.

The SRAM Force Rear Derailleur is crafted with cutting-edge materials, including a carbon-fiber outer cage and a magnesium inner link, resulting in an impressively light 178g weight.



Front Derailleur

Light materials and light-effort shifting deliver a heavy advantage.

The SRAM Force Front Derailleur achieves the critical balance between positive downshifts and light-action upshifts. It features a unique SRAM actuation ratio, professionally engineered cage design, and intuitive adjusters, maximized for 10 speed drivetrains. Working in tandem with the SRAM Force DoubleTap® controls, the SRAM Force Front Derailleur also allows you to trim your shifting for seamless gear changes across multiple cogs.

One size fits all on the new SRAM Force Front Derailleur: utilizing a standardized design that shifts perfectly with both traditional-size chainrings as well as the new popular compact-size ring sets, the new SRAM Force Front Derailleur establishes itself as a legitimate high-performance product.

Available in both braze-on and clamp-band mounting.



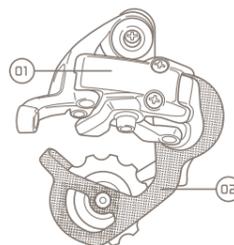
Crankset

Competition-focused technology for serious riders: light weight, strength, and durability come together in the SRAM Force Crankset.

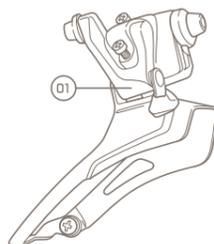
perfected in our own dedicated carbon-fiber manufacturing facility, allows for a one-piece design that's lighter and stiffer than traditional cranks. The arms are finished with a woven graphite sheet and clear coat for a deep, lustrous finish. The SRAM Force Crankset uses our exclusive hard-anodized PowerGlide™ chainrings for long-lasting performance.

Thanks to its integrated carbon-spider design, the SRAM Force Crankset weighs in at only 791g with BB. A 6K carbon weave, developed and

- 01 Exact Actuation means precise, even gear changes throughout the shifting range
- 02 Carbon-fiber outer cage and magnesium inner link provide strength and light weight



- 01 SRAM actuation maintains proper balance between upshifting and downshifting

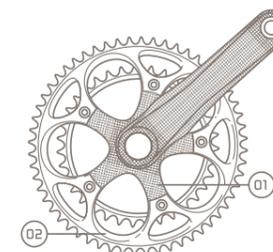


Technology SRAM actuation
Speeds Double front chainring
Weight 88g braze-on, 102g clamp-band
Material Aluminum / Steel Cage
Compatibility 53/39, 50/36, 50/34, max 16T

Technology Exact Actuation
Speeds 10
Weight 178g
Material Aluminum B-Knuckle, Magnesium Inner Link, Carbon / Aluminum Cage
Compatibility Max tooth 28T

- 01 The integrated carbon-spider construction is light and stiff for greater power transfer with less effort
- 02 PowerGlide chainrings are competition proven with long-lasting finishes

Arm Material Carbon / 6K weave
Chainring Material NEW / PG Chainrings w/ Hard-Anodized Coating / Alloy Chainring Bolts
Weight 791g full size / 780g compact (w/ BB)
Available Arm Lengths 170, 172.5, 175, 177.5mm
Available Ratios 53/39 and compact drives 50/36 and 50/34
Compatibility GXP™ Team BB



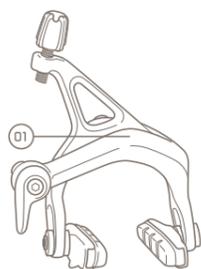


Brakeset

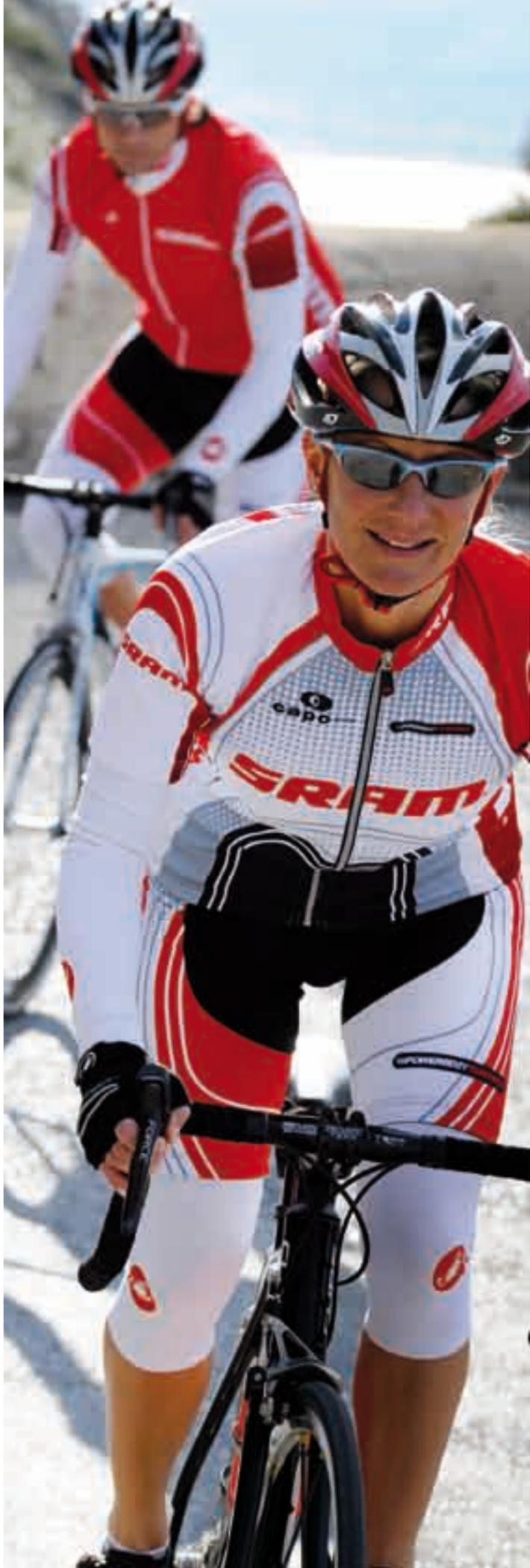
The only brakes strong enough to control the SRAM Force gruppo.

The new SRAM Force Brakeset was designed with light weight, performance, and streamlined aesthetics as our guiding principles. Featuring Dual Pivot performance and a proprietary pad compound, the SRAM Force Brakeset delivers high power with low weight. Intelligent engineering combines cold-forged arms, titanium main pivot bolts, and a powerful return spring for positive engagement and release.

01 Dual Pivot design increases braking power and enhances progressive feel



Technology Skeletonized Dual Pivot design with convex washers
Weight 280g
Material Cold-Forged Arms / Titanium Pivot Bolt
Pad / Holder SRAM compound with adjustable cartridge holder
QR Indexed



OG 1070 OpenGlide™ Cassette and PC 1070 PowerChain™

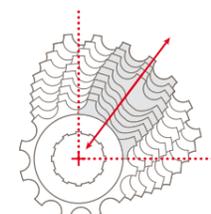
Integration means domination: a chain and cassette combination that could only come from SRAM.

To take full advantage of the power and promise of the SRAM Force gruppo, you need a cassette and chain that are up to the task. With the new OpenGlide 1070 Cassette's semi-spidered design, we've removed specific sections of material from the smaller cogs, creating a cogset that shifts efficiently and positively in all situations.

"A chain is only as strong as its weakest link" - SRAM took this to heart when we designed our innovative new 10 speed PowerChain featuring the PowerLock™ connecting link. The HollowPin™ construction provides smooth, precise shifting and weight savings without sacrificing strength. Plus, it's the only 5.9mm chain with a secure, tool-less attachment device that you'll find in cycling today.

OpenGlide Technology

The unique, simple, and efficient removal of material from each of the smaller cogs in the cassette allows the smoother transition between gears when up- and downshifting.

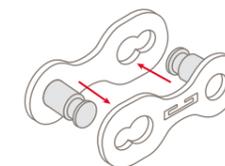


- OpenGlide technology allows for the smoother transition between gears when up- and downshifting
- Semi-spidered design is light, strong, and efficient

Speeds	10
Recommended Chain	PC-1090R, PC-1090, PC-1070, PC-1050, PC-1030
Sprockets on Spider	3
Lock Ring Material	Forged 7000 Series Alloy
Sprocket Material	Heat-Treated Steel
Cassette Weight	210g (11-23)
Available In	11, 12, 13, 14, 15, 16, 17, 19, 21, 23 11, 12, 13, 14, 15, 17, 19, 21, 23, 25 11, 12, 13, 14, 15, 17, 19, 21, 23, 26 11, 12, 13, 14, 15, 17, 19, 22, 25, 28 12, 13, 14, 15, 16, 17, 19, 21, 23, 25 12, 13, 14, 15, 16, 17, 19, 21, 23, 26 12, 13, 14, 15, 16, 17, 19, 21, 24, 27

PowerLock Technology

SRAM's unique, tool-free PowerLock connecting pin is light, quick, and easy to use.



- HollowPin construction allows for uncompromised performance, strength, and light weight
- Compatibility extends to industry-standard 10 speed systems
- Easy-to-use tool-less connection is reliable and unique to SRAM
- PowerLock connecting link

Compatible Gears	10
Model	PC 1070
Closing Link	PowerLock
Outer Plate	Nickel silver
Inner Plate	Gray
Pin Treatment	Chrome-hardened pins
Recommended Group	SRAM Force / Shimano® 10 speed compatible
Chain Weight	257g (1070 / 114 links)



SRAM RIVAL

SRAM launched SRAM Rival, along with SRAM Force, in 2006. For 2009 both will be re-launched with several added features and technology upgrades. Obviously the polished black anodized finish of the new SRAM Rival sets it apart, but that's only the beginning. Borrowing from SRAM's professional level RED group, SRAM Rival now features a sleek carbon brake lever, Zero Loss shifting, multiple cable routing options, and reach adjust for both the shift and brake levers.

The new carbon brake lever lightens the control by 40 grams, delivers better tactile feel, and just looks pro. Zero Loss front shifting engages shifts immediately and can be found on SRAM Rival front only. Additionally, SRAM Rival moves the front trim position to the big ring. Added cable routing options allows for both brake and shifter cables to run along the front or back of the handlebar.

SRAM's popular reach adjust feature, available only on SRAM's DoubleTap® shift levers, allows riders to customize their SRAM brake and shift levers for a perfect fit. Whether its smaller hands, Cross racing, or just customizing your lever spacing, every rider now has a choice on positioning their levers.

SRAM introduced OCT (Open Core Technology) into MTB and then brought it to road. Now it's lighter, stiffer and sexier in the new SRAM Rival line-up. The hollow-forged aluminum cranks lose 40 grams from its predecessor, and comes in 110 and 130 BCD. Crank lengths range from 165 to 180cm.





DoubleTap® Controls

Durable, light, and lightning fast: the gear change that will change the way you ride.

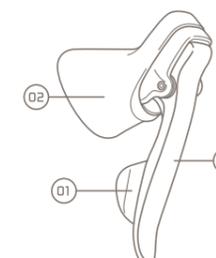
Built around SRAM's DoubleTap® technology, SRAM Rival DoubleTap® controls offer a performance advantage that other competition-level shifters can't touch. Added this year is Zero Loss shifting, which engages front shifts immediately. And, like SRAM Red, SRAM Rival moves the front trim position to the big ring. Added cable routing options allows for both brake and shifter cables to run along either side of the

handlebar. **SRAM Rival also incorporates the popular reach adjust feature**, which SRAM invented, and allows riders to customize their brake and shift levers.

Now every rider has a choice on positioning their DoubleTap® levers. SRAM Rival DoubleTap® controls utilize single levers that move in one direction for both up and downshifting, seamlessly and ergonomically combined with dedicated levers for braking; the shift lever is close to the bar with an optimized 15° sweep, providing the rider with superior drivetrain control, even in the most demanding competitive situations.

- 01 Proprietary DoubleTap® technology delivers smooth up- and downshifts in one motion
- 02 Ergonomic design is comfortable, aerodynamic, and hides all cables, while weighing only 320g
- 03 Aluminum brake and shift levers are light, strong, and comfortable

Technology	DoubleTap®
Speeds	10 rear / Double FC front
Weight	320g
Material	Carbon Brake Lever / Aluminum Shift Lever
Compatibility	SRAM Red, SRAM Force and SRAM Rival Front and Rear Derailleurs Industry-standard 10 speed cassettes

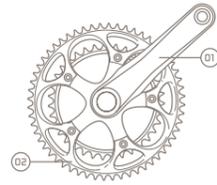




Crankset OCT Crankset

Putting the power to the road.

The SRAM Rival OCT Crankset shows the way forward for any serious cyclist, putting power to the road while saving weight at the same time. Utilizing Open Core Technology, the OCT Crankset's crank arms are hollow-forged out of AL-6066 alloy for maximum strength and mount our new PowerGlide™ 10 speed chainrings. The package, weighing only 830g, is finished off with SRAM's GXP™ bottom bracket, which has been designed to increase power transfer and rigidity while reducing component wear. For riders who want the power transfer and performance but don't demand the weight savings, SRAM offers the SRAM Rival crankset in a solid-core version.



- 01 OCT construction is stronger and lighter than standard solid-core alloy cranks
- 02 PowerGlide chainrings are competition proven with long-lasting finishes

Arm Material	AL-6066/Polished
Chaining Material	PG Chainrings w/ Hard-Anodized Coating
Weight	830g w/ BB
Available Arm Lengths	165, 170, 172.5, 175, 177.5, 180mm
Available Ratios	53/39 and compact drives 50/36 and 50/34
Compatibility	GXP Team BB

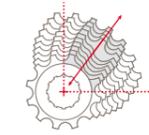


OG 1070 OpenGlide™ Cassette

OpenGlide, the key to smooth performance in competition and on the open road.

To take full advantage of the power and promise of the SRAM Rival gruppo, you need a cassette and chain that are up to the task. With the new OpenGlide 1070 Cassette's semi-spidered design, we've removed specific sections of material from the smaller cogs, creating a cogset that shifts efficiently and positively in all situations.

- OpenGlide technology allows for the smoother transition between gears when up- and downshifting
- Semi-spidered design is light, strong, and efficient



OpenGlide Technology

The unique, simple, and efficient removal of material from each of the smaller cogs in the cassette allows the smoother transition between gears when up- and downshifting.

Speeds	10
Recommended Chain	PC-1090R, PC-1090, PC-1070, PC-1050, PC-1030
Sprockets on Spider	3
Lock Ring Material	Forged 7000 Series Alloy
Sprocket Material	Heat-Treated Steel
Cassette Weight	210g (11-23)
Available In	11, 12, 13, 14, 15, 16, 17, 19, 21, 23, 11, 12, 13, 14, 15, 17, 19, 21, 23, 25, 11, 12, 13, 14, 15, 17, 19, 21, 23, 26, 11, 12, 13, 14, 15, 17, 19, 22, 25, 28, 12, 13, 14, 15, 16, 17, 19, 21, 23, 25, 12, 13, 14, 15, 16, 17, 19, 21, 23, 26, 12, 13, 14, 15, 16, 17, 19, 21, 24, 27.



Rear Derailleur

Supercharged shifting with bulletproof precision.

Sacrifice nothing...not durability, dependability, or performance - nothing. The SRAM Rival Rear Derailleur matches SRAM's Exact Actuation™ with tried-and-true competition-proven design and construction. Exact Actuation delivers even gear changes over the entire shifting range via a precise 3mm adjustment from gear to gear. Maximized for 10 speed systems, the SRAM Rival's design is descended from SRAM's legendary MTB rear derailleurs. It weighs only 188g but features an all-aluminum B-Knuckle inner link and cage that can stand up to any serious rider's demands.



- 01 Exact Actuation means precise, even gear changes throughout the shifting range
- 02 Aluminum cage and inner link allow for weight savings with added structural integrity

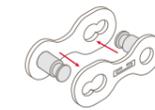
Technology	Exact Actuation
Speeds	10
Weight	188g
Material	Aluminum B-Knuckle, Inner Link, and Cage
Compatibility	Max tooth 28T

PC 1030 PowerChain™

Integration means domination: a chain designed for specific and seamless use with OpenGlide technology.

"A chain is only as strong as its weakest link" - SRAM took this to heart when we designed our innovative new 10 speed PowerChain featuring the PowerLock™ connecting link. The HollowPin™ construction provides smooth, precise shifting and weight savings without sacrificing strength. Plus, it's cycling's only 5.9mm chain with a secure, tool-less attachment device.

- Compatibility extends to industry-standard 10 speed systems
- Reliable tool-less connection is unique to SRAM
- PowerLock connecting link



PowerLock Technology

SRAM's unique, tool-free PowerLock connecting pin is light, quick, and easy to use.

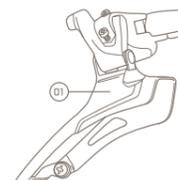
Compatible Gears	10
Model	PC 1030
Closing Link	PowerLock
Outer Plate	Nickel Silver
Inner Plate	Gray
Pin Treatment	Chrome-hardened pins
Recommended Group	SRAM Red / SRAM Force / SRAM Rival, Shimano® compatible
Chain Weight	277g (114 links)



Front Derailleur

Crucial componentry.

The SRAM Rival gruppo is a whole that's truly greater than the sum of its parts. Key to its seamless and precise performance is the SRAM Rival Front Derailleur. Designed to work in perfect concert with the Rival Rear Derailleur's Exact Actuation, it utilizes a professionally engineered cage design with intuitive adjusters for truly unrivaled upshifts and downshifts. The SRAM Rival Front Derailleur is standardized for use with both traditional and compact ring sets and is available in braze-on or clamp-band mounting.



- 01 SRAM actuation maintains proper balance between upshifting and downshifting

Technology	SRAM actuation
Speeds	Double front chainring
Weight	88g braze-on, 102g clamp-band
Material	Aluminum / Steel Cage
Compatibility	53/39, 50/34, 50/36, max 16T



Brakeset

Braking away.

With cold-forged arms, Dual Pivot design, and a proprietary pad compound providing the needed muscle, SRAM's Rival Brakeset gives you powerful stopping power and positive, progressive response. Lightweight materials, streamlined design, and a sleek finish all complement the performance, letting you scrub speed or stop on a dime whether you're racing, training, or warming up.



- 01 Dual Pivot design increases braking power and enhances progressive feel

Technology	Skeletonized Dual Pivot design with convex washers
Weight	287g
Material	Cold-Forged Arms
Pad / Holder	SRAM compound w/adjustable cartridge holder
QR	Indexed

You are compact! If you are passionate about Cycling but do not make a living of it. If riding is your obsession, not your profession, and you do not have the time to train like a pro. Whoever you are, wherever you ride, compact* is the solution. When it gets down to winning in the mountains, even pros ride compact. Climb with a smile, without compromise.

*Def: The lightest double chainring system with the gear ratio of a triple crankset.



No mountain too steep

Every spare minute you have next to work, family and friends is all about cycling. Still this is not enough time to get in shape like a pro – but thanks to SRAM Compact no mountain will seem too steep. The 50/34 double chainring system gives you the racing look and the pro bike feel with the extra gear range to climb those nice 15 km passes in the Alps. SRAM Compact – the lightest chainring system with the benefits of a triple crankset.

50/34 11-28

Are you compact?

SRAM Compact - SRAM Red, SRAM Force and SRAM Rival Specifications

Groupset	Crank versions	Crank lengths	Cassettes
	50x34 52x36	165 170 172.5 175 177.5mm	11-23: 11-12-13-14-15-16-17-19-21-23 11-26: 11-12-13-14-15-17-19-21-23-26 NEW for 2009 11-25: 11-12-13-14-15-17-19-21-23-25 11-28: 11-12-13-14-15-17-19-22-25-28

Groupset	Crank versions	Crank lengths	Cassettes
	50x34 50x36	170 172.5 175 177.5mm	11-23: 11-12-13-14-15-16-17-19-21-23 11-25: 11-12-13-14-15-17-19-21-23-25 11-26: 11-12-13-14-15-17-19-21-23-26 11-28: 11-12-13-14-15-17-19-22-25-28 12-25: 12-13-14-15-16-17-19-21-23-25 12-26: 12-13-14-15-16-17-19-21-23-26 12-27: 12-13-14-15-16-17-19-21-24-27

Groupset	Crank versions	Crank lengths	Cassettes
	50x34 50x36	165 170 172.5 175 177.5 180mm	11-23: 11-12-13-14-15-16-17-19-21-23 11-25: 11-12-13-14-15-17-19-21-23-25 11-26: 11-12-13-14-15-17-19-21-23-26 11-28: 11-12-13-14-15-17-19-22-25-28 12-25: 12-13-14-15-16-17-19-21-23-25 12-26: 12-13-14-15-16-17-19-21-23-26 12-27: 12-13-14-15-16-17-19-21-24-27



What does compact mean?

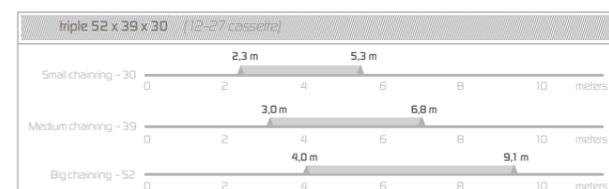
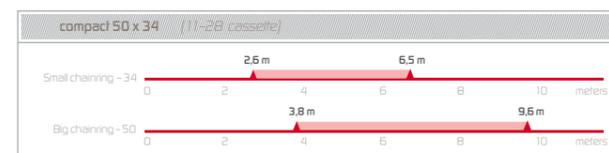
Just like standard cranksets, Compact uses 2 chainrings. But instead of having a 130mm bolt circle diameter (BCD), it has a 110mm BCD. This difference in bolt circle diameter enables you to mount smaller chainrings than on a standard crankset (compact chainrings are therefore not compatible with standard cranks). With a compact, 50x34 and 50x36 chainring combinations are now possible.

Why choose compact?

- Compact offers simple and crisp shifting like a standard set up.
- You ride in a more comfortable position - Narrower Q-factor**.
- Climbing becomes painless – it is the lightest transmission combination on the market.
- Climbing is easy on the low gears and descending is fun on the harder gears – Thanks to the wide gear range.
- You take full advantage of your 20 gears - Fewer crossovers.

**Def: The Q-factor refers to the distance between the left and right pedals.

Road gear ratios (based on common specifications):





PowerMeter Pro™ (only available in North America)

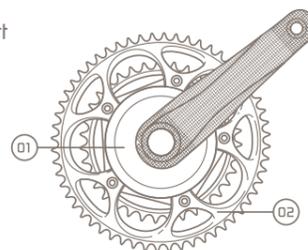
The technology to train, the power to win.

For the first time ever, SRM, the leader in scientific cycling analysis, has partnered with a manufacturer to create a complete, integrated system focused on improving your ability to train for power. Introducing the new SRAM PowerMeter Pro. Power measurement is the most proven method for training with consistency and quality. The PowerMeter Pro utilizes

SRM's own proven technology, which uses eight strain gauges for accuracy within +/- 2%. This enables athletes to scientifically manage the specifics of their personal program, avoid overtraining, and assess and interpret reactions to a variety of training and racing stimuli. The crankset itself was designed and developed for the PowerMeter; a high degree of stiffness and shifting accuracy are achieved in a clean, modular package.

- 01 The integrated carbon-spider construction is light and stiff for greater power transfer with less effort
- 02 PowerGlide™ chainrings are competition proven with long-lasting finishes

Arm Material	Carbon / 3K weave
Chaining Material	PG Chainrings w/ Hard-Anodized Coating / Alloy Chaining Bolts
Weight	865g w/ BB
Available Arm Lengths	170, 172.5, 175, 177.5mm
Available Ratios	53/39
Compatibility	GXP™ Team BB



S900 Crankset

Developed for precision, power, and performance.

The SRAM S900 offers a new option between the SRAM Rival OCT and the SRAM Force Crankset. The S900 utilizes SRAM's proven carbon-fiber construction along with a new forged alloy spider. This crank arm design was originally developed for the SRAM PowerMeter Pro and was used by the Saunier Duval team this season. The SRAM S900 includes our proven PowerGlide™ chainrings and GXP™ BB system. It comes in full-size and compact ratios and in multiple crank arm lengths.

Arm Material	Carbon / Forged Alloy Spider
Chaining Material	PG Chainrings w/ Hard-Anodized Coating
Weight	830g
Available Arm Lengths	165, 170, 172.5, 175, 177.5mm
Available Ratios	53/39, 50/36, 50/34
Compatibility	GXP



S300 Crankset

A lightweight crank that's simple, strong, and dependable.

The SRAM S300 puts the precision of PowerGlide shifting technology within easy reach. PowerGlide also gives you enhanced tooth profiles for quicker shifting and more precision. The crank arms are forged out of our AL-6061-T6 alloy material with a design that is beautiful, strong, and light. The addition of the Giga X Pipe™ offers a legendary and durable bearing design in a lightweight package. The SRAM S300 is available in both full-size and compact ratios and in multiple crank arm lengths.

Arm Material	AL 6061 T6 Alloy
Chaining Material	PG Chainrings w/ Hard-Anodized Coating / Alloy Chaining Bolts
Weight	900g
Available Arm Lengths	165, 170, 172.5, 175, 177.5, 180mm
Available Ratios	53/39, 50/34
Compatibility	GXP



Omnium Crankset

The purists' choice for street and track performance.

The new Omnium track crankset is the first external bearing track crank in the world. Designed for world-class track racing, but also at home as the ultimate "fixie" crankset, the Omnium features our strongest and stiffest alloy, 7050-T6. The full 5mm thick 7075-T6 chainwheel was developed for use only with 1/2 x 1/8 chains. Reports from our test riders suggest that this is the stiffest crank they've ever ridden.

Arm Material	Forged 7050 Alloy
Chaining Material	AL 7075-T6
Weight	825g
Available Arm Lengths	165, 167.5, 170, 172.5, 175, 180mm
Available Ratios	48
Compatibility	GXP

TT

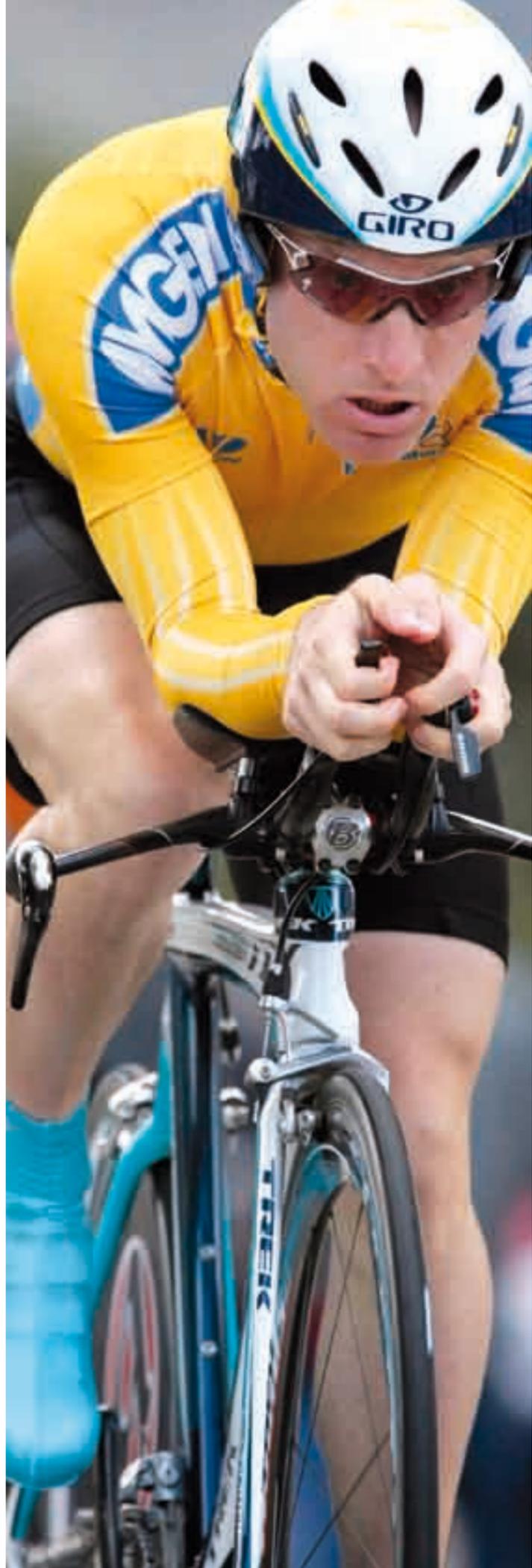
The same design philosophy that led to the revolutionary SRAM Red, SRAM Force, and SRAM Rival road gruppos has now been applied to time trials-specific controls. The SRAM TT Shifter and TT Brake Lever represent a real leap forward in performance, comfort and aerodynamics.



NEW SRAM TT Chainrings

NEW SRAM TT Chainrings – Late in 2008 SRAM will be releasing its 54 and 55 tooth TT chainrings. Already having won the time trial stage at this year's Amgen Tour of California, these PowerGlide™ rings have been aggressively adopted by all of our pro teams. All feature SRAM's hard anodized finish in tungsten grey. The 54 and 55 also add vertical material for strength and aerodynamics with bold 3X SRAM laser-etched graphics that look wicked fast.

Ratios	54 and 55 tooth
Weight	154g
Material	Aluminum
Compatibility	SRAM Red, SRAM Force and SRAM Rival Front and Rear Derailleurs



900 TT Shifter

More than just plug-and-play, it's the only carbon-fiber TT shifter you can buy.

Lightweight materials, easy attachment, and intuitive setup make them comfortable, but the real secret to the SRAM TT Shifter's performance is its unique ability to take advantage of SRAM's Exact Actuation™. An aggressively aerodynamic form that utilizes carbon fiber and aluminum sets the shifters apart in weight, wind resistance, and looks. When it comes to shifting in the tuck and on the fly, you can now have your cake and eat it too.

Speeds	10 rear / friction front
Weight	138g/pair
Material	Carbon-Fiber Pull Lever / Aluminum Top Cover
Compatibility	SRAM Red, SRAM Force and SRAM Rival Front and Rear Derailleurs



500 TT Shifter

NEW SRAM 500 TT shift levers – The SRAM 500 TT shift levers deliver all the features and performance of the original SRAM carbon TT shifter at a lower price. The 500's also include a three position stop - an internal adjustment 'coin' can be flipped and rotated for precise cable release tuning.

Speeds	10 rear / friction front
Weight	154g/pair
Material	Aluminum Pull Lever / Aluminum Top Cover
Compatibility	SRAM Red, SRAM Force and SRAM Rival Front and Rear Derailleurs



900 TT Brake Lever

Low profile and low weight mean low elapsed times.

Maximum aero-efficiency doesn't have to mean minimum comfort. The SRAM TT Brake Lever's ultra-thin, full-carbon-fiber form is shaped to slice through the air while also allowing for excellent hand fit. The addition of a return spring puts it in a class of its own.

Compatibility	SRAM Red, SRAM Force, and SRAM Rival Brakesets
Weight	99g/pair
Material	Carbon Fiber



500 TT Brake Lever

NEW SRAM 500 TT aero brake levers – SRAM's original TT brake levers delivered precise and real stopping power at a phenomenal 99 grams per pair and featured a positive action return spring. For the 500 TT levers, hot red anodized aluminum replaces carbon, adding minimal weight, but maintaining all the quality, stopping power and aerodynamics.

Compatibility	SRAM Red, SRAM Force, and SRAM Rival Brakesets
Weight	115g/pair
Material	Aluminum



SRAM DoubleTap® 10 Flat-Bar Road Shifter

DoubleTap® technology makes the leap to performance flat-bar bikes with the new SRAM Flat-Bar Road Shifter. Smooth multi-gear upshifts and indexed single-gear downshifts are lightning-fast and a carbon-fiber clamp helps keep the lever's weight to a minimum. It features an adjustable lever for easy customization, as well as a dial gear indicator for quick reference.

Technology	DoubleTap®
Speeds	10 rear / 2 front
Material	Carbon Clamp / Aluminum Lever / Aluminum Housing
Compatibility	SRAM Red, SRAM Force and SRAM Rival Front and Rear Derailleurs

Compatible with:
X30 X-9 X-7 X-5



SRAM DoubleTap® 9 Flat-Bar Shifter

DoubleTap® technology makes the leap to performance 9 speed flat-bar bikes with the new SRAM Flat-Bar Shifter. Smooth multi-gear upshifts and indexed single-gear downshifts are lightning-fast. Only compatible with SRAM MTB 1:1 rear derailleurs, it features an adjustable lever for easy customization, as well as a dial gear indicator for quick reference.

Technology	DoubleTap®
Speeds	9 rear / 3 front
Material	Aluminum Clamp / Aluminum Lever / Aluminum Housing
Compatibility	SRAM 1:1® rear derailleurs, SRAM or Shimano® front derailleurs



SuperLight Bar Tape

Superlight bar tape blends durability, comfort, and breathability in a ultra-light package that maintains its performance no matter what you put it through.

Available In: Black, Grey, Blue, Yellow, Red



Supertech Bar Tape

For riders who want a smooth, stealthy alternative to traditional bar tapes, Supertech delivers: it looks good, lasts long, is easy to clean, and repels sweat and moisture.

Available In: Black, Silver, Carbon



Supercork Bar Tape

Cork: dependable, comfortable, and classic. Supercork is SRAM's take on a mainstay material for all-purpose bar tape.

Available In: Black, yellow, blue, white (w/ white hoods), and red (w/ red hoods)
 NEW Pink Bar Tape
 NEW Yellow (w/ Yellow hoods)
 NEW Pink (w/ Pink hoods)



Ceramic BB Bearings

SRAM's new hybrid Ceramic BB Bearings exceed the needs of even the most demanding riders. They offer a performance advantage over traditional bottom bracket bearings that's almost too great to believe. Besides being 10% lighter than standard bearings, ceramic bearings require an astonishing 78% less energy than the next most efficient BB on the market.

Ceramic bearings are more resistant to dirt and moisture and, when properly maintained, will outlast and outperform any other BB on the market. They utilize a lighter-than-normal seal along with stainless steel races and high-polish cups and have no equal when it comes to helping you reach terminal velocity more quickly and easily than ever before.



Weight	105g
Material	Ceramic Balls/Stainless Steel Races
Compatibility	SRAM and Truvativ®, GXP™ Cranksets
Availability	English or Italian threading

BLACKBOX
technology

Ceramic Bearing Rear Derailleur Pulleys

The same hybrid ceramic cartridge bearings used in the new SRAM Red Rear Derailleur's upper and lower pulleys are also available as an upgradable accessory to "hop up" your current drivetrain. Make the leap to reduced friction, increased stiffness, lighter weight, and added durability with this secret weapon.



Weight	12g each
Material	Ceramic Balls/Stainless Steel Races
Compatibility	SRAM Red, SRAM Force, and SRAM Rival Rear Derailleurs
Availability	Sold as a pair (upper and lower pulley set)

BLACKBOX
technology

Cassettes

No matter if your performance needs or riding style dictate that you run an 8, 9, or 10 speed drivetrain, the OG- and PG-series cassettes give you a full range of choices for light weight, strength, and precise shifting.

10 Speed Cassettes



SRAM red
OG 1090
Available In
11-23, 11-25, 11-26, 11-28



SRAM FORCE
SRAM RIVAL
OG 1070
Available In
11-23, 11-25, 11-26, 11-28,
12-25, 12-26, 12-27

9 Speed Cassettes



PG 970
Available In
12-26, 12-23, 11-23, 11-21



PG 950
Available In
11-26, 12-26, 12-23

8 Speed Cassette



PG 850
Available In
11-26, 12-26, 12-23

Chains

Accurate shifting, excellent wear resistance, and superior durability with 8, 9, and 10 speed compatibility: the SRAM PowerChain™ II won't let you down.

10 Speed Chains

SRAM red
PC 1090 R

PC 1090

SRAM FORCE
PC 1070

SRAM RIVAL
PC 1050

PC 1030



9 Speed Chains

PC 991 HP

PC 991 XS

PC 991

PC 971

PC 951



8 Speed Chains

PC 890

PC 870

PC 850

PC 830





SRAM Racing

SRAM designers and engineers partner with an array of world class athletes and technicians in our ongoing effort to develop and construct competition-focused technologies that excel in the most demanding conditions. Below is a list of some of our key teams and athletes riding SRAM:

ROAD TEAMS

- Astana (ProTour)
- Saunier Duval-Scott (ProTour)
- Agribubel (ProConti)
- Team TIBCO (USA)
- Specialized Designs for Women Team (SUI)
- Aaron's (USA)
- Atlas-Romer's Hausbäckerei (GER)
- Auber 93 (FRA)
- Bissel (USA)
- Kelly Benefit/Medifast (USA)
- Praïes (AUS)
- Team Type 1 (USA)

TRIATHLON IRONMAN

- Andrea Brede (GER)
- Kieran Doe (NZ)
- Desiree Ficker (USA)
- Michellie Jones (AUS)
- Nicole Leder (GER)
- Samantha McGlone (CAN)
- Chris Liefo (USA)
- Lothar Leder (GER)
- Torbjorn Sindballe (DEN)
- Normann Stadler (GER)

JUNIOR AND UNDER 23 DEVELOPMENT PROGRAMS

- Cycling Team Mastromarco (ITA)
- Clif Bar Development Cyclocross Team (USA)
- Fiordi Frutta Development Cyclocross Team (USA)
- Heinz von Heiden - Saikls (GER)
- Hot Tubes Junior Development Cycling Team (USA)
- Johan Bruyneel Cycling Academy (USA/BEL)
- Kazakhstan U23 Cycling Team (KAZ)
- Saunier Duval-Scott U23 (ESP)
- Team Rubicon-Livestrong (USA)

TRIATHLON OLYMPIC

- Anja Diltmer (GER)
- Tim Don (GBR)
- Jan Frodeno (GER)
- Brad Kahlefeldt (AUS)
- Lagardère Paris Racing (FRA)
- Triathlon (FRA)

CYCLOCROSS

- Lyne Bessette (CAN)
- Hanka Kupfernagel (GER)
- Tim Johnson (USA)
- Joachim Parbo (DEN)
- Jeremy Powers (USA)
- Malte Urban (GER)
- Clif Bar Devo Team (USA)
- Fidea Cycling Team (BEL)
- ZZPR Cycling Team (NED)

Neutral Road Support (NRS)

SRAM's commitment to the many cycling & triathlon disciplines doesn't stop at the product level. At over 140 events around North America and Australia, Rain, snow or shine, athletes of every level are serviced by SRAM's Neutral Race Support program. Whether you're Down Under at the Herald Sun Tour, racing the B's at The USGP of Cross in Portland, or hitting out under the lights in Athens, GA, our guys will be at the ready to turn a wrench or lend a 404 and a push.

Photographers:

- Dirk Belling
- Michael Darter
- Graham Watson
- Kurt Jambretz
- Chris Milliman
- Roger Bennelt
- Roberto Beltini
- Hennes Roth
- Morgan Nicol

SRAM RED™



SRAM FORCE™



SRAM RIVAL™



SRAM non-series



Gruppo Specifications

SRAM RED™	Shifter	Rear Derailleur	Crankset	Boltom Bracket	Front Derailleur	Brakeset	Cassette	Chain
Technology	DoubleTap	Exact Actuation	Integrated Carbon Spider	GXP	SRAM Actuation	Skeletonized Dual Pivot Design w/ Convex Washers	OpenGlide	PowerLock Chrome-Hardened Pins
Speeds	10	10	2	NA	2	NA	10	10
Weight	280g	153g	760g with BB	105g	58g Braze-On 72g Clamp	265g	155g	257g (114 links)
Material // Finish	Carbon Brake Lever / Carbon Shift Levers / Titanium	Aluminum / Titanium / Ceramic / Carbon	Carbon / Alloy	CNC Alloy Cups / Ceramic Bearings // Polished	Aluminum / Hardened Titanium Cage	Cold-Forged Arms / Titanium Pivot Bolt / SRAM Compound w/ Adjustable Cartridge Holder	Aluminum Anodized / Heat-Treated Steel / Titanium // Nickel / Chrome Plated	Nickel Silver
Compatibility	SRAM Red, SRAM Force, and SRAM Rival Front and Rear Derailleurs	Max Tooth 28T	GXP Team BB 53/39 52/36 50/34	SRAM Red / SRAM Force / SRAM Rival Cranksets	53/39 52/36 50/34 Max Tooth 16T	DoubleTap Controls	11-23, 11-25, 11-26, 11-28	PC 1090R PC 1090 PC 1070 Shimano® 10 spd 5.9mm

SRAM FORCE™	Shifter	Rear Derailleur	Crankset	Boltom Bracket	Front Derailleur	Brakeset	Cassette	Chain
Technology	DoubleTap	Exact Actuation	Integrated Carbon Spider	GXP	SRAM Actuation	Dual Pivot	OpenGlide	PowerLock HollowPin
Speeds	10	10	2	NA	2	NA	10	10
Weight	303g	178g	791g Full Size 780g Compact (w/ BB)	115g	88g Braze-On 102g Clamp	280g	210g (11-23)	257g (1070 / 114 Links)
Material // Finish	Carbon / Magnesium / Titanium // Clear Coat / Paint	Aluminum / Carbon / Magnesium // Polished Tinted Clear Coat	Carbon / Alloy // Clear Coat	CNC Alloy Cups	Aluminum // Polished / Tinted Clear Coat	Cold Forged / Stainless / Titanium Pivot Bolts // Polished / Tinted Clear Coat	Forged Alloy Spider / Heat-Treated Steel // Chrome Plated	Heat-Treated Steel // Silver
Compatibility	SRAM Red, SRAM Force, and SRAM Rival Front and Rear Derailleurs	Max Tooth 28T	GXP Team BB 53/39 50/36 50/34	SRAM Red / SRAM Force / SRAM Rival Cranksets	53/39 50/36 50/34 Max Tooth 16T	DoubleTap Controls	11-23, 11-25, 11-26, 11-28, 12-25, 12-26, 12-27	PC 1090R PC 1090 PC 1070 Shimano® 10spd 5.9mm

SRAM RIVAL™	Shifter	Rear Derailleur	Crankset	Boltom Bracket	Front Derailleur	Brakeset	Cassette	Chain
Technology	DoubleTap	Exact Actuation	OCT Open Core Technology	GXP	SRAM Actuation	Dual Pivot	OpenGlide	PowerLock
Speeds	10	10	2	NA	2	NA	10	10
Weight	320g	188g	SRAM Rival OCT 830g (w/ BB)	115g	88g Braze-On 102g Clamp	287g	210g (11-23)	277g (1030 / 114 Links)
Material // Finish	Aluminum Brake Lever / Aluminum Shift Lever // Polished	Aluminum // Polished	Aluminum // Polished	CNC Alloy Cups	Aluminum // Polished / Clear Coat	Cold Forged / Stainless // Polished / Clear Coat	Forged Alloy Spider / Heat-Treated Steel // Chrome Plated	Heat-Treated Steel // Grey
Compatibility	SRAM Red, SRAM Force, and SRAM Rival Front and Rear Derailleurs	Max Tooth 28T	GXP Team BB 53/39 50/36 50/34	SRAM Red / SRAM Force / SRAM Rival Cranksets	53/39 50/36 50/34 Max Tooth 16T	DoubleTap Controls	11-23, 11-25, 11-26, 11-28, 12-25, 12-26, 12-27	PC 1090R PC 1090 PC 1070 Shimano® 10spd 5.9mm

Tech Guide

With the new DoubleTap® technology of the SRAM ROAD groupsets shifting is easier, faster and more precise than ever. Mounting and tuning SRAM Red, SRAM Force and SRAM Rival differs in some important points from traditional road components.

Very important: adjustment of the correct distance between the upper pulley and the SRAM cassette. Possibility to adjust the reach of the brake and the shift lever individually.

Adjusting the upper and lower derailleur limit screws



Mount the rear derailleur in the correctly adjusted derailleur hanger with a 5-mm-hex key. Recommended torque is 8-10 Nm. Adjust the lower limit with the screw H (H = High speed) so that the chain can't fall off the smallest cog. With the screw L the upper limit (L = Low speed). The chain must not fall off into the spoke side. You can check the correct limitations while moving the derailleur by hand on to the largest cog.

Correct housing length

Choose a long housing length from the cable stop at the chainstay to the rear derailleur to avoid friction and guarantee precise shifting. You should take only 1.1-mm inner cables with a fitting nipple head. Already cut inner cables won't fit through the shifters (only new ones will work).

Fixing the inner cable

The inner cable is routed over the semi-circular guide and is fixed with 5-6 Nm under the plate.

VERY IMPORTANT: Correct distance between upper pulley and cogs!

The following step is crucial for the shifting performance of the SRAM rear derailleur and is different to the known products of Shimano® and Campagnolo®. Put the chain on the inner chainring and the inner cog. In this Configuration the distance between the top of the cog teeth and the upper pulley should be 6mm (picture on the right side). You can adjust the distance between the pulley and the cassette with the B-screw (circled in the picture below). **Attention: If you change the cassette this distance should be adjusted to the new largest cog.**

Adjusting the shifting

With the tension screw, you tune the cable tension: The chain should climb up the cogs easily or drop down fast and easy without delay when you push the shift lever or tap it shortly.

Trim position on the front derailleur

The front derailleur of the RED groupset has its trim position on the outer chainring. A light tap on the lever will allow you to trim the front derailleur – no more rub on the larger cogs. This is because we achieved a better chainline while the chain is running on the outer chainring and the smaller cogs. The



SRAM Force and SRAM Rival (MY 2008) have this trim position on the inner chainring. You can move the front derailleur 2mm to the outer side when the chain is running on the smaller chainring. The chainline is optimized for the smaller gears.



Reach adjustment of the SRAM shift lever

You can adjust the reach of the SRAM Double Tap shifters individually to your needs and your hands size.

ATTENTION: When adjusting the reach you should always tune the shift lever first, then the brake lever!

You can adjust the reach of the SRAM shift levers according to your hand size or your individual needs (arrows in the pictures). The excenter at the upper part of the carbon shift lever (arrow in the lower picture) can be moved with a needle or a pick in 6 different positions. **TIP:** Imagine a clock. Main positions are 12 o'clock = 10mm/minimum distance, 3 o'clock = 5mm, 6 o'clock is 2,5mm, 9 o'clock = 0mm/max reach.



Reach adjustment of the SRAM brake lever

To adjust the reach of the brake lever you roll back the hood covers. With a 3mm hex key (picture left) you can shorten the distance of the lever to the handlebar while turning the screw clockwise. Difference between max and min is 10mm.

Mounting the front derailleur

Picture on the right side: For compact cranks the front derailleur for the brazed on version is mounted in the upper thread (arrow). For

SRAM RED™
SRAM FORCE™
SRAM RIVAL™

standard cranksets with 53/39 you use the lower thread of the derailleur.

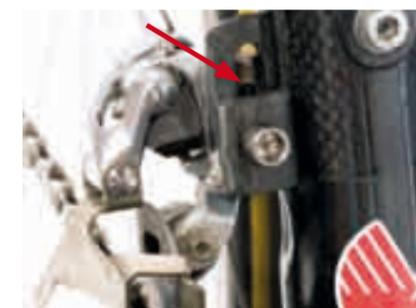
Tuning the front derailleur

The distance between the outer cage of the front derailleur to the teeth tops of the outer chainring should be 1 - 3mm. Take care that the cage is absolutely parallel to the chainring.



Shortening the chain

You find the correct chain length while positioning the chain over the bigger chainring and the largest cog – without going through the pulleys! To this length you add one inner link and the Powerlock. After you have closed the Powerlock you should check the smooth and easy running of the chain. **ATTENTION:** After having locked the Powerlock you can't open it again. You have to use a standard chain tool and a new Powerlock- To close the Powerlock correctly you need a minimum of force which is most easily achieved by putting power on to the pedal.



The ideal wheel

Welcome to the new SRAM S-Series of road wheels. With carbon construction, aero-efficient design, and competition-proven details in an affordable package you'll be sure to find the wheel that's ideal for you.

Features / Specs

- Structural woven carbon rim ensures strength and durability
- Aluminum braking surface enables strong, smooth stopping
- Carbon performance with clincher convenience
- SAPIM spokes with alloy nipples 18F/20R
- Vibration damping comfort
- Same toroidal aerodynamic rim shape used by the most aerodynamic wheels
- Anodized hubs with quick-release levers, compatible with SRAM and Shimano®
- Japanese bearings
- Hand-built



S40 LIGHTWEIGHT & LIGHTNING QUICK PERFORMANCE

Climb, accelerate, and sprint with the best of them. Whether using S40s for a local group ride, criterium, or circuit race, you'll have an easier time smashing personal best over and over again.



Wheel	S40 Front	S40 Rear
Max Width	20mm	20mm
Depth	38mm	38mm
Weight	725g	890g

Max. Brake Track Width Variation	.127mm
Recommended Max. Rider Weight	90kg

S60 ONE WHEEL THAT PACKS A WORLD-BEATING PUNCH

This versatile "do it all" wheelset is fast, comfortable, and aerodynamic. Based on the same technology used in the world's most aerodynamic wheels, the S60's balance of performance and precision allows you to cut through the wind with ease.



Wheel	S60 Front	S60 Rear
Max Width	22mm	22mm
Depth	60mm	60mm
Weight	828g	922g

Max. Brake Track Width Variation	.127mm
Recommended Max. Rider Weight	100kg

S80 SUPERIOR SPEED RESULTS FROM SUPERIOR STRENGTH

When it comes to riding faster, why should you have to do all of the work? The S80's patented rim shape was developed, tested, and refined in the wind tunnel for maximum efficiency. Throw a pair on your bike and experience what happens when your wheels work as hard as you do.



Wheel	S80 Front	S80 Rear
Max Width	25mm	25mm
Depth	82mm	82mm
Weight	951g	1126g

Max. Brake Track Width Variation	.127mm
Recommended Max. Rider Weight	100kg

* All models are available with black or grey anodized hubs and spokes