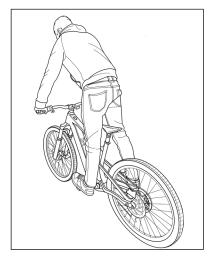


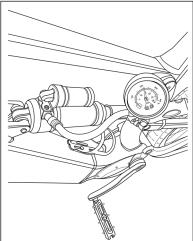
# NUKEPROOF DISSENT CARBON — SUSPENSION AND MAIN PIVOT PROGRESSION SET-UP GUIDE

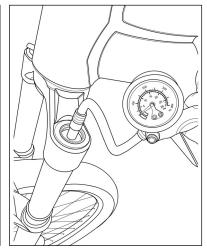
To get the most out of your Dissent Carbon you will need to set up and maintain your suspension. Suspension maintenance is specialist work, we recommend you use official service centres and service intervals are detailed in the manufacturer's user guides. Before your first ride, the suspension will need to be adjusted. The recommended sag for the Dissent Carbon is 25%, seated with your riding kit on. You will need a shock pump to set your sag. The progression, rebound and compression settings are subjective to terrain, riding style and rider preference. Adjust the settings as you ride to find what works best for you. Any doubts about tuning your shock or using the Main Pivot Progression adjustment please consult with an authorised Nukeproof Dealer.

Before setting up your suspension, please read the full manual for your shock and fork. FOX provides a 4-digit Tune code or a QR code on their forks and shocks. This will bring up all specific tuning and service guides on the FOX website. SRAM includes set-up guides for forks and shocks in one document. Rockshox service documents are model specific and linked below. Production Dissent Carbon frames and Bikes will be supplied with a Rockshox Suspension.



Always set your sag when the bike is on a level surface and ensure you have something to steady yourself with or a person to hold the handlebars while you sit on the bike.





Always set your sag before rebound and compression is adjusted.

#### Manufacturer Online Set-up and Service Guides

FOX	FOX Set-Up & Service Guides
Rockshox	Rockshox Set-Up & Service Guides

# Base Settings -

The Dissent Carbon will be supplied with a Rockshox Super Deluxe DH Air shock as standard; initial base settings are mid-point for Rebound and Compression. Only make incremental changes to ensure suspension characteristics are familiar.

# Shock Size / Tune / Upgrading -

If you wish to change your shock for an upgrade or a different model to your preference, please consult with your suspension supplier to ensure the shock is the correct size and the tune suits the kinematics of the Dissent Carbon. The following details will help with fitting a new shock and ensuring the tune is suitable.

#### Shock Size -

250 x 75mm Bearing End

Note a standard eyelet shock without a bearing end can be used with the correct hardware size. Please ensure the hardware matches the shock and the required size for the frame. If a bearing end shock can be sourced, this would be preferential to ensure the smoothest suspension action.

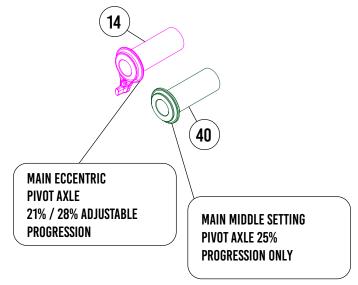
#### Hardware Size -

Front - 25 x 8mm Rear - 30 x 8mm

#### **Tune & Progression Settings -**

The following details will help you understand the Dissent Carbon suspension kinematics, the charts provided below will need to be referenced to help with set-up and if you change your shock need referenced by your suspension provider. The Dissent Carbon has a progressive layout, this ensures more support the further you push through the travel ensuring a stable and predictable ride. The new suspension kinematics builds on the V1 Dissent Alloy and has been improved for the Dissent Carbon. A high beginning rate gives a more supple beginning stroke, with a steep mid-stroke to give good stability and support and a regressive mid-to-end stroke to prevent end-stroke spiking and limited travel use. The added sensitivity allows the rider to go up a spring rate without adding harshness, to work better with air shocks and overall, still pedals exceptionally well.

There are 3 possible Main Pivot positions on the Dissent Carbon. The 3 positions allow adjustment in suspension progression between 21%/25%/28%. As shown adjacent from the Dissent Carbon exploded diagram, the Main Eccentric Pivot (14) allows changes between 21%/28%, fixed Middle Main Pivot (40) is 25%.

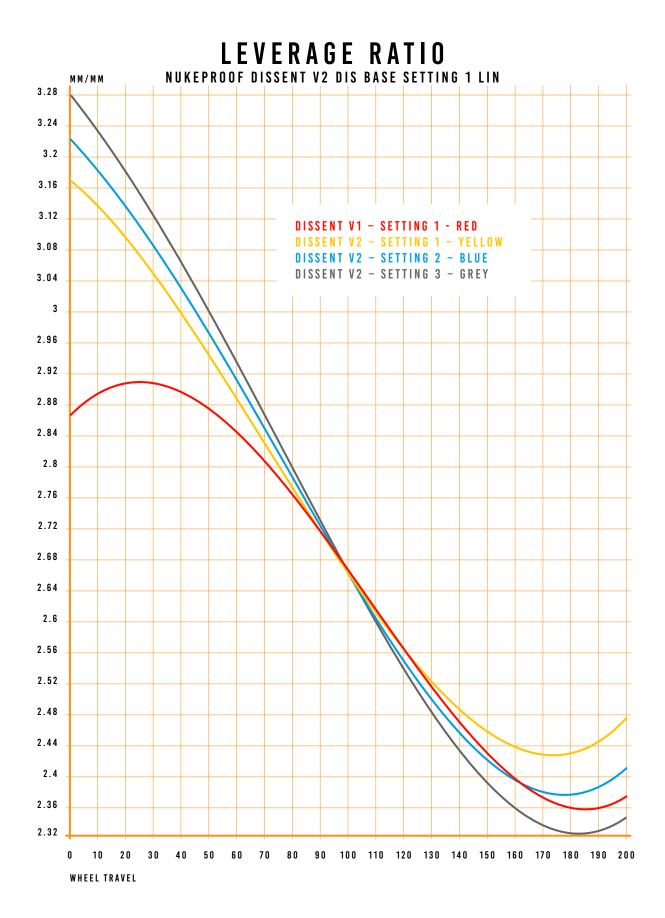


#### **Dissent Carbon**

Setting 1:	21% Progression
Setting 2:	25% Progression
Setting 3:	28% Progression

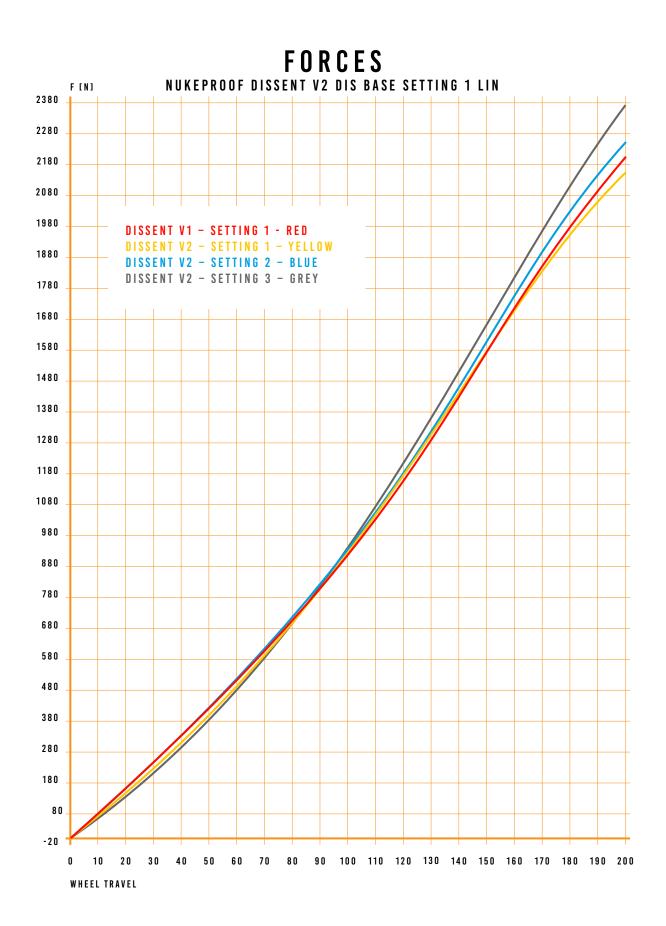
# Leverage Ratio -

All 3 Dissent carbon curves have a high beginning rate to give a more supple beginning stroke, a steep mid-stroke to give good stability and support, and a regressive mid-to-end stroke to prevent end stroke spiking and limited travel usage. You can also see the difference between the new and old curves in the beginning stroke. This was done to add sensitivity, allowing the rider to go up a spring rate without adding harshness and work better with air shocks.



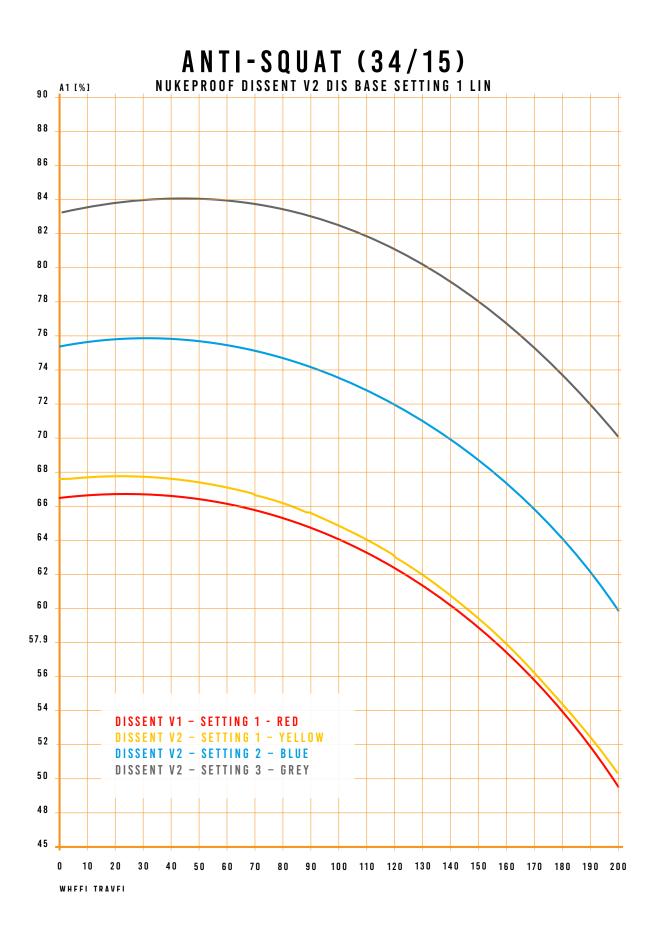
Forces -

Forces graph confirms what we are seeing on the leverage graph. The new Dissent Carbon requires less force to move the wheel before sag compared to the V1 Dissent Alloy. After sag, you can see the progression difference between the 3 settings.



#### Anti-Squat -

Flipping the progression lever also affects the anti-squat %. This works well as the progress setting has more anti-squat to help control the very soft beginning stroke. Whereas the linear setting has a lower anti-squat, but this setting also has more support in the beginning stroke, so requires less anti-squat.



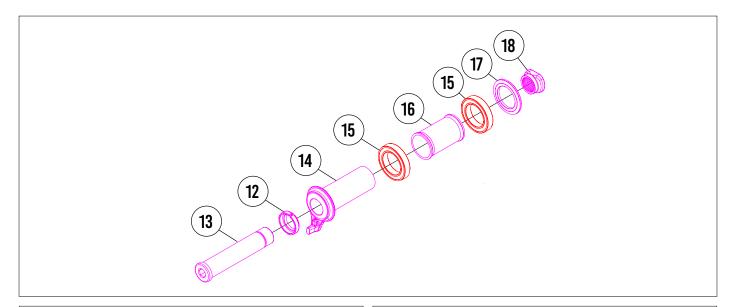
### How to adjust your Progression Settings -

Now you understand the Dissent Carbon rear suspension Kinematics in the 3 available settings, the following details how to switch between these settings to get the suspension dialled to your preference and terrain.

#### **Progression Setting 1 (21%) and 3 (28%) –**

The Dissent Carbon will be supplied with the Main Eccentric Pivot Axle (14) installed to the frame. With the following process, the Main Eccentric Pivot Axle (14) can be flicked up and down to switch between the two progression settings.

- Loosen the Main Pivot Axle (13) anti-clockwise a complete revolution with an 8mm Allen Key. This will free the Main Pivot Flip Axle (14) to move up and down.
- Select your progression preference by moving the Main Pivot Flip Axle (14) fully up and down.
- In the down position progression setting, 1 is 21% and in the up-position progression setting, 3 is 28%.
- Once you have selected your progression preference retighten the Main Pivot Axle (13) to 25Nm with an 8mm Allen Key Torque Wrench.







#### Progression Setting 2 (25%) -

To use this progression setting the Main Eccentric Pivot Axle (14) needs removed and replaced with the Main Middle Pivot Axle (40). Please follow the guide below for installation.

- Clamp the seatpost to the work stand ensuring the post minimum insert depth is not exceeded.
- Remove the rear wheel from the bike with a 6mm Allen Key, careful not to lose the Axle Compression Washer (36) when removing the Rear Axle (21).
- Fully unscrew (anti-clockwise) the Main Pivot Axle (13) with an 8mm Allen Key, and fully remove Main Pivot Axle (13), Main Pivot Collet Washer (12) and Main Pivot Nut (18).
- Your rear triangle is now free from the front triangle Main Pivot. Lift the rear triangle and remove the Main Eccentric Pivot Axle (14) and Main Pivot Washer (17).
- Install greased Main Middle Pivot Axle (40) and replace Main Pivot Washer (17). Lower the rear triangle and align with the front triangle ensuring the Main Pivot Washer (17) stays in position.
- Refit Main Pivot Axle (13), Main Pivot Collet Washer (12) and Main Pivot Nut (18). Tighten with an 8mm Allen Key Torque Wrench to 25Nm.
- Refit the rear wheel to the bike and install the Axle Compression Washer (36) and the Rear Axle (21). Tighten with a 6mm Allen Key Torque Wrench to 10Nm.

