

Wrenching

Deraillieur Limit Screws

When a deraillieur is properly aligned, the mechanism will hold the chain directly above (front deraillieur) or directly below (rear deraillieur) the respective chain ring on the sprocket.

Rear deraillieur correctly lined up directly below the small chain ring

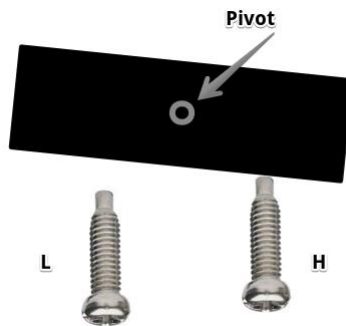


On each end, the high and low gear, there must be a way to limit how far the deraillieur mechanism can travel. Otherwise, the deraillieur can travel past the inner or outer chain ring and the chain will come off. This is done with limit screws. There will be small screws, generally marked H and L, on the deraillieur. On both deraillieurs, the L controls the low gears which are those closest to the bike. The H controls the high gears which are farthest from the bike.

With the chain on the smallest chain ring and the derailleur aligned underneath, adjust the H limit screw until it just starts moving the derailleur inward. Do the same with the largest chain ring using the L limit screw. Once the limit screws are set on the derailleur being adjusted, shift to the smallest chain ring and re-tighten the cables. With the cable loose on the rear, it's a good idea to twist the barrel adjuster all the way in and then move it out two complete turns. This will help with fine tuning the shifting. When shifting to the high or low end, the derailleur should move far enough to allow the chain to move onto the chain ring, but not outside the ring and fall off.

The below diagrams attempt to show how the limit screws contact the rocker plate.

In the first example, the derailleur has moved as far as it can move to the high gear.



In the second example, the derailleur has moved as far as it can move to the low gear.

