

V38 Motorcycle Mechanics



1. Final Task Assignment

The task consists in the completion of two modules.

- Module n°1: Motorization.

Using a provided guide sheet with a pre-established diagnostic and a single-cylinder engine type Suzuki RMZ 450, contestants will:

- Form hypotheses, searching for the necessary information and establishing the procedure sheet.
- Dismantle the engine (disassembly of the cylinder head, cylinder and piston).
- Complete the engine's metrology and assess the degree of wear of its elements.
- Identify which parts to replace and ask the jury for the substitutes necessary to repair the engine.
- Perform the reassembly and making sure the system functions properly.

- Module n°2: Diagnosis.

Contestants will establish the diagnostic of the ignition and fuel injection systems, take measurements, identify the deficient part(s) and complete the repairs.

Contestants will use: - KDS (Kawasaki Diagnostic System) diagnostic software (English and French versions)

- A procedure sheet which will be provided on the day of the competition.

- One Kawasaki Z750 or Z800 motorcycle (or similar model).

2. Allocated time: 5h00

5 hours of competition.

- Module n°1: duration 3h30.

- Module n°2: duration 1h30.

3. Requirements

- Contestants will respect the technical specifications.
- Contestants will respect the rules of safety and hygiene, as well as the jury's instructions and their work station.

4. Procedure

Day -1 (March 24th): On the day before the competition, contestants will be welcomed by members of the jury. A briefing about the organization of the competition and the safety rules will be arranged.

Day 1 (March 25th): All contestants will have 3 hours and 30 minutes to complete module n°1. At the end of module n°1, a 15-minute briefing about the use of the KDS software will be organized, after which contestants will have a 15-minute Q&A session with members of the jury.

Day 2 (March 26th): Contestants will be divided into two groups; group n°1 will have 1 hour and 30 minutes to complete module n°2 while group n°2 will be waiting in a recreation room prepared for them. They will have 1 hour and 30 minutes to complete module n°2 once group n°1 has finished competing.

Composition of Group n°1:

- France, 1 contestant
- Korea, 1 contestant

Composition of Group n°2:

- Mongolia, 1 contestant
- Pakistan, 1 contestant

N°	5. Evaluation criteria	Scoring scale
Motorization module		60
01	Respect of the rules of safety, hygiene and waste sorting management	5
02	Organization of the work station and method	5
03	The chronology of disassembly is coherent and the disassembly is performed correctly	5
04	The metrological measurement of the cylinder ovalization is correct	3
05	The metrological measurement of the cylinder conicity is correct	3
06	The metrological measurement of the camshaft lubrication play is correct	3
07	The metrological measurement of the end gap (segmentation) is correct	3
08	The metrological measurements cam height intake are performed correctly	3
09	The metrological measurements cam height evacuation are performed correctly	3
10	The metrological measurement of the valves adjustment are performed correctly	3
11	The defective part(s) is identified correctly	6
12	The chronology of reassembly is coherent and the reassembly is performed correctly	5
13	Distribution calibration is correct and allows for proper functioning	8
14	The various elements are not damaged	5
Diagnosis module		40
15	The origin of the malfunction is properly identified with KDS	5
16	The measurement of the power supply tension is correct	5
17	The measurement of the variable tension is correct	5
18	The defective part is properly identified	5
19	The repair operation is performed correctly, the system functions properly	10
20	The KDS diagnosis software is used properly	5
21	Time allocated to the module is respected, the intervention is performed in its entirety	5
TOTAL POINTS		100



Abi wishes you a good competition!