



FIA FORMULA 1 WORLD CHAMPIONSHIP



2025 MIAMI GRAND PRIX

02 - 04 May 2025

From	The FIA Formula One Technical Delegate	Document	81
To	The Stewards	Date	04 May 2025
		Time	19:53

Technical Delegate's Report

Before the Race:

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

Aston Martin Aramco Mercedes:

Car 18: Throttle pedal assembly
Parameter changes associated with the throttle pedal replacement

A central floor deflection test was carried on car number 22.

A horizontal and angled rear wing main plane deflection test was carried out on car number 16.

A rear wing main plane tip deflection test was carried out on car number 16.

The front wing of car number 01 was digitally scanned and the scanned data were compared with the team declared CAD drawings. Further the team declared CAD drawings were also compared with previously submitted versions and checked for conformance with the 2025 Formula One Technical Regulations.

The front wing flap adjustable range of car number 01 was digitally checked.

A front floor deflection test was carried on car numbers 31, 06 and 55.

A fuel sample was taken from car numbers 44, 63 and 14 and analysed during the race.

An engine oil sample was taken from car numbers 63 and 14.

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 81, 16, 01, 22, 63, 12, 31, 23 and 55.

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:

<i>Number</i>	<i>Car</i>	<i>Driver</i>
81	McLaren Mercedes	Oscar Piastri
04	McLaren Mercedes	Lando Norris
16	Ferrari	Charles Leclerc
44	Ferrari	Lewis Hamilton
01	Red Bull Racing Honda RBPT	Max Verstappen
22	Red Bull Racing Honda RBPT	Yuki Tsunoda
63	Mercedes	George Russell
12	Mercedes	Kimi Antonelli
18	Aston Martin Aramco Mercedes	Lance Stroll
14	Aston Martin Aramco Mercedes	Fernando Alonso
10	Alpine Renault	Pierre Gasly
31	Haas Ferrari	Esteban Ocon
06	Racing Bulls Honda RBPT	Isack Hadjar
23	Williams Mercedes	Alexander Albon
55	Williams Mercedes	Carlos Sainz
27	Kick Sauber Ferrari	Nico Hülkenberg

The following aerodynamic component or bodywork areas were checked on car number 16:

- | | |
|-------------------|--------------------|
| - Floor Body | - TR Article 3.5.1 |
| - Floor Fences | - TR Article 3.5.2 |
| - Floor Edge Wing | - 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
- Sidepod - TR Article 3.7.1
- Coke Panel - TR Article 3.7.2
- Engine Cover - TR Article 3.7.3
- Tail - TR Article 3.8.1
- Front Wing Profiles - TR Article 3.9.1
- Front Wing Endplate body - TR Article 3.9.2
- Front Wing Tip - TR Article 3.9.3
- Front Wing Diveplane - TR Article 3.9.4
- Front Wing Endplate - TR Article 3.9.5
- Rear Wing Profiles - TR Article 3.10.1
- 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 skid wear was checked on car numbers 81, 04, 16, 44, 01, 22, 63, 12, 06, 23 and 55.

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 all cars.

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

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.

The tyres cold pressure was checked on car number 18.

An fuel sample was taken from car number 04.

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 04.

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 2025 FIA Formula One Technical Regulations.

Jo Bauer

The FIA Formula One Technical Delegate