

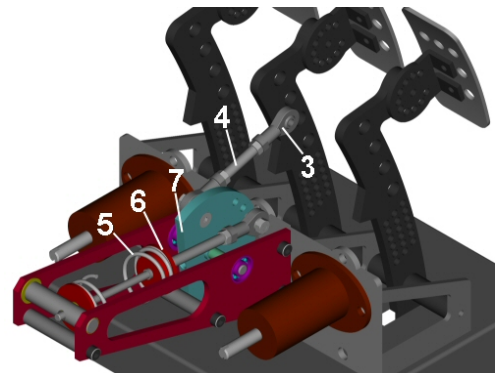
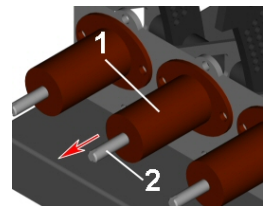
Hyper-Real Braking Device Instruction Manual

By purchasing a VPP Hyper-Real Pedalset, you decided to enter the High-End hardware segment. Like all Virtual Performance Parts products, this Hyper-Real Pedalset will offer you a tremendous amount of possible settings. This product is designed to satisfy all possible demands a customer could have.

Assembly

Caution: the spring components are under initial tension. Please follow the exact steps in this manual. Disregarding this warning could lead to injuries.

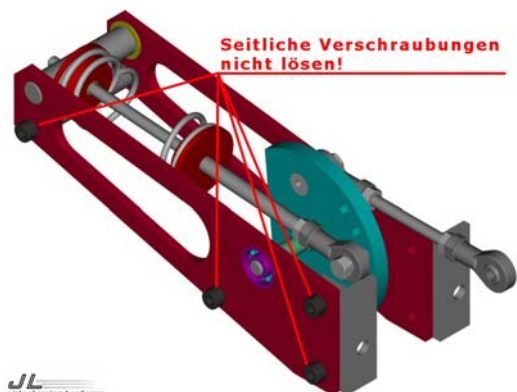
1. Release the spring tension in **Housing 1**, by unscrewing **Clampscrew 2** totally.
2. Undo **Rod 3** from the braking pedal and fit it including counter nut to **Threaded rod 4** at the progressive brake.
3. Only now you release the screw connection which fits **Housing 1** to the pedalframe. Release both screws evenly spread in order to achieve a total tension release inside the housing, before you take **Housing 1** off the frame.
4. Now, instead of **Housing 1**, please fit the progressive brake to the frame. You can use the screws that previously fit **Housing 1** to the pedalframe. Make sure you still can move the brake a bit – so don't tighten the screws totally yet.
5. Before you connect **Threaded Rod 4** with the brake pedal, release tension on **Pressure spring 5** at the progressive Brake, by turning **Spring Cup 6** into **Crank Disk 7**'s direction. Now connect **Threaded Rod 4** to the brake pedal. Don't forget to insert a grommet between **Rod 3** and the pedal lever.
6. Now move the progressive brake until **Threaded Rod 4** is positioned parallel to the brake pedal. Once you accomplished this, please tighten the screws totally to make sure the brake is mounted safely and solid.



Check each and every connection you altered and make sure they are solid.

General Note

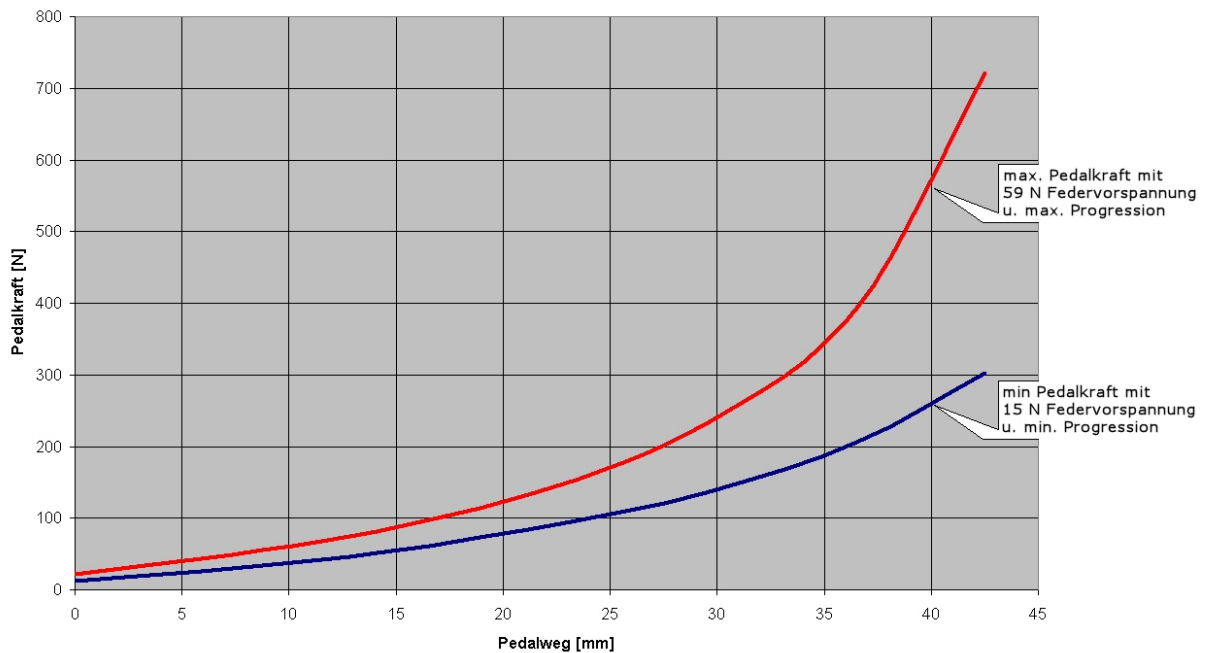
Users should not, under any circumstances loosen the screws on the sides of the device. Doing so is liable to damage the product.



If you intend to change your setup from the settings supplied by the manufacturer, we highly recommend you to consult the instructions below before you do so.

It is possible to adjust the brake power itself, by changing the initial spring tension. Furthermore you can adjust and control the process of brake-progression. You can do this by using one of the three mounting holes *A*, *B* or *C* (at the crank disk) for the *Push rod*. You can see the total possible window of progression below in *Diagram 1*.

Progressionsverlauf



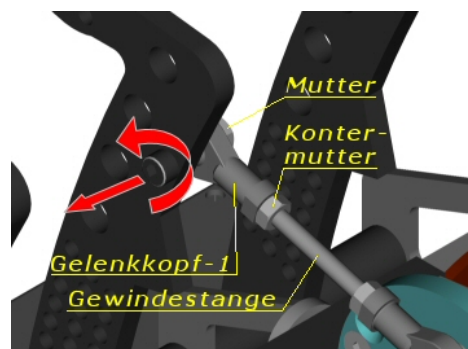
a) **Aligning the Pedal position**

Standard alignment is equal to all pedals, meaning all pedals are in the exact same position. If you desire a different alignment, make sure you follow the next procedure for you brake pedal:

Loosen the nut at *Rod End-1* and pull the clamping bolt out of the pedal lever. Now loosen the *Counter Nut* at *Rod End-1* and bring it at the *Threaded Rod*, until it reached the desired position.

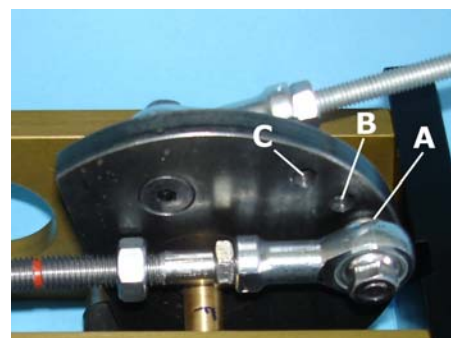
Attention! Make sure that you still have about the width of a nut left within *Threaded Rod-1*, preventing the mechanics from instability. Also make sure that once you tighten the *Counter Nut*, the position of *Rod End-1* is parallel to the pedal lever.

If you cannot find a desired pedal position with the standard *Threaded Rod*, you can obtain graduated lengths if required.



b) **Adjusting Brake Progression**

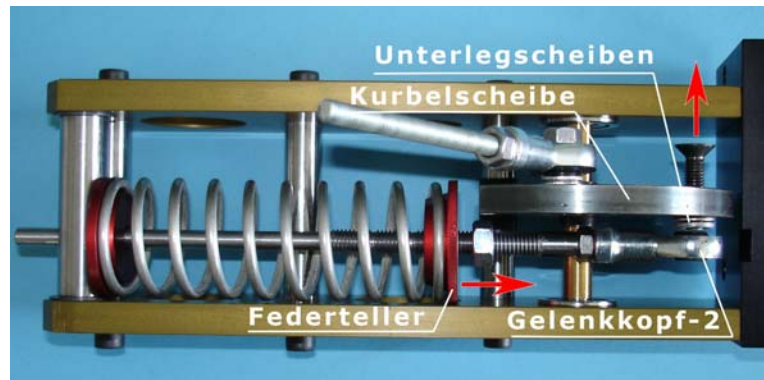
In *Diagram 1* you will notice how the pedal pressure compared the the travel starts raising slowly. In the last third of the travel you will recognise the pressure raising more explicit. This means the pedal pressure is growing progressively. You will notice that while driving it



will be harder to push the brake pedal, the closer the tires get to the point of locking. After a little practise and once you got used to this, you will find out that with this system, the optimal braking pressure point, which is close to the lock-up point, is much easier to find. In other words you can find this point faster and as a result you will be able to brake later. The standard setting is chosen to be average progression. (position B). However you can also adjust these settings in both ways; either a stronger or a weaker progression of pedal pressure. You can do this by fitting the *Push Rod* to either position *A (stronger)* or *C (Weaker)* at the *Crank Disc*.
Gehen Sie hierfür bitte wie folgt vor:

- Loosen the nut at the *Spring Cup* and turn it as far into the direction of the Crank Disk until the pressure spring isn't under tension anymore.
- Remove the nut and the grommer at *Rod End-2 of the Crank Disc*. Now wring the *Counter Sunk Screw* out of the *Crank Disc*
- Choose the new position *A* or *C* for the *Push Rod* at the Crank Disk and screw the *Counter Sunk Screw* in there.

Attention! Just turn the *Counter Sunk Screw* only as much into the *Crank Disc*, until it allows you to put the two grommets and the *Rod End-2* softly onto the end of the screw.



BEWARE that you **do not cause a bending force** at the push rod. Now that you have done this you can tighten the *Counter Sunk Screw* totally. Finally, fit the *Rod End-2* including grommet and nut to the *Crank Disc*.

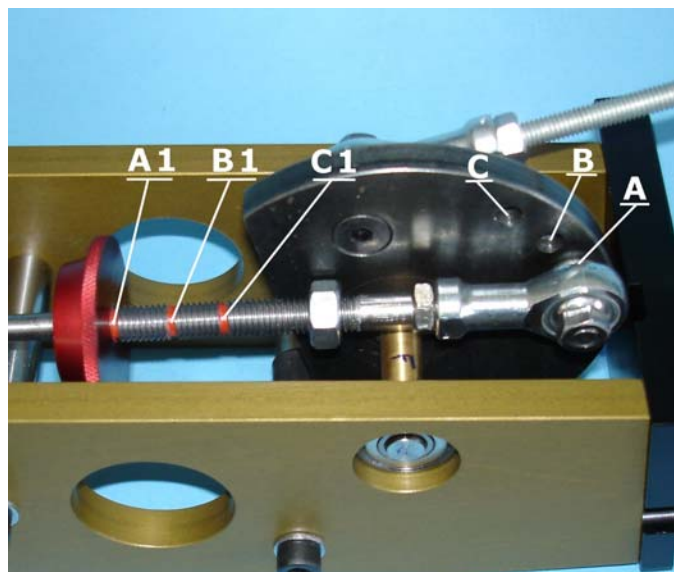
- **Attention!** After changing the push rod's position, at any cost, also re-adjust the spring tension, or check the position of the spring cup. Please use the instructions below (point C) to do this.

c) Adjusting or setting the spring tension

Loosen the nut you find at the *Spring Cup*. Turning the Spring Cup will either increase or decrease spring tension. After you are finished setting up the tension make sure you tighten the nut back against the spring cup (counter it).

If you set the maximum spring tension you should check that the spring is NEVER on „block“ – not even when you have the pedal 100% passed through. „Block“ means that the spring is totally compressed and there is no air between the „turns“ anymore. This can happen pretty easily if you have chosen to use positions *B* or *C* for the *push rod*.

To avoid the spring from going onto „block“ – there are 3 marked notches at the *Push Rod*: *A1*, *B1*, *C1*. Naturally, *A1* is related to position *A*, *B1* to position *B* and *C1* to position *C*. If you have chose position *A*, make sure the Spring Cup does absolutely not cover any bit of the *A1* mark. The mark is the limit. If you have



chosen B1, the limit is the B1 mark and naturally if you have chose C, the limit is at C1.

Attention! This means, that you should absolutely NEVER turn the Spring cup further than the start of the specific mark. It should never cover the slightest bit of the marks, as that would result in a „block“ most likely. You should always be able to see the full marks without any part of the spring cup covering them.

In the worst case, you don't just get a „block“ as a result of disregarding the above advice, but you would damage the total braking device.