Fork Set-Up Guide

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Fork Set-Up Guide for Other Languages

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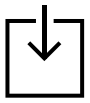

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Pre-Ride Check

1. Do not ride your bicycle if any one of the following test criteria is not passed! Riding your bike without eliminating any defect or carrying out the necessary adjustments can result in an accident, serious injury or even death.

2. Do you notice any cracks, dents, bent or tarnished parts of your suspension fork or any other part of your bicycle? If so, please contact a trained and qualified bicycle mechanic to check your fork and/or complete bike.

3. Do you notice any oil leaking out of your fork? Check hidden areas like behind the fork arch under the crown and main seals. If so, please consult a trained and qualified bicycle mechanic to check your fork or bike.

4. Make sure your wheels are perfectly centered in order to avoid any contact with suspension fork or brake system.

5. Make sure the thru-axle system is secure. There should be no play between hub and fork lower. Reference wheel installation section for proper instructions.

Pre-Ride Check

6. Compress your fork with your body weight. If it feels too soft, inflate to the proper pressure to achieve accurate SAG, inflate until your SAG is between 15-20%. Please also refer to SAG section for more details.

7. Make sure your brakes are properly installed/adjusted and work appropriately. This also applies to every other part of your bike like handlebars, pedals, crank arms, seat post, saddle, etc.

8. Check the cable length and routing of your components. Make sure they do not interfere with your steering actions or full compression and extension of your fork.

Before Tuning

RIDER CONNECT (Product Registration)

Go to http://rider.dvosuspension.com and create a Rider Connect account. Rider Connect is a website where you can register your product, save and search tuning settings with DVO's own myTunes and create a custom DVO profile where you can share with your friends and fans.

MYTUNES (Sharing Setting Service)
Once you have your adjustments figured out you can save them as a MYTUNE profile in your Rider Connect account.

MYTUNES was created to give its customer easier and direct access to specific settings and adjustments. MYTUNES is a database of suspension settings for its Rider Connect community that includes DVO Base Tunes, Pro Rider Settings along with terrain specific setups. Users can create several tunes for their own product(s) and can share their tunes on Social Media. Imagine being able to find a tune by someone of your weight and riding ability in Whistler or wondering what setup DVO Pro Riders are running.

If you have not set up your rider connect account please go to http://rider.dvosuspension.com. Once you have created your account and registered your product then you can start creating personal myTune profiles. You can create and save multiple tunes for each product and share them with your friends!

ENGLISH

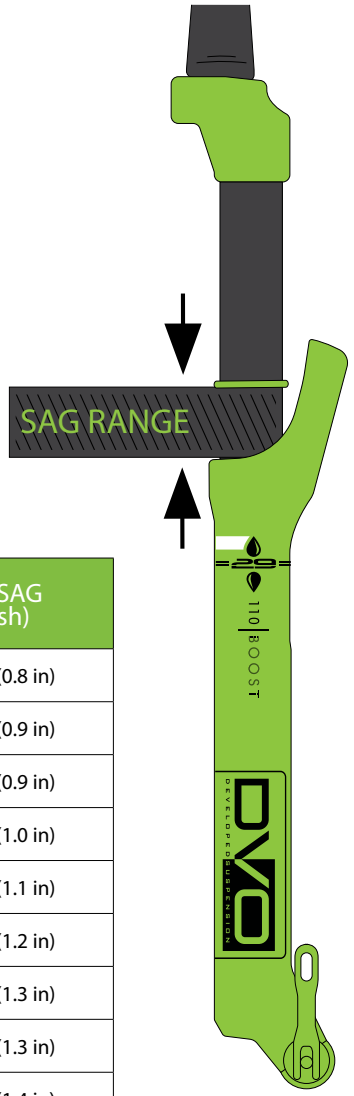
SAG Explained

Step 1: SAG Setting

SAG is the amount your fork compresses under your body weight (don't forget to include your riding gear), also referred to as Rider Weight. Remember that these are only starting points and adjustments will vary based on rider ability, trail conditions and personal preference.

After you are done setting up your suspension fork according to the recommended base settings, check your SAG to make sure you are within the recommended SAG settings.

The recommended SAG is 15% - 20%. Setting proper SAG is the only way to find the right air pressure for your fork. Refer to the chart below to find the proper SAG.



Travel	15% SAG (Firm)	20% SAG (Plush)
100 mm (3.9 in)	15 mm (0.6 in)	20 mm (0.8 in)
110 mm (4.3 in)	17 mm (0.7 in)	22 mm (0.9 in)
120 mm (4.7 in)	18 mm (0.8 in)	24 mm (0.9 in)
130 mm (5.1 in)	20 mm (0.8 in)	26 mm (1.0 in)
140 mm (5.5 in)	21 mm (0.8 in)	28 mm (1.1 in)
150 mm (5.9 in)	23 mm (0.9 in)	30 mm (1.2 in)
160 mm (6.3 in)	24 mm (0.9 in)	32 mm (1.3 in)
170 mm (6.7 in)	26 mm (1.0 in)	34 mm (1.3 in)
180 mm (7.1 in)	27 mm (1.1 in)	36 mm (1.4 in)
203 mm (8.0 in)	30 mm (1.2 in)	41 mm (1.6 in)

CAN SAG AFFECT PEDALING?

Front fork SAG can have a huge effect on pedaling performance. You will mainly notice this when climbing or sprinting out of the saddle (standing up). Riders that make pedaling a priority can run less SAG (around 15%) to increase the stability of the bike. If you have a fork with a quick range low speed adjuster (ex. Diamond Series, Beryl, Sapphire) you can use that to reduce the pedal bob from the front end by using the firmest setting.

HOW DOES SAG EFFECT THE HANDLING

It is very beneficial to test different SAG settings for various riding conditions. Changing the amount of SAG on your fork will change the geometry of your bike. Riders that make high speed stability a priority can run less SAG. This will keep the front end of the bike high under braking and rough sections but comfort and cornering traction will be compromised.
Riders that want to have a comfortable ride with great cornering traction should run more SAG (around 30%).

DOES SAG EFFECT MY BODY POSITION

SAG has a huge effect on your body position. Riders that run less SAG will maintain the geometry of their bike during braking, cornering, climbing, and high speed/rough sections. This can be a difficult setting to utilize for most riders though. It reduces the comfort level of your ride & cornering traction. Going to a higher amount of SAG on your fork will improve the cornering of your bike drastically. This is because the head angle of your bike becomes steeper under braking. It allows your bike to corner better and also transfers your weight forward to increase traction on the front end. The comfort level of your fork will also increase drastically and reduce any deflection that can happen on square edge obstacles.

For detailed instructions and videos, visit DVO Tech: tech.dvosuspension.com/setup

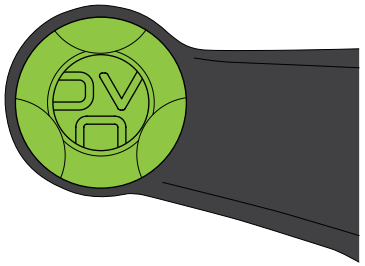
ENGLISH

Do not exceed maximum air pressure:
DIAMOND Series: 170PSI
BERYL: 170 psi
SAPPHIRE 32mm Model: 170 psi
SAPPHIRE 34mm Model: 150 psi

AIR PRESSURE Explained

Step 2: Air Pressure

Adjust the air pressure to attain your proper sag setting by removing the air cap and inflating the fork with a suspension pump. Refer to the chart below for your recommended starting pressure based on your rider weight.



DIAMOND series / BERYL

Rider Weight		Air Pressure (psi)														
lbs	kgs	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
120-139	54-63	Plush		Firm												
140-159	64-72			Plush		Firm										
160-179	73-81					Plush		Firm								
180-199	82-90							Plush		Firm						
200-219	91-100									Plush		Firm				
220-239	101-108											Plush		Firm		
240+	109+													Plush		Firm

SAPPHIRE 32mm Stanchion

Rider Weight		Air Pressure (psi)														
lbs	kgs	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155
120-139	54-63	Plush		Firm												
140-159	64-72			Plush		Firm										
160-179	73-81					Plush		Firm								
180-199	82-90							Plush		Firm						
200-219	91-100									Plush		Firm				
220-239	101-108											Plush		Firm		
240+	109+													Plush		Firm

SAPPHIRE 34mm Stanchion

Rider Weight		Air Pressure (psi)														
lbs	kgs	55	65	75	80	85	90	95	100	105	110	115	120	125	130	135
120-139	54-63	Plush		Firm												
140-159	64-72			Plush		Firm										
160-179	73-81					Plush		Firm								
180-199	82-90							Plush		Firm						
200-219	91-100									Plush		Firm				
220-239	101-108											Plush		Firm		
240+	109+													Plush		Firm

ONYX SC

Rider Weight		Air Pressure (psi)														
lbs	kgs	50		55		60		65		70		75		80		85
120-139	54-63	Plush		Firm												
140-159	64-72			Plush		Firm										
160-179	73-81					Plush		Firm								
180-199	82-90							Plush		Firm						
200-219	91-100									Plush		Firm				
220-239	101-108											Plush		Firm		
240+	109+													Plush		Firm

ONYX DC

Rider Weight		Air Pressure (psi)														
lbs	kgs	55	65	75	80	85	90	95	100	105	110	115	120	125	130	135
120-139	54-63	Plush		Firm												
140-159	64-72			Plush		Firm										
160-179	73-81					Plush		Firm								
180-199	82-90							Plush		Firm						
200-219	91-100									Plush		Firm				
220-239	101-108											Plush		Firm		
240+	109+													Plush		Firm

THINK DIFFERENTLY WHEN ADJUSTING PRESSURE.

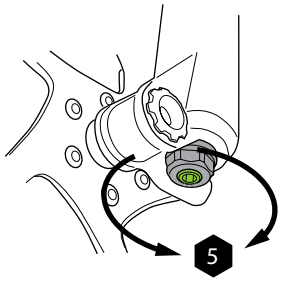
DVO Suspension requires a different mindset to properly adjust and get right. That's the idea of our products, to do things differently and in a better way. In other suspension products, riders can be timid to adjust the air pressure because of the negative effects it would have on different aspects of the travel. For example: If a rider is bottoming out too easily on medium hits, but loves the small bump sensitivity of the fork, they would most likely make a compromise and run the fork too soft. We see this all too often. The features and adjustments on DVO Suspension are there to remove any hesitation you may have or potential compromises you could make with set up. Take the time to set up your suspension and you will be rewarded!

Set your air pressure for mid-stroke and end stroke support only! We'll get to setting up your small bump sensitivity in the next section.

For detailed instructions and videos, visit DVO Tech: tech.dvosuspension.com/setup

OTT Explained

Step 2: OTT Setting



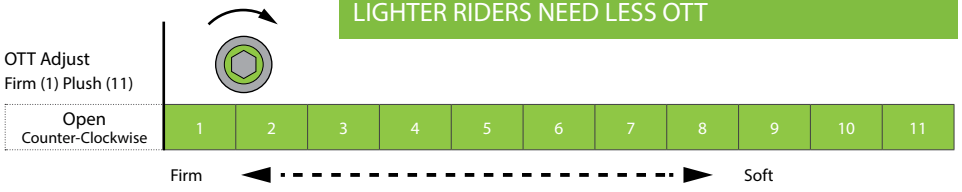
OTT is a DVO Exclusive Performance Feature that delivers amazing traction, comfort & control matching a wide range of riders weights & skill levels.

OTT allows the rider to independently adjust the initial 30mm's of the travel by externally adjusting the tension on the negative spring in relation to the amount of air pressure in the main spring.

As a general rule of thumb, the heavier/aggressive rider will use more air pressure & more OTT, and and lighter/less aggressive rider will use lower air pressures and less OTT.

Note:
Make sure that you always adjust the OTT 1 full rotation at a time, NOT 1 click.

HEAVIER RIDERS NEED MORE OTT
LIGHTER RIDERS NEED LESS OTT



Rider Weight		OTT (Rotation)										
lbs	kgs	1	2	3	4	5	6	7	8	9	10	11
120-139	54-63	Firm	Soft									
140-159	64-72		Firm		Soft							
160-179	73-81				Firm		Soft					
180-199	82-90						Firm		Soft			
200-219	91-100								Firm		Soft	
220-239	101-108										Firm	
240+	109+											

What is OTT?

OTT stands for "Off The Top" and it does just that. Allow you to tune how your fork feels off the top. OTT gives you the "Best of Both Worlds" for softer initial feel while being firm in the mid-stroke and end stroke… *Run higher air pressures without the harshness.*

How does it work?

OTT adjusts the preload on the negative spring inside the air cartridge. The negative spring on your OTT system is a traditional coil spring. You can externally preload the spring just like you would on a rear coil shock. This gives you the ability to fine tune the initial sensitivity without having it affect the mid-stroke or end stroke.

HOW CAN I USE IT?

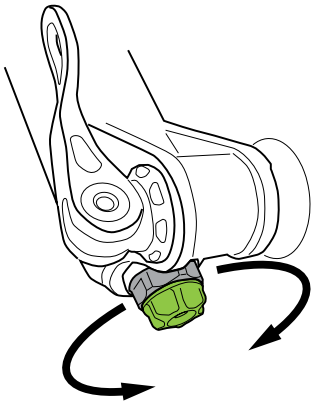
Higher air pressures allows fast moving riders to skip over bumps and holes but the downside is the harshness. With the OTT feature, the initial 30mm's of travel can be independently tuned regardless of air pressure. Heavier or fast riders can run higher air pressures while still having amazing small bump sensitivity & traction by simply increasing OTT. Lighter riders who run lower air pressures will use less OTT allowing you to use of all the travel without having the fork sag or hammock in the middle of the stroke. The Best of Both Worlds!

As a general rule of thumb, the heavier/aggressive rider will use more air pressure & more OTT, and lighter/less aggressive rider will use lower air pressures and less OTT.

For detailed instructions and videos, visit DVO Tech: tech.dvosuspension.com/setup

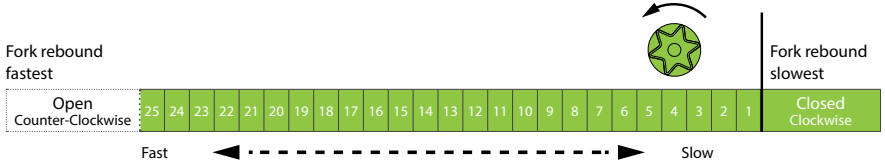
REBOUND Explained

Step 3: Rebound Setting



Rebound controls the speed at which the fork extends after compression. Rebound damping control is relative to the amount of air pressure used. 20 clicks total

Higher air pressure requires more rebound damping
Lower air pressure will require less rebound damping so please adjust accordingly.



Air Pressure	Rebound (Clicks)																			
(psi)	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
80							■	■	■	■										
85							■	■	■	■										
90							■	■	■	■										
95							■	■	■	■										
100							■	■	■	■	■	■	■							
105									■	■	■	■	■							
110									■	■	■	■	■							
115									■	■	■	■	■							
120									■	■	■	■	■	■	■					
125											■	■	■	■	■					
130											■	■	■	■	■					
135											■	■	■	■	■					
140											■	■	■	■	■					
145											■	■	■	■	■					
150											■	■	■	■	■					

WHAT IS REBOUND?

Rebound controls the return speed of after the fork is compressed. Rebound damping control is relative to the amount of air pressure used. Higher air pressure requires more (slower) rebound damping and a lower air pressure will require less (faster) rebound damping so please adjust accordingly.

HOW DOES REBOUND EFFECT THE HANDLING OF MY BIKE?

Rebound can drastically change the way your suspension functions as well as your overall control of the bike. It is extremely important to have a balanced rebound setting that is not too fast or too slow. This will depend on the air pressure you run. Higher pressures need more rebound, lower pressures need less rebound. If you notice the front end is dead feeling, rough on high speed chatter, and not tracking in corners, your rebound setting is most likely too slow. If rebound is too fast, your wheel will fall into more holes, instead of skipping over the top of them. Handling will feel twitchy and hard to control, it will be easier to be thrown out of control on jumps and landings.

IS MY REBOUND TOO FAST?

If rebound is too fast, your wheel will fall into more holes, instead of skipping over the top of them. Handling will feel twitchy and hard to control, it will be easier to be thrown out of control on jumps and landings.

IS MY REBOUND TOO SLOW?

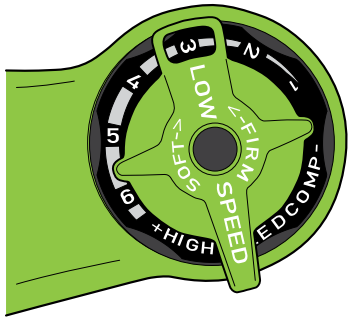
If rebound is set too slow it will pack on successive hits because the fork cannot extend fast enough keeping you in the mid stroke. This will result in the wheel going deeper into the travel on every hit and riding towards the end stroke.

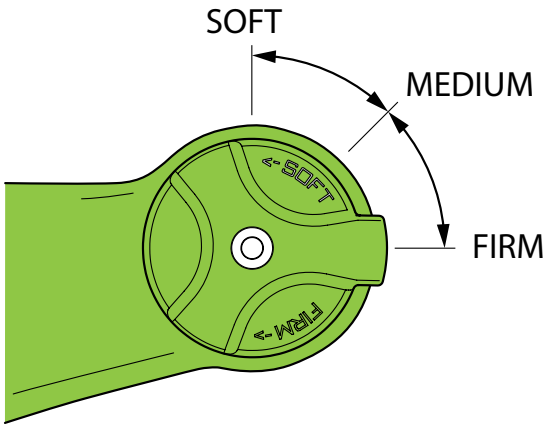
LOW SPEED COMPRESSION Explained

Step4: Low Speed Compression Setting

Low Speed Compression (LSC)

The Diamond/Sapphire comes with a "Quick Range" low speed compression adjuster that has 6 clicks of adjustment. Setting "1" is wide open and recommended when descending or riding on technical terrain. When you are climbing, you can switch the LSC to "6" to give you the firmest setting and best pedaling platform. Don't forget to change this back when you start to descend!





D2 DAMPER

D2 Low Speed Compression (LSC)

The D2 damper comes with a "Quick Range" low speed compression adjuster that has 3 clicks of adjustment. Setting "SOFT" is wide open and recommended when descending or riding on technical terrain. When you are climbing, you can switch to "FIRM" to give you the firmest setting and best pedaling platform. Don't forget to change this back when you start to descend!

WHAT IS LSC?

Low speed compression control the slower vertical movements such as climbing or slower paced trails and bumpy whoop sections. A good example of low speed is rolling slowly over a large rock and riding to its downside, this is where the suspension will fully compress but at a slower rate and low speed compression circuit comes into play. LSC refers to the shaft speed of the suspension and not the actual riding speed.

WHY DO I NEED LSC?

Low speed compression affects the suspensions performance when the shaft is moving up and down at slow speeds. Low Speed affects small bump performance and controls dive under braking.

WHAT HAPPENS IF THERE IS TOO MUCH LSC?

Too much Low Speed Compression will result in harshness over small bumps and traction will be reduced. Turning performance may also suffer because the suspension will ride to high in its travel. Ride may become harsh.

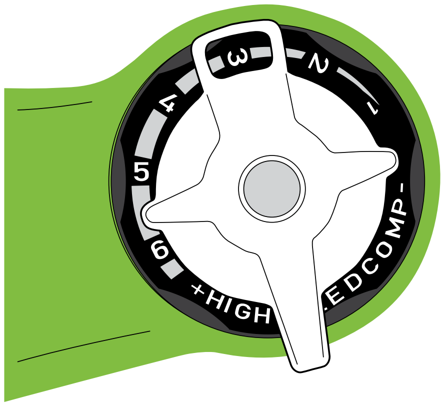
WHAT HAPPENS IF THERE ISN'T ENOUGH LSC?

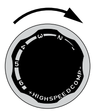
Not enough Low Speed Compression will result in the front end diving to quickly under braking. The suspension will have a mushy feeling and may bottom out too easily.

ENGLISH

HIGH SPEED COMPRESSION Explained

Step5: High Speed Compression Setting





Open Counter-Clockwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29

Soft ◄ - ► Firm

Air Pressure	Compression (Clicks)																												
(psi)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
80																													
85																													
90																													
95																													
100																													
105																													
110																													
115																													
120																													
125																													
130																													
135																													
140																													
145																													
150																													

WHAT IS HSC?

High Speed Compression controls the damping force under faster suspension movements regardless of the rider's speed. HSC comes into effect on fast, rough, technical trails, g-outs and hard landings. If you find yourself easily going through the travel then 1st make sure your sag is correct then adjust your HSC accordingly.

WHY DO I NEED HSC?

High Speed Compression damping affects the suspension when the shaft is moving up and down at high speeds. High Speed Compression helps with large impacts or sharp/sudden impacts. High Speed Compression can be used to reduce bottom out.

WHAT HAPPENS IF THERE IS TOO MUCH HSC?

Too much High Speed Compression may result in the fork not being able to reach full travel, and or spiking on large impacts.

WHAT HAPPENS IF THERE ISN'T ENOUGH HSC?

If you don't have enough High Speed Compression, The fork will blow through it's travel to easily on jump faces, and will bottom out to easily on large impacts.

ENGLISH

Notes

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