



## INTERNATIONAL CYCLING UNION

To the National Federations  
Sent by email only

Aigle, 20 December 2011  
Ref: Sport and Technical Department / JC /  
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### **Horizontality of the saddle**

Dear Sir, Madam,

As a result of many discussions and comments concerning Article 1.3.014 on the horizontality of the saddle, the UCI has decided to clarify the situation by introducing a tolerance to the measurement of the saddle angle. To determine the value of this tolerance, the UCI has taken into account many measurements recorded in competition, numerous scientific articles published on the subject describing biomechanical issues as well as discussions with several saddle manufacturers.

Ultimately the concept is to grant the rider sufficient freedom to allow a comfortable position to be adopted, reducing the pressure on the perineum, while avoiding any deviation through an excessively sloping saddle that could improve sporting performance to an unacceptable degree by the addition of a lumbar support. Furthermore, if the saddle is inclined too severely, this reduces the quality of the rider's position on the saddle, thus reducing its intrinsic function of providing a basic support for the rider on the bicycle.

From 1 March 2012, checks on the horizontality of saddles will be conducted at WorldTour events, World Cup events and World Championships for the road, the track and the cyclo-cross by measuring the angle of incline of the saddle, considering the plane passing through the highest points at the front and rear of the saddle. This angle must be less than 2.5 degrees with an error tolerance of 0.5 degree. This means that if the measurement taken during the check exceeds  $\pm 3$  degrees (positive or negative inclines), the saddle must be adjusted. Incline of the saddle of -3 degrees is shown in the picture below.



The commissaires at aforesaid events will be provided with a measuring device as shown in the image below. Checks will not be systematic, but in the event of any doubt, the commissaires will place the device on the saddle to determine its angle of incline after having calibrated the device to the ground or the measuring jig.



The reference value will always be the measurement of the angle of the incline of the saddle, but for events at which the official measuring device is not available, commissaires will measure the difference between the heights of the highest points of the front and rear of the saddle using a spirit level. The tolerance for the height difference is 1 cm. This value has been defined taking into account the mean distance between the highest points at the front and the back of the saddle.

The measurement of the horizontality of saddles must be a simple, fair and repeatable process. The tolerance of 3 degrees gives the rider a lot more freedom to adjust his or her position on the bike compared to the previous interpretation of the rule. Commissaires will be able to give a clear, coherent and categorical response when carrying out saddle checks.

## Bottle position and dimensions

The positioning and dimensions of bottles used during competition are the subject of a change of the regulations that was approved by the Management Committee in September. The new article 1.3.024 bis states:

**“Bottles shall be integrated in the frame and may only be located on the down and seat tubes on the inside of the frame and cannot be integrated to the frame. The maximum dimensions of the section of a bottle used in competition must not exceed 10 cm or be less than 4 cm and their capacity must be a minimum of 400 ml and a maximum of 800 ml.”**

Bottles have been increasingly moving away from their original function of allowing riders to rehydrate towards an alternative use as aerodynamic elements which are integrated into the design of frames in order to improve riders' performances. It has become essential to regulate the positioning and dimensions of bottles in order to avoid any future deviations and to return bottles to their principal function.

Article 1.3.024 bis will come into effect on 1 January 2013. From that date, bottles will only be allowed to be positioned on the down tube and seat tube. Locating bottles behind the saddle, on the stem, or in any other position will then be prohibited. Furthermore, it will not be allowed to integrate bottles with frames, meaning that there must be a space between the bottle and the tube to which it is attached.

The rule specifies the bottle dimensions in order to avoid empty bottles being added solely for reasons of aerodynamics. The rule also improves the rider's ability to access and grasp the bottle. The minimum dimensions do not apply to the bottle caps and the part of the bottle to which the cap is attached.

Finally, the capacity is also specified in order to guarantee that bottles are used for rehydration purposes and to prevent any deviations. If bottles with a volume in excess of 500 ml are used, it is recommended that the bottle attachment system should be checked to ensure that it can bear a weight in excess of 0.5 kg.

Thank you for taking note of these new instructions and for your cooperation during the checks during the year 2012. Please do not hesitate to consult the commissaires or to contact me in the event of a problem or questions relating to equipment.

Seasons greetings and best wishes for the New Year.



Julien Carron  
Technological Coordinator