



## 2013 HUNGARIAN GRAND PRIX

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**From** The FIA Formula 1 Technical Delegate

**Document** 29

**To** All Teams, All Officials

**Date** 27 July 2013

**Time** 19:45

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### Technical Report

#### Before the qualifying practice session:

It was confirmed for all cars that the nominated gear ratios for use during the remainder of this Event belong to the 30 numerical change gear ratio pairs declared to the FIA technical delegate at or before the first Event of the 2013 Championship.

The thickness of the brake discs of all cars taking part in the qualifying session was checked.

#### During the qualifying practice session:

Car numbers 01, 12, 15, 17 and 18 were weighed.

The weight distribution was checked on car numbers 01, 12, 15, 17 and 18.

Car numbers 12 and 18 were checked for the following:

- 1) Bodywork around the front wheels
- 2) Front wing height and overhang
- 3) Rear wing height and overhang
- 4) Front and rear wing width
- 5) Rear wing configuration
- 6) Rear bodywork area
- 7) Rear winglet height
- 8) Stepped bottom
- 9) Diffuser height
- 10) Diffuser width
- 11) Overall height
- 12) Overall width

Fuel samples were taken from car numbers 16 and 21.

**After the qualifying practice session:**

Car numbers 01, 02, 03, 04, 06, 07, 08, 09, 10 and 19 were weighed.

Car numbers 01, 02, 03, 04, 06, 07, 08, 09, 10 and 19 were checked for the following:

- 1) Bodywork around the front wheels
- 2) Front wing height and overhang
- 3) Rear wing height and overhang
- 4) Front and rear wing width
- 5) Rear wing configuration
- 6) Rear bodywork area
- 7) Rear winglet height
- 8) Stepped bottom
- 9) Diffuser height
- 10) Diffuser width
- 11) Overall height
- 12) Overall width

The chassis identification transponders have been confirmed for car numbers 02, 03, 04, 06, 07, 09 and 19.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 02, 03, 04, 06, 07, 09 and 19.

It was confirmed for car numbers 01, 02, 03, 04, 06, 07, 08, 09, 10 and 19 that any vertical cross section of bodywork normal to the car centre line and situated in the volumes defined in Article 3.8.4 form one tangent continuous curve on its external surface with a radius no less than 75mm.

The concave radius of sections of the three rear wing elements which are in contact with the external air stream was checked on car numbers 01, 02, 03, 04, 06, 07, 08, 09, 10 and 19.

The front and rear brake air duct dimensions were checked on car numbers 01, 02, 03, 04, 06, 07, 08, 09, 10 and 19.

It was confirmed for all drivers taking part in the qualifying session that they have used their sealed engine.

The units locking status was checked on all cars.

The session type has been confirmed for all cars.

The legality monitoring events were checked on car numbers 02, 03, 08, 10, 14 and 20.

Software version checks have been carried out on all cars.

Chassis FIA checksums were checked on all cars taking part in the qualifying sessions.

Gear shift data checks have been carried out for car numbers 03, 04, 07, 08, 10, 20, 21, 22 and 23.

The base ignition map range was checked on all cars.

The cylinder ignition offsets range was checked on all cars.

The KERS control was checked for car numbers 02, 03, 08, 10, 14 and 20.

It was checked that no car did exceed 18000 rpm during the qualifying practice session.

The fuel pressure of all cars during the qualifying session was checked.

The logged pressure within the engine cooling system during the qualifying sessions was checked on all cars.

The tyres used by all drivers during the sessions today have been checked.

Fuel samples were taken from car numbers 03 and 06 .

All the fuel samples have been checked for density and analysed by gas chromatography.

The results of fuel analyses show that the fuels were the same as ones, which had been approved for use by the relevant competitors prior to the Event.

The following software versions have been used by the teams during the qualifying sessions:

<b>Team</b>	<b>FIA Standard ECU system version</b>
Caterham	SR248
Ferrari	SR244
Force India	SR248
Lotus	SR245
Marussia	SR245
McLaren	SR248
Mercedes	SR248
Red Bull	SR248
Sauber	SR248
Toro Rosso	SR245
Williams	SR244

All the above items were found to be in conformity with the 2013 FIA Formula One Technical Regulations.

**Jo Bauer**

**The FIA Formula 1 Technical Delegate**