

Bicycle assembly

1. Final task assignment

The task consists in assembling a Women's city bike. Some of its parts may be pre-installed in order to facilitate the work of contestants. Contestants will use the manufacturer's assembly instructions.

The brand of the bicycle will be revealed on the day of the competition.

The following image is an example of a Women's city bike. Be careful, this is not the one to be used for the competition.



Summary of the main assembly steps (bear in mind that depending on the brand, the manufacturer's assembly instructions might come in a different order):

- ✓ Installation of the bicycle drive, of the crankset and pedals
- ✓ Installation of the derailleur gears
- ✓ Installation of the chain
- ✓ Installation of the fork, of the stem and of the handlebar
- ✓ Installation of rim brakes on both the front and the back wheel
- ✓ Installation of the seat post and the saddle
- ✓ Installation of the cables and their sheaths
- ✓ Installation of the bottom bracket
- ✓ Adjustment of any buckling or axle problems
- ✓ Assembly of tubes and tires
- ✓ Installation of the lights, the mudguards, the carrier rack and any other accessories
- ✓ Installation of the wheels
- ✓ Adjustment of all systems

2. Allocated time: 4 hours 30 minutes

The contest duration is 4 hours 30 minutes.

3. Requirements

- ✓ Contestants must respect hygiene and safety rules.
- ✓ A demonstration bike will be available for consultation to contestants for 30 minutes before the beginning of the competition. It will then be removed from the contestants' sight.
- ✓ Once they have adjusted the buckling of the wheels, contestants will notify the jury for evaluation and carry on with the installation of the remaining parts.
- ✓ Any contestant caught cheating, talking to someone from the public or using a communication device will suffer a penalty of 5 points for the first transgression. A second transgression will lead to an exclusion from the contest.

4. Procedure

Day -1 (March 23rd): On the day before the competition, contestants will be welcomed by the members of the jury. A briefing about the organization of the competition and the safety rules will be arranged. Due to the large number of registered contestants, the competition will be organized in two groups. Contestants from a same delegation will inevitably be placed in the same group. Contestants will draw lots to be assigned to a work station, where they may drop off their tools.

Composition of the groups

Group 1: 4 contestants	Group 2: 4 contestants
Uganda, 2 contestants	France, 2 contestants
Korea, 1 contestant	Kenya, 1 contestant
Australia, 1 contestant	Chinese Taipei, 1 contestant

Day 1 (March 24th): Group n°1 will have 4 hours and 30 minutes to complete the task. Group n°2 will go on an organized trip.

Day 2 (March 25th): Group n°2 will have 4 hours and 30 minutes to complete the task. Group n°1 will go on an organized trip.

5. Scoring criteria

N°	Items to be evaluated	O/S	Scoring scale
01	Respect of the rules of safety, hygiene and waste sorting management <i>Respect des règles d'hygiène, de sécurité et gestion du tri des déchets</i>	S	3
02	Method and organization of the work station <i>Méthode et organisation du poste de travail</i>	S	5
03	Correct assembly of the derailleur gears <i>Montage correct du système de changement de vitesse par dérailleur</i>	O	6
04	Correct assembly of the chain <i>Montage de la chaîne correct</i>	O	3
05	Correct assembly of the front braking system <i>Montage correct du système de freinage avant</i>	O	4
06	Correct assembly of the rear braking system <i>Montage correct du système de freinage arrière</i>	O	4
07	Correct assembly of the stem and the handlebar <i>Montage correct de la potence du guidon</i>	O	7
08	Correct assembly of the seat post and saddle <i>Montage correct de la tige de selle et de la selle</i>	O	4
09	Correct assembly of the bottom bracket <i>Montage correct du boîtier de pédalier</i>	O	4
10	Correct assembly of the crankset and pedals <i>Montage correct des manivelles et des pédales</i>	O	5
11	Precision of the adjustment of wheel buckling and of wheel alignment <i>Précision du réglage du voile et de l'alignement des deux roues</i>	S	7
12	Precision of the adjustment of both axles <i>Précision du réglage du saut des deux roues</i>	S	7
13	Correct assembly of the front tubes and tire <i>Montage correct de la chambre à air et du pneu avant</i>	O	5
14	Correct assembly of the rear tubes and tire <i>Montage correct de la chambre à air et du pneu arrière</i>	O	5
15	Correct assembly of the cables and sheaths <i>Montage correct des gaines et des câbles</i>	O	5
16	Correct assembly of the lighting system <i>Montage correct du système d'éclairage</i>	O	4
17	Correct assembly of the mudguards, carrier rack and accessories <i>Montage correct des gardes boue, du porte bagage et des accessoires</i>	O	3

18	Quality of the adjustments of the gear shifting systems <i>Qualité des réglages des systèmes de changement de vitesses</i>	S	7
19	Quality of the adjustments of the braking systems <i>Qualité des réglages du système de freinage</i>	S	7
20	Complete assembly and adjustment of the bike within the allocated time <i>Montage et réglage complet du vélo dans le temps imparti</i>	O	5
TOTAL			100