

# **Equipment Regulations**

# Version in force from 1 January 2000

## **Chapter III EQUIPMENT**

## **SECTION 1: GENERAL PROVISIONS**

## §1 Principles

- **1.3.001** Each licence-holder shall ensure that his equipment (bicycle with accessories and other devices fitted, headgear, apparel, etc.) does not, by virtue of its quality, materials or design, constitute any danger to himself or to others.
- **1.3.002** The UCI shall not be liable for any consequences deriving from the choice of the equipment used by licence-holders, nor for any defects it may have or its non-compliance.
- 1.3.003 In no case shall the fact that the rider or any other licence-holder has been able to take the start incur the liability of the UCI as any verification of equipment that might have been conducted by the commissaires is limited to ensuring compliance of the overall external appearance of that equipment with purely sporting requirements.

### §2 Technical innovations

1.3.004 No technical innovation regarding anything used, worn or carried by any rider or other license holder during a race (bicycles, equipment mounted on them, accessories, helmets, clothing, means of communication, etc.) may be used until approved by the UCI Executive Committee. Requests for approval shall be submitted to the UCI before 31 August of any year, accompanied by all necessary documentation. If accepted, the innovation will be permitted only as from 1 January of the following year.

Acceptance shall refer solely to the fact that the innovation will be acceptable from a sporting point of view.

1.3.005 If at the start of a race or stage, the Commissaires Panel considers that a rider arrives with a technical innovation not yet accepted by the UCI, it shall refuse to permit the rider to start the race with such an innovation.

In the event of usage during a race the rider is automatically eliminated or disqualified.



There shall be no right to appeal against the decision of the Commissaire's Panel.

If this technical innovation is not noticed or sanctioned by the Commissaire's Panel, the UCI Disciplinary Commission shall order the disqualification.

The UCI shall refer to the Disciplinary Commission, either automatically or at the request of all interested. The Disciplinary Commission will only apply sanctions after having received the opinion of the Equipment Commission.

Outside races, the UCI shall decide whether some item be a technical innovation and whether the procedure provided for in article 1.3.004 is to be followed.

#### **SECTION 2 BICYCLES**

#### **Preamble**

Bicycles shall comply with the spirit and principle of cycling as a sport. The spirit suggests that cyclists compete in competitions on an equal footing. The principle asserts the primacy of man over machine.

## §1 Principles

#### Definition

1.3.006 The bicycle is a vehicle with two wheels of equal diameter. The front wheel shall be steerable; the rear wheel shall be driven through a system comprising pedals and a chain.

### Type

**1.3.007** Bicycles and their accessories shall be of a type that is or could be sold for use by anyone practising cycling as a sport. The use of equipment designed especially for the attainment of a particular performance (record or other) shall be not authorised.

## Position

**1.3.008** The rider shall normally assume a sitting position on the bicycle. This position requires that he be supported solely by the pedals, the saddle and the handlebar.

## Steering

**1.3.009** The bicycle should have a handlebar which allows it to be ridden and manoeuvred in any circumstances and in complete safety.

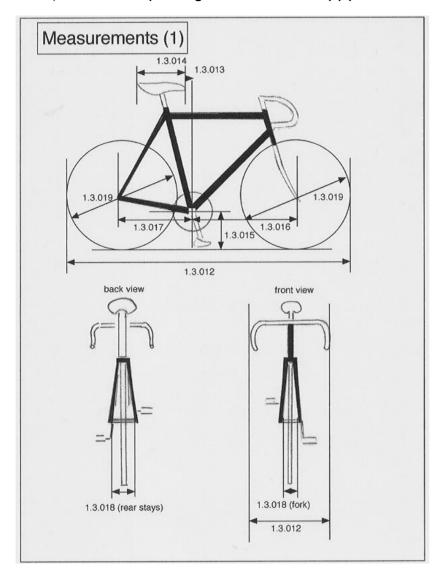
## **Propulsion**



**1.3.010** The bicycle shall be propelled solely, through a chainset, by the legs moving in a circular movement.

## §2 Technical specifications

- **1.3.011** Except where stated to the contrary, the following technical specifications shall apply to bicycles used in Road, Track and Cyclo-Cross racing.
  - a) Measurements (see diagram "Measurements (1)")

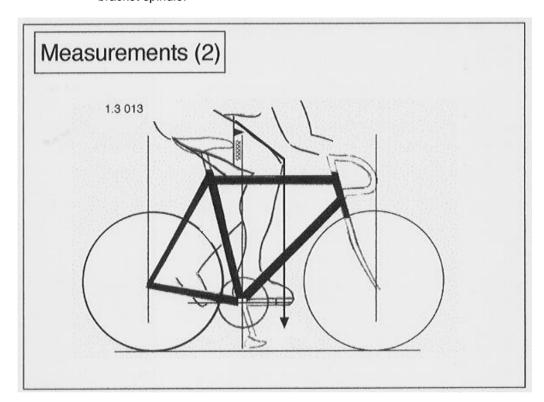


**1.3.012** A bicycle shall not measure more that 185 cm in length and 50 cm in width overall.



A tandem shall not measure more than 270 cm in length and 50 cm in width overall.

1.3.013 The peak of the saddle shall be a minimum of 5 cm to the rear of a vertical plane passing through the bottom bracket spindle. This restriction shall not be applied to the bicycle ridden by a rider in a track sprint event, keirin, 500 metres or 1 kilometre time trials; however, in no circumstances shall the peak of the saddle extend in front of a vertical line passing through the bottom bracket spindle.



- **1.3.014** The saddle support shall be horizontal. The length of the saddle shall be 24 cm minimum and 27.5 cm maximum.
- **1.3.015** The distance between the bottom bracket spindle and the ground (DA) shall be between 24 cm minimum and 30 cm maximum.
- **1.3.016** The distance between the vertical passing through the lower bracket spindle and the front wheel spindle shall be between 54 cm minimum and 65 cm maximum<sup>(1)</sup>.

<sup>&</sup>lt;sup>1</sup> The distances mentioned in footnote (1) to the articles 1.3.013 and 1.3.016 above may be reduced where that is necessary for morphological reasons. By morphological reasons should be understood everything to do with the size and limb-length of the rider.

Any rider who, for these reasons, considers that he needs to use a bicycle of lesser dimensions than those given shall inform the Commissaires Panel to that effect when presenting his licence. In that case, the Panel may conduct the following test. Using a plumb-line, they shall check to see whether, when pedalling, the point of the rider's knee when at its foremost position passes beyond a vertical line passing through the pedal spindle (see diagram "Measurements (2)").



The distance between the vertical passing through the bottom bracket spindle and the rear wheel spindle shall be between 35 cm minimum and 50 cm maximum.

- **1.3.017** The internal distance between the front fork ends shall not exceed 10.5 cm and that of the rear stays shall not exceed 13.5 cm.
- 1.3.018 Wheels of the bicycle may vary in diameter between 70 cm maximum and 55 cm minimum, including the tyre. For the cyclo-cross bicycle the width of the tyre shall not exceed 35 mm and it may not incorporate any form of spike or stud.

Only wheel designs given prior approval by the UCI may be used.

Without prejudice of the application of article 1.3.004 and 1.3.005, this paragraph will come into force on January 1 2001.

### b) Weight

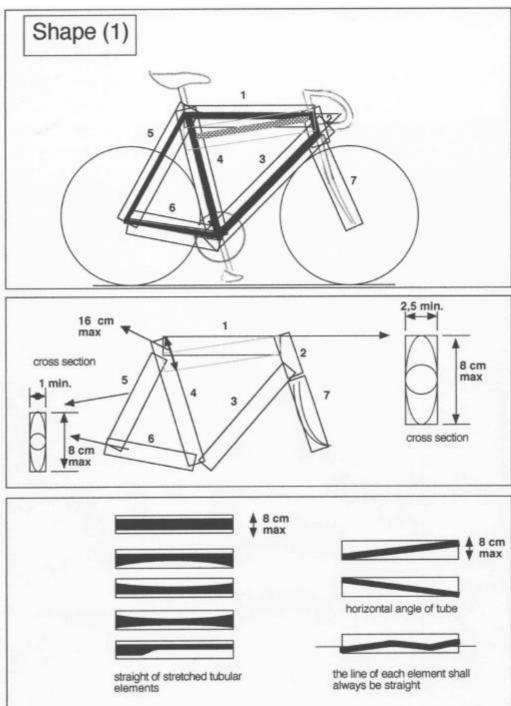
- 1.3.019 The weight of the bicycle cannot be less to 6.8 kilograms.
  - c) Configuration
- 1.3.020 For massed start road races and cyclo-cross events, the frame of the bicycle shall be of a traditional pattern, i.e. built around a main triangle. It shall be constructed of straight or tapered tubular elements (which may be round, oval, flattened, teardrop shaped or otherwise in cross-section) such that the form of each element encloses a straight line; the centre line of each element shall always be straight. The elements of the frame shall be laid out such that the joining points shall follow the following pattern: the top tube (1) connects the top of the head tube (2) to the top of the seat tube (4); the seat tube (from which the seat post shall extend) shall connect to the bottom bracket shell; the down tube (3) shall connect the bottom bracket shell to the bottom of the head tube. The rear triangles shall be formed by the chain stays (6), the seat stays (5) and the seat tube (4) with the seat stays anchored to the seat tube at points falling within the limits laid down for the slope of the top tube.

The maximum height of the elements shall be 8 cm and the minimum width 2.5 cm. The minimum width shall be reduced to 1 cm for the chain stays (6) and the seat stays (5). The minimum thickness of the elements of the front fork shall be 1cm; these may be straight or curved (7). (See diagram "Shape (1)").

The top tube may slope, provided that this element fits within an horizontal template defined by a maximum height of 16 cm and a minimum thickness of 2.5cm.

"Road races" is taken here to include all races on the road with the exception of individual time trials and time trials for teams of up to four riders.

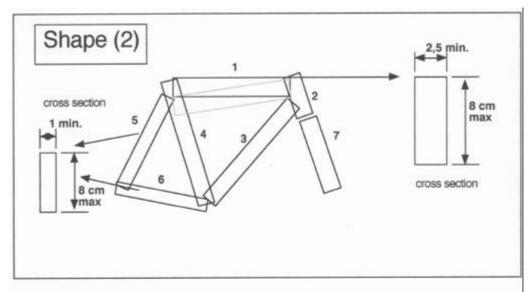


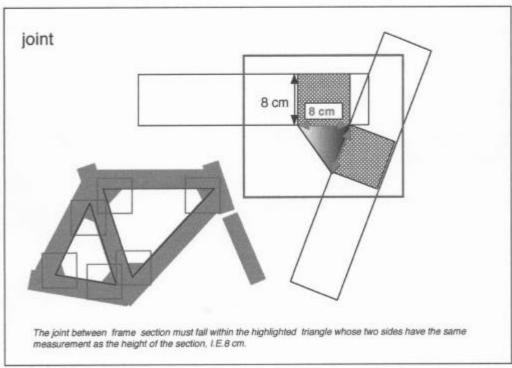


1.3.021 For individual time trials and time trials for teams of up to four riders, and for track races, the elements of the bicycle frame may be tubular or solid, assembled or cast in a single piece in any form (including arches, cradles,



beams or any other). These elements, including the bottom bracket shell, shall fit within a template of the "triangular form" defined in article 1.3.020.







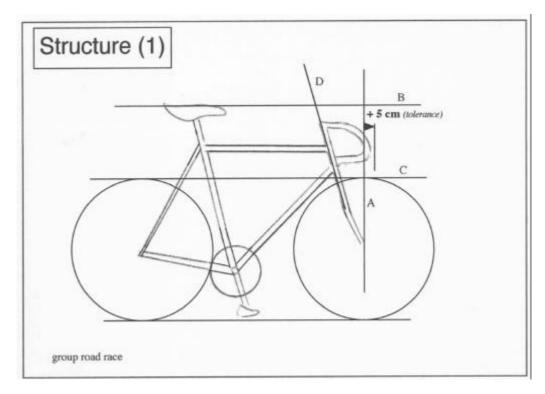
## c) Structure

1.3.022 In races other than those covered by article 1.3.023, only the traditional type of handlebars (see diagram "structure 1") may be used. The point of support for the hands must be positioned in an area defined as follows: above, by the horizontal plane of the point of support of the saddle (B); below, by the horizontal line passing through the highest point of the two wheels (these being of equal diameter) (C); at the rear by the axis of the steerer tube (D) and at the front by a vertical line passing through the front wheel spindle with a 5 cm tolerance (see diagram "Structure (1)"). The distance referred to in

vertical line passing through the front wheel spindle.

The brake controls attached to the handlebars shall consist of two supports with levers. It must be possible to operate the brakes by pulling on the levers with the hands on the lever supports. Any extension to or reconfiguration of the supports to enable an alternative use is prohibited. A combined system of brake and gear controls is authorised.

point (A) is not applicable to the bicycle of a rider who takes part in a sprint, keirin or Olympic sprint race, but must not exceed 10 cm in relation to the

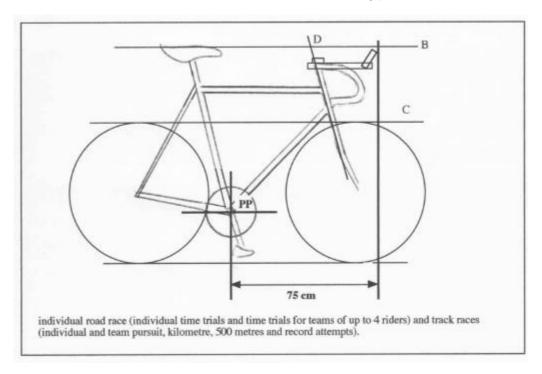


1.3.023 For individual time trials and time trials for teams of up to four riders on the road, and for the individual and team pursuits, kilometre and 500m time trials and record attempts on the track, an extension may be added to the steering system. The distance between the vertical line passing through the bottom bracket axle and the extremity of the handlebar may not exceed 75 cm, with the other limits set in article 1.3.022 (B,C,D) remaining unchanged. A support for the elbows or forearms is permitted (see diagram "Structure (1)").



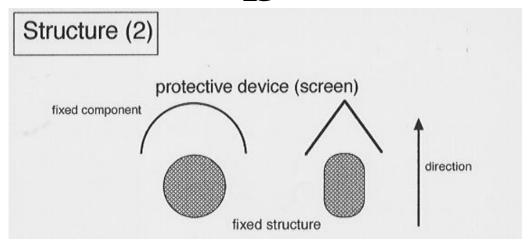
For individual road time trials and time trials for teams of up to four riders, controls or levers fixed to the handlebar extension may extend beyond the 75 cm limit as long as they do not constitute a change of use, particularly that of providing an alternative hand position beyond the 75 cm mark.

For the track events covered by article 1.3.023, the distance of 75 cm may be increased to 80 cm to the extent that this is required for morphological reasons; "morphological reasons" should be taken as meaning anything regarding the size or length of the rider's body parts. A rider who, for this reason, considers that he needs to make use of a distance between 75 and 80 cm must inform the Commissaires' Panel at the moment that he presents his licence. In such cases the Commissaires' Panel may carry out the following test: ensuring that the angle between the forearm and upper arm does not exceed 120° when the rider is in a racing position.

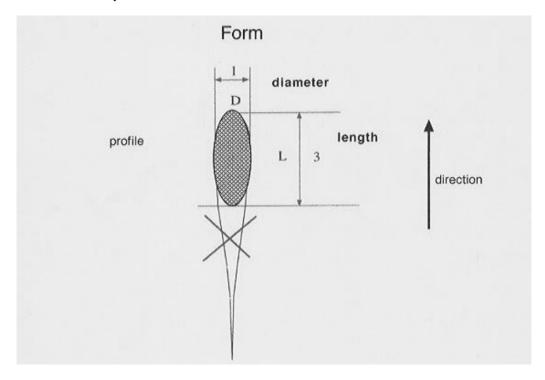


1.3.024 Any device, added or blended into the structure, that is destined to decrease, or which has the effect of decreasing, resistance to air penetration or artificially to accelerate propulsion, such as a protective screen, fuselage form of fairing or the like, shall be prohibited.



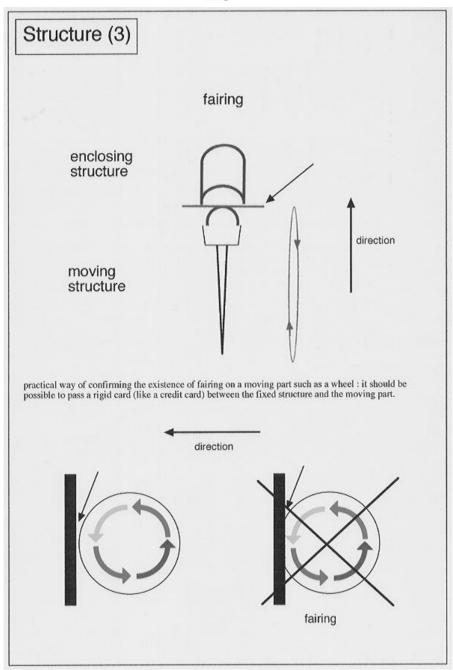


A protective screen shall be defined as a fixed component that serves as a windscreen or windbreak designed to protect another fixed element of the bicycle in order to reduce its wind resistance.



A fuselage form shall be defined as an extension or streamlining of a section. This shall be tolerated as long as the ratio between the length L and the diameter D does not exceed 3.





A fairing shall be defined as the use or adaptation of a component of the bicycle in such a fashion that it encloses a moving part of the bicycle such as the wheels or the chainset. Therefore it should be possible to pass a rigid card (like a credit card) between the fixed structure and the moving part.

**1.3.025** Freewheels, multiple gears and brakes are not permitted for use on the track during competition or training.