



2017 SPANISH GRAND PRIX

From	The FIA Formula One Technical Delegate	Document	52
To	The FIA Stewards of the Meeting	Date	14 May 2017
		Time	17:49

Technical Delegate's Report

Before the race:

Clutch paddle linearity checks have been carried out on cars 44, 33, 05, 11, 19, 14, 26, 20, 27 and 09.

A fuel sample was taken from car numbers 77, 03 and 18 and analysed during the race.

On the grid it was checked that all cars had fitted their tyres when the "3-Minutes" signal was given.

On the grid it was checked that the top ten cars had fitted the tyres which they had used when doing their fastest lap in Q2.

On the grid the temperature of the LHS and RHS front and rear tyre was checked on car numbers 19, 14, 02 and 27.

On the grid the minimum tyre starting pressure of the LHS and RHS front and rear tyre was checked on all cars.

After the race:

The following cars were weighed:

Number	Car	Driver
44	Mercedes	Lewis Hamilton
03	RBR TAG Heuer	Daniel Ricciardo
05	Ferrari	Sebastian Vettel
11	Force India Mercedes	Sergio Perez
31	Force India Mercedes	Esteban Ocon
18	Williams Mercedes	Lance Stroll
14	McLaren Honda	Fernando Alonso
26	Toro Rosso	Daniil Kvyat
55	Toro Rosso	Carlos Sainz
08	Haas Ferrari	Romain Grosjean

27	Renault	Nico Hülkenberg
30	Renault	Jolyon Palmer
94	Sauber Ferrari	Pascal Wehrlein

The steering wheel of all classified cars has been checked.

Car numbers 26, 55, 08, 27 and 94 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) Skidblock thickness
- 9) Stepped bottom
- 10) Diffuser height
- 11) Diffuser area
- 12) Overall height
- 13) Overall width

The profile of the prescribed front wing section in Article 3.3.2 of the 2017 Formula One Technical Regulations was checked on car numbers 26, 55, 08, 27 and 94.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 26, 55, 08, 27 and 94.

It was confirmed for car numbers 26, 55, 08, 27 and 94 that any vertical cross section of bodywork normal to the car centre line and situated in the volumes defined in Article 3.5.7 form one tangent continuous curve on its external surface with a radius no less than 75mm.

The concave radius of sections of the two rear wing elements which are in contact with the external air stream was checked on car numbers 26, 55, 08, 27 and 94.

The front and rear brake air duct dimensions were checked on car numbers 26, 55, 08, 27 and 94.

It was checked that no car exceeded 80 km/h when leaving the formation grid prior to the start of the race.

The units locking status was checked on all cars.

The session type has been confirmed for all cars.

Software version checks have been carried out on all cars.

Single clutch paddle use for the race start has been checked on all cars.

The race start data of car numbers 44, 77, 03, 33, 05, 07, 11, 31, 14, 02, 26, 55, 08, 20, 27, 30, 09 and 94 have been checked.

The ES state of charge on-track limits were checked on car numbers 44, 03, 05, 11, 31, 26, 55, 27 and 94.

The lap energy release and recovery limits were checked on car numbers 44, 03, 05, 11, 31, 26, 55, 27 and 94.

The MGU-K power limits were checked on car numbers 44, 03, 05, 11, 31, 26, 55, 27 and 94.

The maximum MGU-K torque was checked on car numbers 44, 03, 05, 11, 31, 26, 55, 27 and 94.

The maximum MGU-K speed was checked on car numbers 44, 03, 05, 11, 31, 26, 55, 27 and 94.

The maximum MGU-H speed was checked on car numbers 44, 03, 05, 11, 31, 26, 55, 27 and 94.

It was verified on car numbers 44, 77, 03, 05, 11, 31, 19, 18, 14, 02, 26, 55, 08, 20, 09 and 94 that the MD5 checksum of the PCU8 (dash board display) used on the car matched the configuration lodged with the FiA prior to the qualifying session.

The ERS energy lap limits were checked on car numbers 44, 11 and 31.

It was checked on all cars that the MGU-K was not used below 100 km/h at the start.

The radio communications during the formation lap were checked on car numbers 11, 31, 18 and 19.

It was checked that car numbers 03, 05, 11 and 14 did not exceed 15000 rpm during the race.

The fuel pressure of car numbers 03, 05, 11 and 14 during the race was checked.

The logged pressure within the engine cooling system during the race was checked on car numbers 03, 05, 11 and 14.

The tyre starting pressures of all cars during the race were checked.

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

The fuel temperature of all cars was checked.

The instantaneous fuel flow of all cars was checked.

The total fuel mass used by every classified car during the race was checked.

Fuel system pressures of all cars during the race were checked.

A fuel sample was taken from car number 05.

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

The results of all the 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.

Further the density change of the fuel samples taken today was within the permitted limits.

All car weights and the items checked were found to be in conformity with the 2017 FIA Formula One Technical Regulations.

Jo Bauer

The FIA Formula One Technical Delegate