

FIA FORMULA 1 WORLD CHAMPIONSHIP



2024 ABU DHABI GRAND PRIX

06 - 08 December 2024

From The FIA Formula One Technical Delegate Document 56

To The Stewards Date 08 December 2024

Time 20:51

Technical Delegate's Report

Before the Race:

The following parts have been replaced today after 14:55 and before the start of the race:

Ferrari:

Car 55: Driver's drink bag

Kick Sauber Ferrari:

Car 24: Antenna

A symmetric and asymmetric front wing deflection test was carried out on car numbers 16, 04 and 10.

A front wing flap deflection test was carried out on car numbers 16, 04 and 10.

The uppermost rear wing element adjustable positions were checked on car numbers 01, 55, 04, 10 and 27.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 01, 55, 04, 10 and 27.

The front wing flap adjustable range of car number 04 was digitally checked.

The front wing gurneys of car numbers 16, 55, 81, 04, 10, 77 and 24 were checked.

A fuel sample was taken from car numbers 11, 77 and 20 and analysed during the race.

An engine oil sample was taken from car numbers 77 and 20.

On the grid it was checked that all cars had fitted their tyres and the tyre heating blankets were disconnected, when the "5-Minutes" signal was given.

On the grid the temperature of the LHS and RHS front and rear tyre was checked on car numbers 01, 44, 16, 55, 81, 04, 10, 23, 77 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
01	Red Bull Racing	Max Verstappen
	Honda RBPT	
63	Mercedes	George Russell
44	Mercedes	Lewis Hamilton
16	Ferrari	Charles Leclerc
55	Ferrari	Carlos Sainz
81	McLaren Mercedes	Oscar Piastri
04	McLaren Mercedes	Lando Norris
18	Aston Martin Aramco	Lance Stroll
	Mercedes	
14	Aston Martin Aramco	Fernando Alonso
	Mercedes	
61	Alpine Renault	Jack Doohan
10	Alpine Renault	Pierre Gasly
23	Williams Mercedes	Alexander Albon
30	RB Honda RBPT	Liam Lawson
22	RB Honda RBPT	Yuki Tsunoda
24	Kick Sauber Ferrari	Zhou Guanyu
20	Haas Ferrari	Kevin
		Magnussen
27	Haas Ferrari	Nico Hülkenberg

The following aerodynamic component or bodywork areas were checked on car numbers 44, 14, 10 and 27:

Floor Body
Floor Fences
Floor Edge Wing
TR Article 3.5.1
TR Article 3.5.3

Nose - TR Article 3.6.1 Forward Chassis - TR Article 3.6.2 Mid Chassis - TR Article 3.6.3 Mirror Housing - TR Article 3.6.4 - TR Article 3.7.1 Sidepod Coke Panel - TR Article 3.7.2 - TR Article 3.7.3 **Engine Cover Pylons** - TR Article 3.10.2 Rear Wing Beam - TR Article 3.10.3 Rear Wing Endplate Body - TR Article 3.10.4 Rear Wing Tip - TR Article 3.10.5 Rear Wing Endplate - TR Article 3.10.7

The fuel pressure of all cars during the race was checked.

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

The engine high rev limit bands were checked on all cars.

Fuel flow meter calibration checksums were checked on all cars.

The instantaneous fuel mass flow of all cars was checked.

The partial load fuel mass flow of all cars was checked.

The fuel temperature of all cars was checked.

The plenum temperature was checked on all cars.

The oil consumption was checked on car numbers 01, 63, 44, 16, 55, 81, 04, 14, 10 and 27.

The exhaust fluid mass flow of all cars was checked.

The IVT temperatures were checked on all cars.

The ES state of charge on-track limits were checked on all cars.

The lap energy release and recovery limits were checked on all cars.

The MGU-K power limits were checked on all cars.

The maximum MGU-K speed was checked on all cars.

The maximum MGU-K torque was checked on all cars.

The maximum MGU-H speed was checked on all cars.

The MGU-K use at the race start was checked on all cars.

It was checked on all cars that the ES was not charged while the car was stationary in the pits.

The torque coordinator demands were checked on all cars.

The torque control was checked on all cars.

The session type has been confirmed for all cars.

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

The rear brakes pressure control was checked on all cars.

The brake temperature warnings were checked on all cars.

The steering wheel of all cars has been checked.

The race start data of all cars have been checked.

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

It was verified on all cars that the PCU dash display configuration was not changed during Parc Fermé.

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.

A fuel sample was taken from car number 55.

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 Competition.

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

An engine oil sample was taken from car number 55.

The engine oil samples have been analysed by FTIR spectroscopy and viscometry.

The results of the FTIR analyses show that the sampled oils were consistent with reference engine oil samples which had been approved for use by the relevant competitors prior to the Competition.

All car weights and the items checked were found to be in conformity with the 2024 FIA Formula One Technical Regulations.

Jo Bauer

The FIA Formula One Technical Delegate