How to: restrict gears – rear mech

Bikes can be easily restricted or limited to a lower gear using the limit screws on the rear mech (derailleur). First change your gears so that the chain is sat on the sprocket you want to set as the limit. Then, without pedaling, click the gear lever back to the current set high gear to release the tension on the cable, the chain will now be out of alignment (picture 1). Find the H Limit screw (picture 2) and screw it clockwise to move the rear mech across 2 sprockets and sit directly under the sprocket the chain is on (picture 3). This locks the rear mech off and prevents the rider accessing any higher gears.



Chain on correct sprocket but out of alignment

Screw clockwise



Letter H denotes high gear limit screw



Chain on correct sprocket and aligned as rear mech has been correctly adjusted rightwards

As a general rule of thumb you can screw off or restrict 3 sprockets on most rear mechs. You can screw off more gears by purchasing longer screws for your rear mech, these are a standard size (M4) and are easily bought from most hardware stores – take your screw with you and double check the size by finding a nut that fits it. Your other option for restricting 3 or more sprockets is to purchase a 14 or 16-up cassette – see the document cassettes: explained