

SCIENTISTS TELL US  
THERE ARE PARTS OF THE  
MOON TOO ROUGH TO  
ATTEMPT A LANDING.

**Offroad**  
Suspend Your Disbelief

# IT'S OBVIOUS WHEN SOMEONE HASN'T HAD A LOT OF EXPERIENCE DESIGNING SUSPENSION SYSTEMS.

For one thing, a lot of people seem to be under the impression that what works for a motorcycle will work for a mountain bike.

Which accounts, no doubt, for some bikes being equipped with suspensions more appropriate for a motocross than a ride on a mountain bike.

In our opinion, this is a major problem. And here's why.

You see, a mountain bike just isn't the same as a motorcycle. Not in any way. It's not as big. It's not as heavy. And it's powered by humans, not horses.

So why, we ask, does a suspension system for a mountain bike need to be as heavy, complicated or difficult to maintain as that of a motorcycle?

The answer, as so convincingly demonstrated by our Offroad Pro-Flex™ bicycles, is that it does not.

More specifically, with the Offroad Pro-Flex Generation 3 suspension system in the rear. And with the shock-absorbing Girvin Flexstem™ up front.

At the heart of each is a series of elastomeric springs that do a number on bump forces you would not believe.

Although, as the world's bicycling press has already discovered, it's hard not to.

"It's simple to operate, requires little or no maintenance and softens the ride... what more could you ask for?" said *Mountain Bike Action*. "The smoothness of the suspension gives a sensation of exceptional comfort at all speeds," gushed *Velo Vert*.

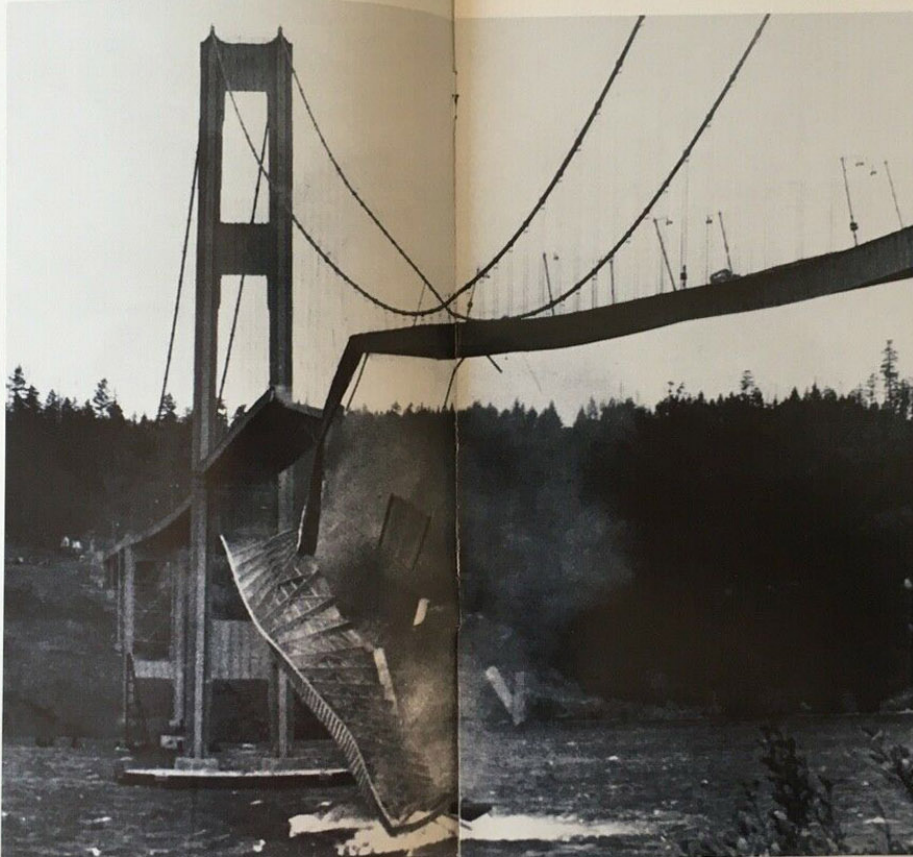
What happens is that the springs compress and expand to give you an incredibly smooth ride — and this is the important part — without losing the feel of a bicycle. Something that very definitely can, and



THE GIRVIN™ FLEXSTEM™ SOAKS UP FRONT-END SHOCK SO YOU CAN RIDE FASTER WITH MORE CONTROL.



NO, THEY'RE NOT DOUGHNUTS. THEY'RE ELASTOMERIC SPRINGS AND THE HEART OF THE OFFROAD PRO-FLEX SUSPENSION SYSTEM.



does, get lost with motorcycle-like shock absorber systems.

Plus, the springs come in different stiffnesses, so you can fine-tune flex characteristics to your body weight or local terrain. And the good part is that you don't have to be a motorcycle mechanic to do it.

Like we said, simple. Very simple indeed.

Then, there's the matter of balance. On most suspension bikes, what you basically wind up with is a suspension fork in the front. Unfortunately, this approach fails to maximize the suspension concept to its fullest potential.

But on a bike like the Offroad Pro-Flex 752, for example, bumps are soaked up in the rear by the Pro-Flex Generation 3 system and in the front by the Girvin Flexstem. Which, no doubt, accounts for the fact that the Pro-Flex 752 is the best-selling suspension bike on the planet.



THE EASY-TO-ADJUST PRO-FLEX REAR SUSPENSION HAS UP TO 51 CM OF SHOCK-ABSORBING TRAVEL.



THE OFFROAD PRO-FLEX 752.

Not exactly unexpected, mind you, when you consider that Offroad has been designing, refining and producing suspension bikes — and nothing but suspension bikes — longer than anyone else.

The collective result of which is a line of bikes that let you ride even the toughest, most punishing terrain faster, more comfortably, while consuming less energy than you would dare believe possible.

**Offroad**  
PRO-FLEX

# HOW FAST DID YOU SAY YOU WANTED TO GO UPHILL?

You know the story.

You're hammering up a steep section, your rear wheel is spending more time off the ground than the Mir space station and it's hard to tell which has more rubber, your tires or your legs.

You pull the front wheel up and over a sharp rock, when blammo, your rear tire blows. No wonder: Lower tire pressure plus bumps equals, you guessed it, pinch flat.

All in all, not a very fast way to get to the top. Or for that matter, a very comfortable one.

The solution is an Offroad Pro-Flex. With one, you'd be going up hills faster, with less effort and

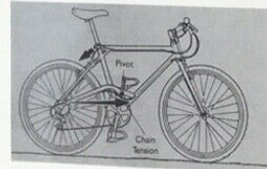
with less hassle than ever before.

The reason is something we call Pro-Flex Dig-In™ technology.

Without having to get into a big physics lecture, what basically

happens is this. Just like on a tennis racket, the location of the swingarm pivot on a mountain bike has a sweet spot. The optimum place to convert all that heavy-duty, uphill chain tension into some serious climbing energy.

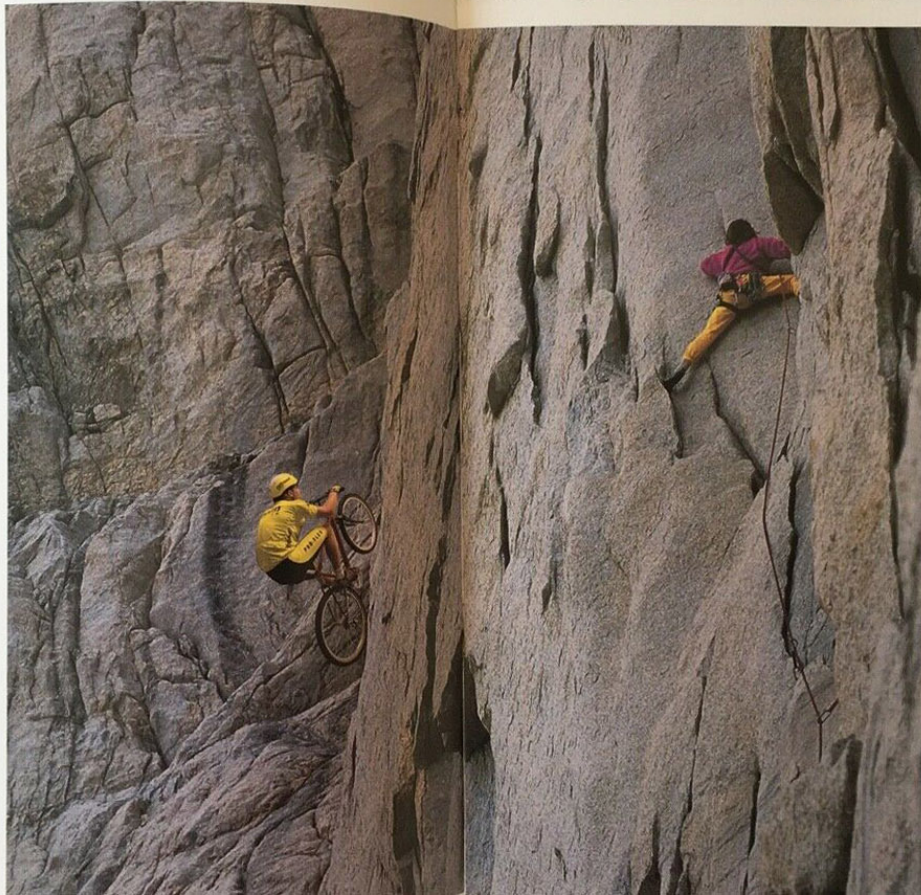
Which is precisely where you'll find the swingarm pivot on the Offroad Pro-Flex. Just above the chain line.



OPTIMUM SWINGARM PIVOT LOCATION OPENS UP SUSPENSION FOR BETTER TRACTION.

And while this may not seem like a big deal, it really lets chain tension open up the suspension which keeps your rear wheel on the ground longer. And if your rear wheel's on the ground longer, you're going to get uphill with less effort and — you guessed it — a lot more speed.

Next time you're struggling up a 20% grade with enough lactic acid in your quads to last well



into the next century, consider this. A Pro-Flex™ can increase the amount of power converted into forward motion by 5.5%. That's one less 144-foot vertical climb in a ten-mile ride.



NOW, THIS IS A SWINGARM.

Plus, you'd have greater control, a lot more comfort and a whole lot less stress on your tires, rims, spokes and frame components.

Yeah, we know what you might be thinking, *I'll just throw a front suspension fork on my bike and I'll be cruising up the steeps just like on a Pro-Flex™*. Well, not exactly.

You see, with a suspension fork alone, you're forced to compromise between efficiency and suspension performance. Set it up too soft and it bounces with every turn of the cranks, a real nightmare for pedalling efficiency. Set it up too stiff and it won't handle the smaller bumps. At all.



THE OFFROAD PRO-FLEX 962.

But let's say you were riding a Pro-Flex™ 962. With three separate suspension components, you could: (a) set the front suspension fork stiff enough to keep from bouncing, (b) let the Girvin Flex-stem™ worry about the small stuff, and (c) increase traction in the rear with the Pro-Flex Generation 3. All at the same time. Which makes the 962 a veritable high speed elevator. But, hey, when you've got a monster hill glaring down at you, the only thing you should be fighting is gravity. Not your bike.

**Offroad™**  
PRO-FLEX

# AS ANY PILOT KNOWS, YOU CAN REALLY FLY WHEN THERE'S LESS TURBULENCE.

We aren't talking air pockets here. We're talking some serious turbulence. Boulders. Riverbeds. Mud. Logs. Sticks and stones that can break your bones.

The thing is, on a mountain bike, every time you try to go fast, there are several hundred tons of gravel, bedrock and miscellaneous and sundrie organic materials conspiring against you.



BERNARD VERMETTE PROVED THE OFFROAD PRO-FLEX ADVANTAGE BY WINNING THE 1991 CANADA CUP MOUNTAIN BIKE SERIES.

What you need, of course, is a way to neutralize all that stuff so you can keep your wheels on the ground – where they belong – thereby attaining some serious cruising speeds.

As it so happens, with our Offroad Pro-Flex bicycles, we've come up with several ways to let you do precisely that. Uphill. Downhill. And, most notably, on the flats.

We must have. Because our approach – namely, a hugely effective way of suspending a bike – seems to have captured the attention of the mountain biking cognoscenti in a very big way.



Like *Mountain* and *CityBiking*, for example. "Rough sections over the flats were where the majority of our testers were

most impressed." And the crowd at *Mountain Biking U.K.* was clearly no less moved. "It seemed to be more efficient . . . the harder and faster we rode, the better the bike responded."

So, just exactly how does an Offroad Pro-Flex manage to go this fast in the face of all those nasty jars and jolts?

For the answer, we take you now to the engineering laboratories of Brown University in Providence, Rhode Island, where we conducted what



surely must rank as one of the most exhaustive scientific probes into mountain bike suspension technology ever undertaken.

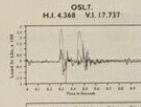
To make a long story short (of course, if you prefer the long story, we'll be happy to send you a copy of the actual test results), one of the things we did was to build a 1.5 inch high test bump, run a Pro-Flex over it 72 times at an average speed of 17 mph and take a whole lot of electronic measurements.



SCIENCE MARCHES ON. OR SHOULD WE SAY PEDALS ON.

When it was over the results startled even us. What we learned was that the Pro-Flex can reduce the velocity drop over a 1.5 inch bump by as much as 36%. The scientists tell us that works out to 2,740 foot pounds of energy in one mile. Which, assuming you're a scientist, is a very impressive bit of information. But if you're a rider, here's something even more impressive. A Pro-Flex can save at least 40 seconds over a typical 10-mile course. No problem.

All of which explains why more and more riders all over the world are choosing and riding the Offroad Pro-Flex. Which, when you take a moment to think about it, isn't a bit surprising, really. Hey, why ride a Cessna when you can take the Concorde?



ACCELEROMETERS MEASURE THE EFFECT OF BUMP FORCES ON AN OFFROAD PRO-FLEX. THAT IS, WHAT'S LEFT OF THEM.

$$\Delta V = (F \times t) = M$$

THE OFFROAD THEORY OF BUMPHUNTING IT EXPLAINS WHY A PRO-FLEX IS SO MUCH FASTER.

**Offroad**  
PRO-FLEX

## OFFROAD PRO-FLEX 962

The ultimate full suspension, professional all-terrain racing bicycle. Three independent suspension components combine to optimize suspension performance – for more speed guaranteed!



Offroad Leather Racing Saddle with titanium rails

Griv'n Titanium Flexstem XST adds suspension but not weight! Only 560 Grams!

Heat Treated 7005 Aluminum main triangle

Panaracer Smoke tires w/kerf bead

Adjustable Rock Shox front suspension fork

Shimano XTR componentry throughout



PRO-FLEX 952 FEATURES RIGID CROMOLY FORK & FLEXSTEM XST

## SPECIFICATIONS

FRONT SUSPENSION: Griv'n Flexstem XST 135mm. & Rock Shox fork

REAR SUSPENSION: PRO-FLEX Generation 3 FRAMESET: 7005 Heat Treated Aluminum main tubes with Cromoly swingarm. Tange 7000 Aluminum evolution headset.

WHEELS: Shimano XTR 32 hole hubs. 12-28T 7 spd. freehub. SUN USA CR16 26x60mm silver anodized tires. 15 gauge stainless spokes; Panaracer Smoke tires.

DRIVETRAIN: Shimano XT derailleurs with Rapidfire Plus shifters, Shimano XTR Crankset 46/36/26T w/UN90 Cartridge Bottom Bracket. Shimano XT pedals, hypergide chain.

BRAKES: Shimano Deore XT Low Profile w/ servo wave levers.

SADDLE/SEATPOST: Offroad Grey Leather Alloy single bolts seatpost w QR collar.

SIZES: 14", 16", 18", 20.5" COLOR: Silver Metallic with Gloss Black accents.



ALSO AVAILABLE AS THE PRO-FLEX 862 WITH ROCK SHOX SUSPENSION FORK AND FLEXSTEM XST.

## OFFROAD PRO-FLEX 852

Take out all the bumps without sacrificing weight or efficiency! The Shimano XT equipped 852 tames any trail.



Griv'n Titanium Flexstem XST adds suspension but not weight! Only 560 Grams!

Shimano Rapidfire Plus shifters

Heat Treated 7005 Aluminum main triangle

Panaracer Smoke tires

PRO-FLEX Generation 3 Rear suspension with new swingarm design

Shimano XT equipped throughout

## OFFROAD PRO-FLEX 552

The world's best selling full suspension bicycle is even better for '92. Shimano DX componentry, aluminum PRO-FLEX frame and Griv'n Flexstem make this bike a proven performer.



Offroad black leather racing saddle w/QR adjustable seatpost.

Aluminum Griv'n Flexstem™ takes out the front shocks

PRO-FLEX Generation 3 rear suspension with servo wave levers.

Shimano Deore DX derailleurs and brakes.

SUN USA CR16 rims

Panaracer Smoke tires.

## OFFROAD PRO-FLEX 552

With the 552, now every dirt riding enthusiast can get the PRO-FLEX advantage. Featuring PRO-FLEX generation 3 heat-treated 7005 aluminum frame and Shimano LX drivetrain.



Aluminum Griv'n Flexstem™ front suspension.

7005 heat treated Aluminum main tubes.

PRO-FLEX Generation 3 rear suspension.

Shimano Deore LX derailleurs and brakes.

Tange Unicomrom Cromoly fork.

## SPECIFICATIONS

FRONT SUSPENSION: Aluminum Griv'n Flexstem

REAR SUSPENSION: PRO-FLEX Generation 3

FRAMESET: 7005 Heat Treated Aluminum main tubes with Cromoly swingarm. Tange FOV Aluminum 31.8mm headset.

WHEELS: Shimano DX 32 hole hubs. 12-28T 7 spd. freehub. SUN USA CR16 26x60mm silver anodized rims. 15 gauge stainless spokes; Panaracer Smoke tires.

DRIVETRAIN: Shimano Deore DX Crankset w/46/36/24T. Deore DX Derailleurs & shifters with hypergide chain.

BRAKES: Shimano Deore DX Low Profile. SADDLE/SEATPOST: Offroad Black Leather Alloy single bolts seatpost w QR collar.

SIZES: 14", 16", 18", 20.5" COLOR: Metallic Red with Silver and Gloss Black accents.

## SPECIFICATIONS

FRONT SUSPENSION: Aluminum Griv'n Flexstem

REAR SUSPENSION: PRO-FLEX Generation 3

FRAMESET: 7005 Heat Treated Aluminum main tubes with Cromoly swingarm. Tange evolution sized headset.

WHEELS: Shimano LX 32 hole hubs. 12-28T 7 spd. freehub. SUN USA CR16 26x60mm silver anodized rims. 15 gauge stainless spokes; 26x21 Black skinwall tires.

DRIVETRAIN: Shimano Deore LX Crankset w/46/36/24T. Deore LX Derailleurs & shifters with hypergide chain.

BRAKES: Shimano Deore LX Low Profile w/2 finger SLR levers.

SADDLE/SEATPOST: Offroad Black saddle. Alloy single bolts seatpost w QR collar.

SIZES: 14", 16", 18", 20.5" COLOR: Metallic Blue with Light Silver and Gloss Black accents.

## OFFROAD PRO-FLEX 550

With the 550, you won't need a second mortgage to get full suspension performance! The Tange Infinity cromoly PRO-FLEX frameset keeps the 550 light, fast, durable & economical! Perfect for the budding dirt enthusiast.

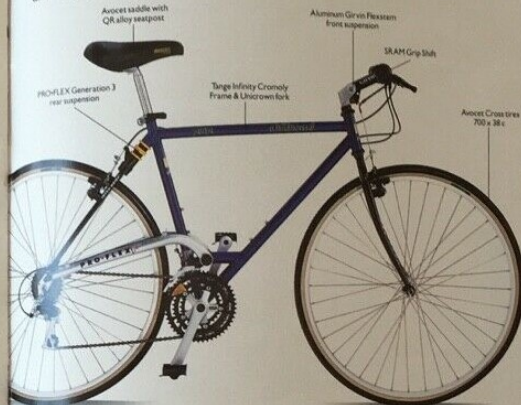


## SPECIFICATIONS

**FRONT SUSPENSION:** Aluminum Girvin Flexstem  
**REAR SUSPENSION:** PRO-FLEX Generation 3  
**FRAMESET:** Tange Infinity cromoly PRO-FLEX with uncrown fork. 25.4 mm Tange headset.  
**WHEELS:** Shimano LX 32 hole hubs. 12-28T 7 spd. freehub; SUN USA L18 26x88mm silver anodized rims. 14 gauge stainless spokes; Avocet Cross 700 x 38c skinwall tires.  
**DRIVETRAIN:** Shimano Deore LX Crankset w/46/36/24T; Deore LX Derailleurs with hyper-glide chain. SRAM Grip Shift.  
**BRAKES:** Shimano Deore LX w/DiaCompe short stop levers.  
**SADDLE/SEATPOST:** Offroad Black saddle. Alloy single bolt seatpost w QR collar.  
**SIZES:** 14", 16", 18", 20.5"  
**COLOR:** Offroad Pearl White with Silver and Gloss Black accents.

## OFFROAD PRO-FLEX 252

Who says you can't get one bike to do it all! Offroad's ultimate around town hybrid bike, the 252 makes cycling a pleasure again for recreational cyclists and commuters alike who are sick and tired of sore arms and backsides.



## SPECIFICATIONS

**FRONT SUSPENSION:** Aluminum Girvin Flexstem  
**REAR SUSPENSION:** PRO-FLEX Generation 3  
**FRAMESET:** Tange Infinity cromoly PRO-FLEX with uncrown fork. 25.4 mm Tange cromoly headset.  
**WHEELS:** Shimano LX 36 hole hubs. 12-30T 7 spd. freehub; SUN USA L17 700c silver anodized rims. 14 gauge stainless spokes. Avocet Cross 700 x 38c Tires.  
**DRIVETRAIN:** Shimano 300 LX Crankset w/48/38/28T; 300 LX Derailleurs with hyperglide chain. SRAM Grip Shift.  
**SADDLE/SEATPOST:** Avocet Touring Saddle. Alloy single bolt seatpost w QR collar.  
**SIZES:** 17", 19", 21"  
**COLOR:** Metallic Blue with Light Silver and Gloss Black accents.

## OFFROAD PRO-FLEX 352

The world's first suspension hybrid! On or off the pavement, the PRO-FLEX 352 lets you defeat potholes, road construction and bumpy trails alike!



## SPECIFICATIONS

**FRONT SUSPENSION:** Aluminum Girvin Flexstem  
**REAR SUSPENSION:** PRO-FLEX Generation 3  
**FRAMESET:** 700S Heat Treated Aluminum main tubes with Cromoly swingarm. Tange cromoly headset.  
**WHEELS:** Shimano LX 32 hole hubs. 12-28T 7 spd. freehub; SUN USA L18 700c silver anodized rims. 14 gauge stainless spokes; Avocet Cross 700 x 38c Tires.  
**DRIVETRAIN:** Shimano Deore LX Crankset w/46/36/24T; Deore LX Derailleurs with hyper-glide chain. SRAM Grip Shift.  
**BRAKES:** Shimano Deore LX  
**SADDLE/SEATPOST:** Avocet Touring Saddle. Alloy single bolt seatpost w QR collar.  
**SIZES:** 17", 19", 21"  
**COLOR:** Platinum Grey with Metallic Silver & Gloss Black accents.

## '92 OFFROAD FRAME SPECIFICATIONS

	26" WHEEL BICYCLES			
	14"	16"	18"	20.5"
Stand-over Height inches (cm)	27.7" (70.4)	28.8" (73.2)	29.9" (76)	32.1" (81.5)
Top Tube Length inches (cm)	19.9" (50.5)	21.2" (53.8)	22.4" (56.9)	23.6" (60)
Seat Angle	75°	73°	73°	73°
Head Angle	71°	71°	71°	71°
Bottom Bracket Drop inches (cm)	1.2" (3.0)	1.2" (3.0)	1.2" (3.0)	1.2" (3.0)
Chain Stay Length inches (cm)	16.8" (42.7)	16.8" (42.7)	16.8" (42.7)	16.8" (42.7)
Fork Offset mm	38mm	38mm	38mm	38mm
Crank Arm Length (mm)	170mm	170mm	175mm	175mm

	700C WHEEL BICYCLES		
	17"	19"	21"
Stand-over Height inches (cm)	29.4" (74.7)	30.5" (77.6)	32.4" (82.2)
Top Tube Length inches (cm)	20.6" (52.3)	21.7" (55.1)	22.5" (57.2)
Seat Angle	74°	74°	74°
Head Angle	72°	72°	72°
Bottom Bracket Drop inches (cm)	2.4" (6.1)	2.4" (6.1)	2.4" (6.1)
Chain Stay Length inches (cm)	17.1" (43.5)	17.1" (43.5)	17.1" (43.5)
Fork Offset mm	40mm	40mm	40mm
Crank Arm Length (mm)	170mm	170mm	175mm



# ***Offroad***<sup>TM</sup>

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