



FIA FORMULA 1 WORLD CHAMPIONSHIP



2024 DUTCH GRAND PRIX

23 - 25 August 2024

From	The FIA Formula One Media Delegate	Document	9
To	All Teams, All Officials	Date	23 August 2024
		Time	09:53

Title Car Presentation Submissions

Description Car Presentation Submissions

Enclosed 2024 Dutch Grand Prix - Car Presentation Submissions.pdf

Roman De Lauw

The FIA Formula One Media Delegate



FIA FORMULA 1 WORLD CHAMPIONSHIP

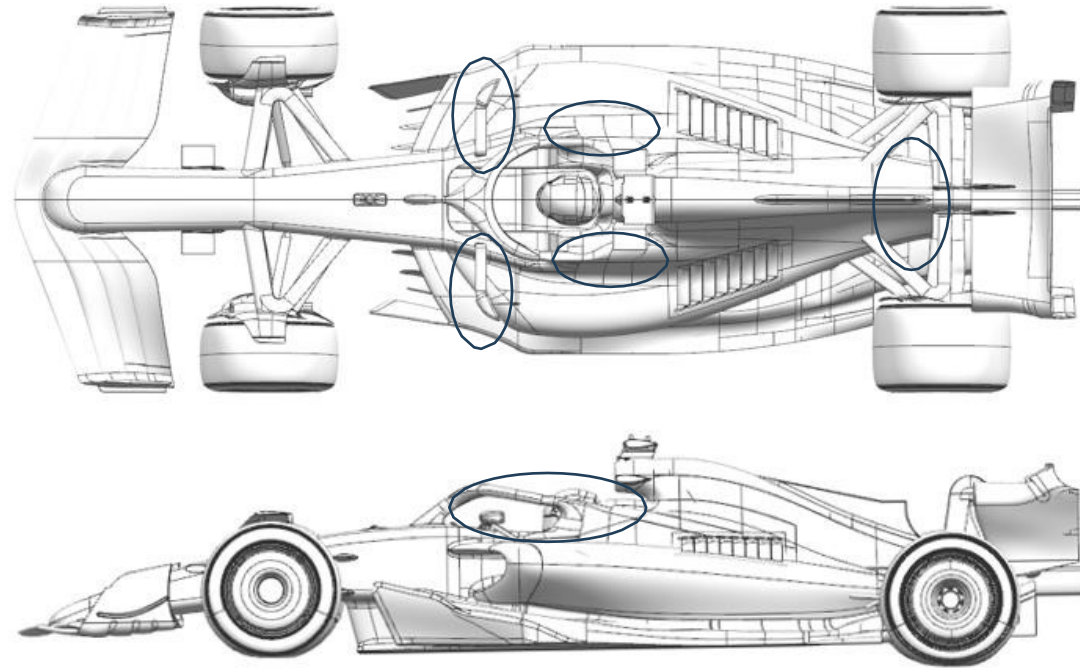
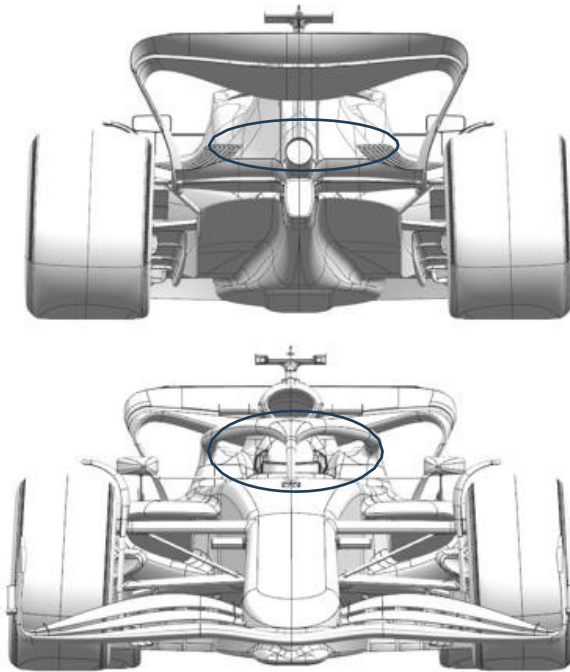


Car Presentation – Dutch Grand Prix ORACLE RED BULL RACING

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works
1	Coke/Engine Cover	Circuit specific - cooling range	Narrowed central exit	Cooling requirements for up-coming races implies the central exit can be narrower which cascades into the quarter panel to reduce blockage.
2	Halo	Performance – Flow Conditioning	Rearward fairing revised to re-orientate the vane	To improve the total pressure downstream the floor upper surfaces by better alignment to the local flow conditions.
3	Mirror stays	Performance -Flow Conditioning	Revised horizontal stay height and vertical stay angle	To improve the total pressure available downstream along the sidepod and to the floor upper surface again by better alignment to the local flow conditions.



FIA FORMULA 1 WORLD CHAMPIONSHIP





FIA FORMULA 1 WORLD CHAMPIONSHIP



Car Presentation – 2024 Dutch Grand Prix

Mercedes-AMG PETRONAS F1 Team

No updates submitted for this event.



FIA FORMULA 1 WORLD CHAMPIONSHIP



Car Presentation – Dutch Grand Prix

SCUDERIA FERRARI

No updates submitted for this event.



FIA FORMULA 1 WORLD CHAMPIONSHIP



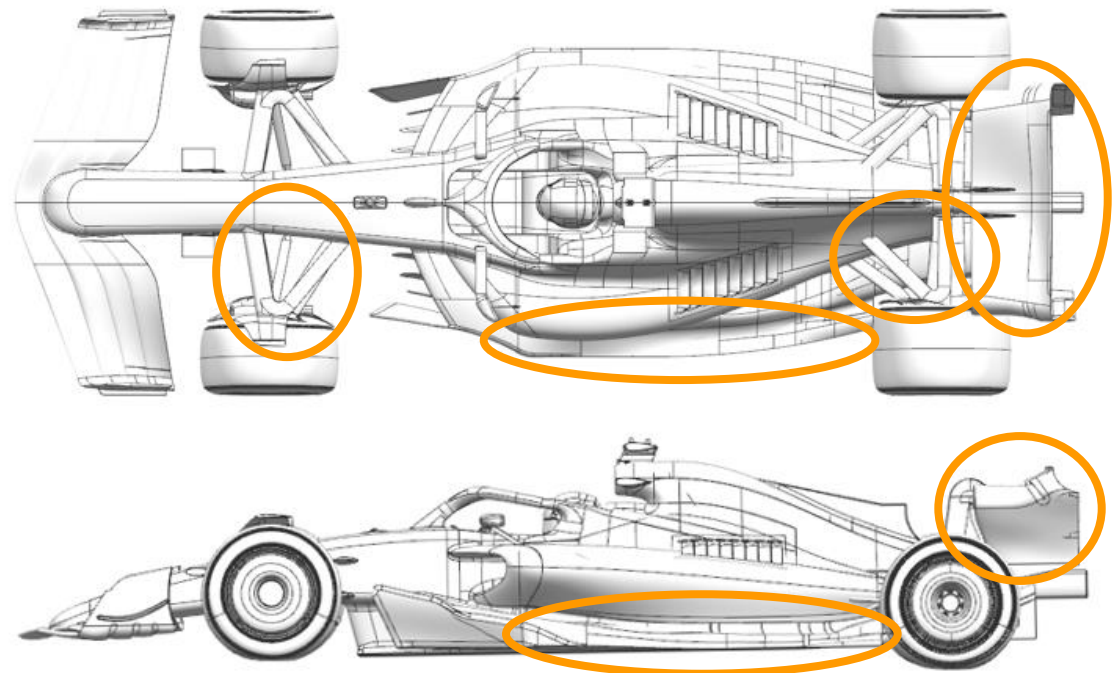
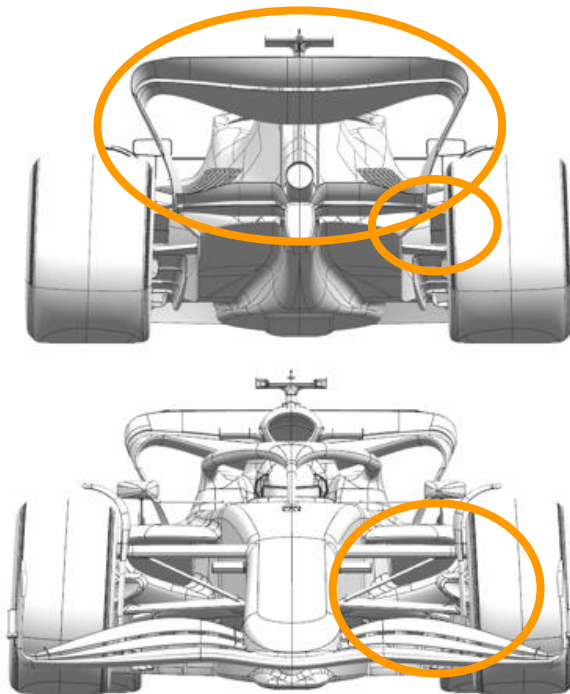
Car Presentation – Dutch Grand Prix

McLaren Formula 1 Team

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Front Corner	Performance - Flow Conditioning	New Front Brake Scoop	The redesigned Front Brake Scoop results in an improvement of overall flow conditions downstream yielding a gain of aerodynamic load without compromising brake cooling performance.
2	Front Suspension	Performance - Flow Conditioning	Revised Front Suspension	To suit the altered flow conditions resulting from the new front brake scoop geometry, the front suspension has been modified, complementing the beneficial effect downstream.
3	Floor Edge	Performance - Local Load	Revised Floor Edge	The Floor Edge modification improves both local load generation around the floor edge as well as flow conditioning improving overall floor performance.
4	Rear Corner	Performance - Flow Conditioning	Modified Rear Suspension	The revised rear suspension shape results in an improvement of flow conditioning around the rear corner, diffuser and beam wing area.
5	Rear Wing	Circuit specific - Drag Range	New Higher Downforce Rear Wing	Suitable to the isochronal of this circuit, a completely new rear wing assembly has been designed, increasing overall wing efficiency.
6	Beam Wing	Circuit specific - Drag Range	New Higher Downforce Beam Wing	As required by the difference in Rear Wing Design, a new Beam Wing, suitable for the new high downforce Rear Wing Mainplane and Flap has been designed.



FIA FORMULA 1 WORLD CHAMPIONSHIP





FIA FORMULA 1 WORLD CHAMPIONSHIP



**Car Presentation – Dutch Grand Prix
Aston Martin Aramco F1 Team**

No updates submitted for this event.



FIA FORMULA 1 WORLD CHAMPIONSHIP

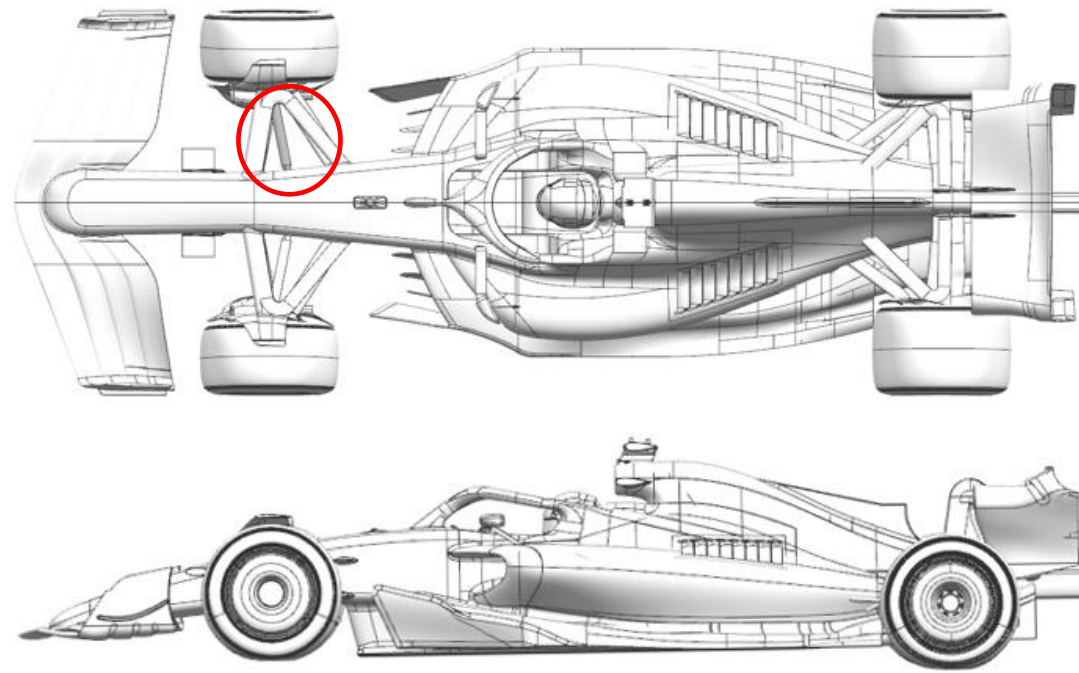
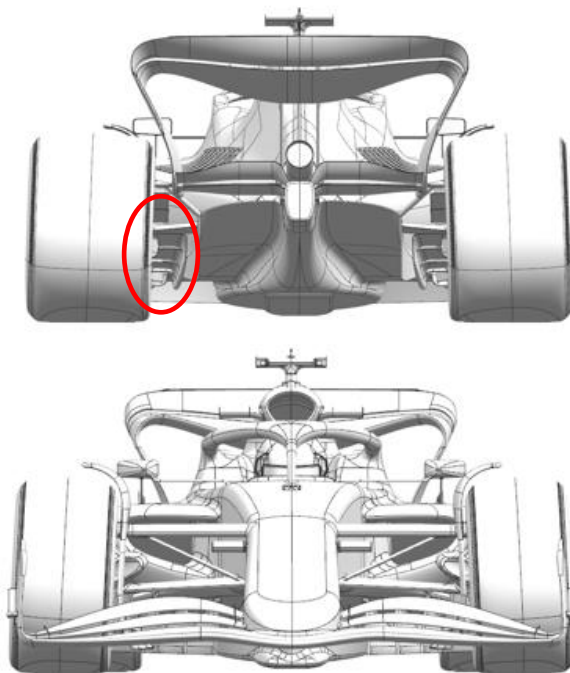


Car Presentation – Dutch Grand Prix BWT Alpine F1 Team

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Front Suspension	Performance - Flow Conditioning	Reprofiled front suspension leg	This updated upper leg suspension profile brings a better flow control and a healthier flow towards the rear of the car for an aero-performance benefit.
2	Rear Corner	Performance - Local Load	Rear Brake Duct furniture	The rear brake duct furniture has been updated with a new winglets arrangement in order to trade downforce and drag more efficiently.



FIA FORMULA 1 WORLD CHAMPIONSHIP





FIA FORMULA 1 WORLD CHAMPIONSHIP



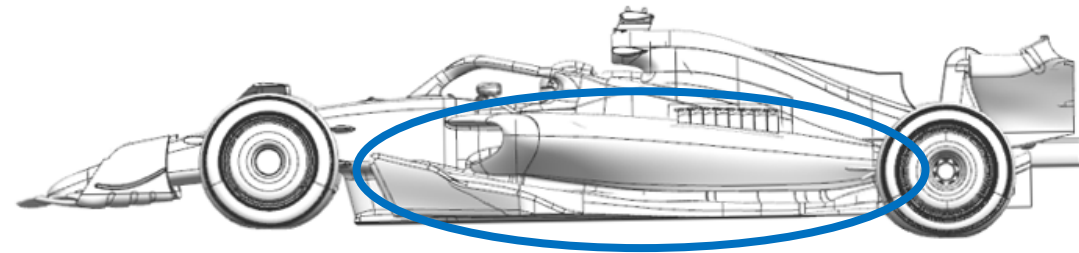
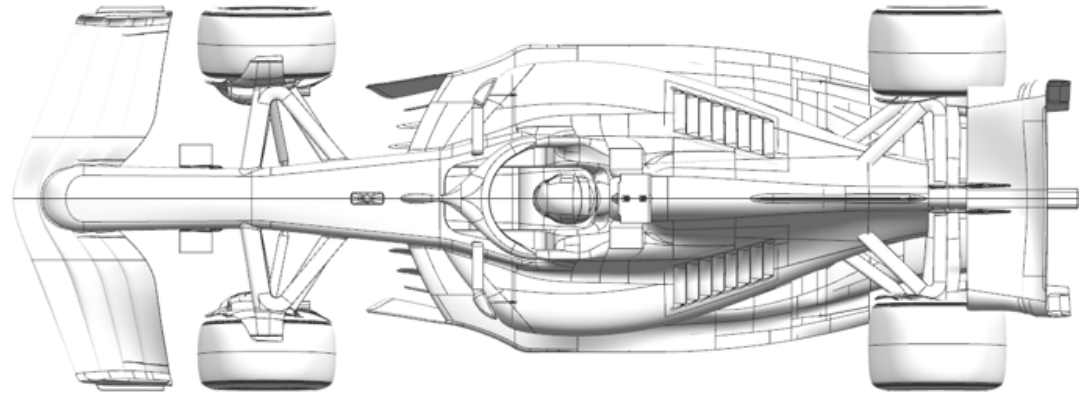
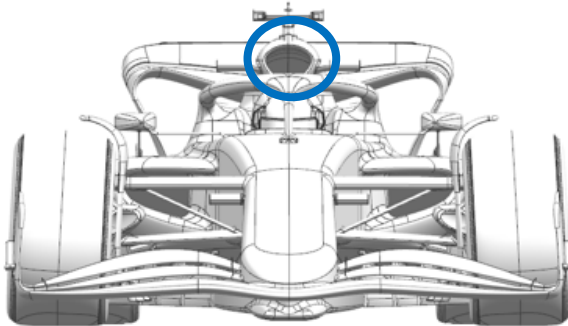
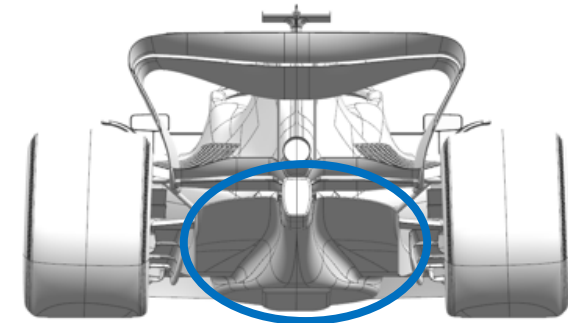
Car Presentation – Dutch Grand Prix

Williams Racing

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Floor Body	Performance - Local Load	The floor body is fully updated as part of a completely new floor geometry. The height of the forward floor is increased, and the fences are reprofiled. The floor edges are updated with more pronounced finger geometry.	We have reprofiled the front of the floor body and the local fence curvatures to offer a local load improvement and to also enhance the onset flow to the new floor edge wing geometry.
2	Diffuser	Performance - Local Load	The diffuser is also new with subtle reprofiling of some of the key features.	Detail changes at the front of the floor have also created opportunities for flow field improvements to the rear of the car, which in turn have allowed us to extract more performance in this local area.
3	Sidepod inlet	Performance – Flow Conditioning	The sidepod inlet geometry is updated. The upper surface is now longer than the lower surface, creating a larger 'deck' alongside the cockpit opening	The modifications to the sidepod inlet region have offered improvements in loss management from the front of the car and thus have unlocked performance improvements to the rest of the car.
4	Coke / Engine Cover	Performance – Flow Conditioning	The main sidepod region is a new geometry, which compliments the revised sidepod inlet and floor geometries. The gully in the sidepod is less aggressive initially giving a longer forward deck, and the top body is now wider at the bottom edge. The cooling louvres and upper top body are unchanged.	The changes to the sidepod and engine cover have been designed to complement and enhance the flow field improvements which have been unlocked from the previously described floor development work.
5	Central air intake	Performance – Flow Conditioning	The main roll hoop geometry is revised, and the internal ducting and external aero surfaces are reprofiled to suit.	The primary purpose of this update is to remove mass from the primary roll hoop structure. This has also permitted some optimisation to the associated aero surfaces, which are design to compliment the flow field improvements from the Sidepod Inlet and Coke/Engine Cover updates



FIA FORMULA 1 WORLD CHAMPIONSHIP





FIA FORMULA 1 WORLD CHAMPIONSHIP



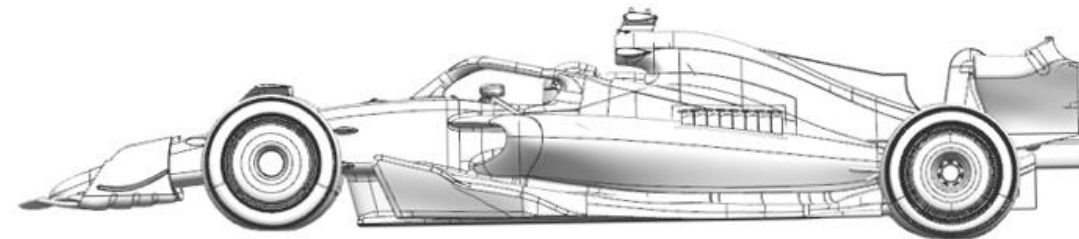
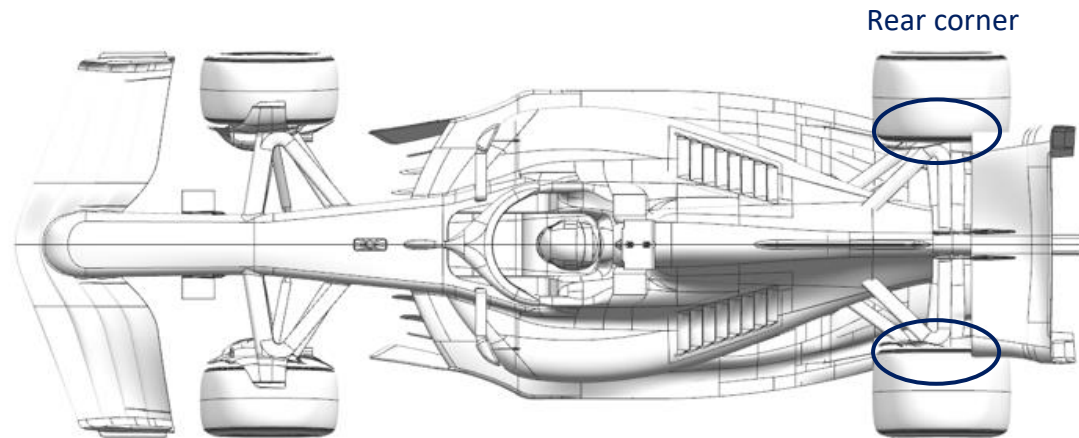
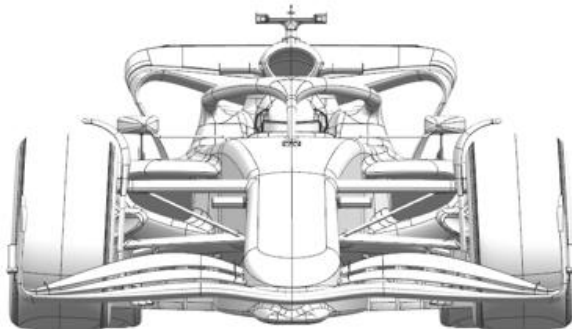
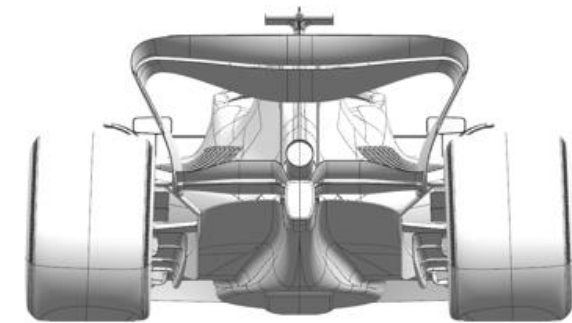
Car Presentation – Dutch Grand Prix

Visa Cash App RB

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Rear Corner	Performance - Local Load	The geometry of the brake duct & winglets has been updated.	Lower brake cooling requirements allow duct area to be reduced, creating additional space for downforce-generating devices.



FIA FORMULA 1 WORLD CHAMPIONSHIP





FIA FORMULA 1 WORLD CHAMPIONSHIP



**Car Presentation – Dutch Grand Prix
Stake F1 Team KICK Sauber**

No updates submitted for this event.



FIA FORMULA 1 WORLD CHAMPIONSHIP



Car Presentation – 2024 Dutch Grand Prix

MONEYGRAM HAAS F1 TEAM

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Front Wing	Performance - Flow Conditioning	New camber distribution, reduced inboard and increased mid span	This new load distribution reduced the FW load IB, favouring cleaner flow along the nose/chassis and concentrates the front load mid span. The connection to the endplate was also revised because of the new profiles.
2	Nose	Performance - Flow Conditioning	The nose covers also the first element of the Front Wing.	To achieve a cleaner central flow, the nose covers now also the first element of the Front Wing. In conjunction with the new Front Wing, this allows to achieve a more efficient central flow, delivering higher energy to the floor/bodywork.
3	Front Suspension	Performance - Flow Conditioning	Reprofiled upper wishbone.	Because of the revised Front Wing and Nose the upper wishbone needed a re-profiling to comply with the new incoming flow.
4	Front Corner	Performance - Flow Conditioning	Vertical deflector incidence changed	Because of the revised Front Wing and Nose the vertical deflector of the Front Corner needed to be re-aligned.



FIA FORMULA 1 WORLD CHAMPIONSHIP

