



2017 UNITED STATES GRAND PRIX

From	The FIA Formula One Technical Delegate	Document	51
To	The FIA Stewards of the Meeting	Date	22 October 2017
		Time	17:40

Technical Delegate's Report

Before the race:

The following parts have been replaced today after 12:55 and before the start of the race:

Force India Mercedes:

Car 31: CE INJ310 (previously used)

A front floor deflection test was carried on car numbers 44, 05, 31 and 14.

The flatness of the reference and step plane and their position to each other was checked on car numbers 44, 05 and 14.

A fuel sample was taken from car numbers 19, 08 and 55 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 26 and 94.

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
77	Mercedes	Valtteri Bottas
33	RBR TAG Heuer	Max Verstappen
05	Ferrari	Sebastian Vettel
07	Ferrari	Kimi Räikkönen
11	Force India Mercedes	Sergio Perez
31	Force India Mercedes	Esteban Ocon
19	Williams Mercedes	Felipe Massa
02	McLaren Honda	Stoffel Vandoorne
26	Toro Rosso	Daniil Kvyat
08	Haas Ferrari	Romain Grosjean
55	Renault	Carlos Sainz
09	Sauber Ferrari	Marcus Ericsson

The steering wheel of all classified cars has been checked.

Car numbers 19 and 26 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 19 and 26.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 19 and 26.

It was confirmed for car numbers 19 and 26 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 19 and 26.

The front and rear brake air duct dimensions were checked on car numbers 19 and 26.

The inclination, the diameter and the position of the last 150mm of the exhaust tailpipes were

checked on car numbers 19 and 26.

A front wing flap deflection test was carried out on car numbers 19 and 26.

It was checked that no classified 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.

Chassis FIA checksum was checked on all cars taking part in the race.

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

The race start data of all cars have been checked.

The ES state of charge on-track limits were checked on car numbers 44, 33, 05, 07 and 20.

The lap energy release and recovery limits were checked on car numbers 44, 33, 05, 07 and 20.

The MGU-K power limits were checked on car numbers 44, 33, 05, 07 and 20.

The maximum MGU-K torque was checked on car numbers 44, 33, 05, 07 and 20.

The maximum MGU-K speed was checked on car numbers 44, 33, 05, 07 and 20.

The maximum MGU-H speed was checked on car numbers 44, 33, 05, 07 and 20.

It was checked on car numbers 44, 33, 05, 07 and 20 that the MGU-K was not used below 100 km/h at the start.

It was checked on car numbers 44, 33, 05, 07 and 20 that the ES was not charged while the car was stationary in the pits.

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 classified cars was checked.

Fuel flow meter calibration checksums were checked on all classified cars.

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

Fuel system pressures of car numbers 44, 33, 05, 07 and 20 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