



FIA FORMULA 1 WORLD CHAMPIONSHIP



2024 BRITISH GRAND PRIX

05 - 07 July 2024

From	The FIA Formula One Media Delegate	Document	9
To	All Teams, All Officials	Date	05 July 2024
		Time	09:56

Title Car Presentation Submissions

Description Car Presentation Submissions

Enclosed 2024 British Grand Prix - Car Presentation Submissions.pdf

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The FIA Formula One Media Delegate



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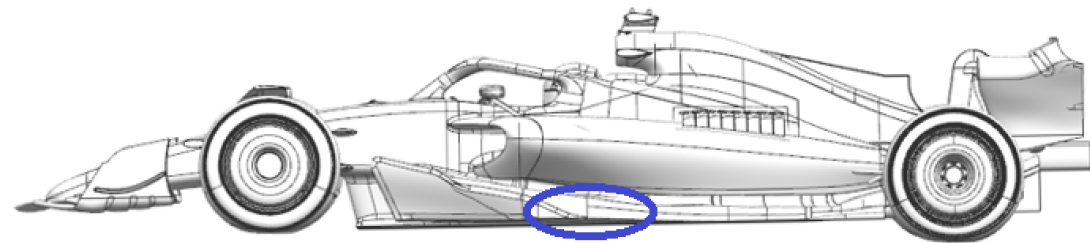
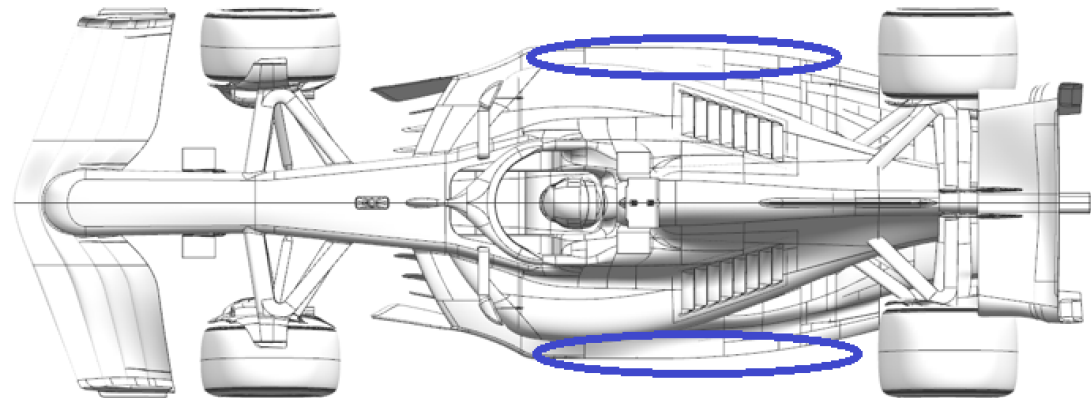
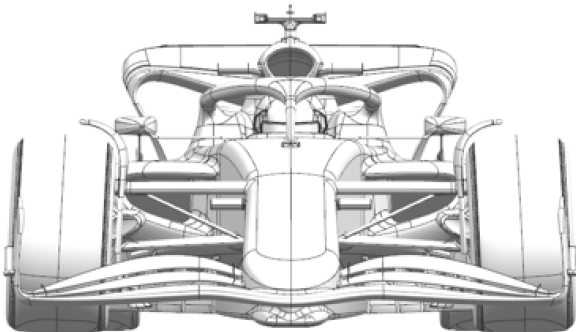
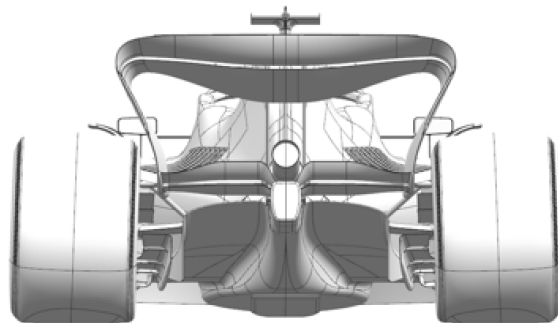


Car Presentation – British Grand Prix ORACLE RED BULL RACING

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works
1	Floor Body	Performance - Flow Conditioning	Subtle re-profiling of the surface above and behind the lower SIS tube	Optimising the upper floor surface further based upon research and comparison with full scale results to get more energy thus pressure to the floor edge wing.
2	Floor Edge	Performance - Local Load	Minor re-profiling of the edge wing with attendant detail	Given higher pressure upstream, the edge wing detail has been subtly changed to add more camber deriving more load whilst respecting the necessity for flow stability.



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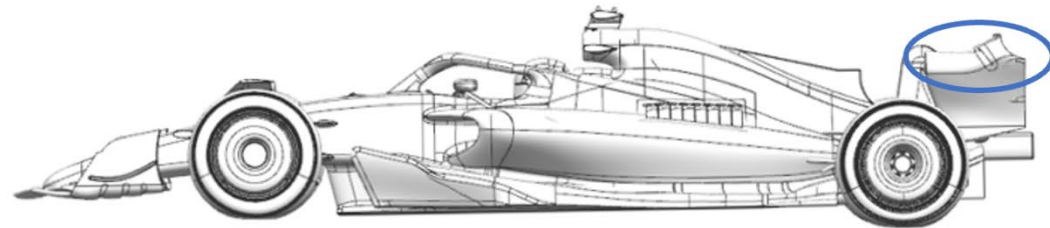
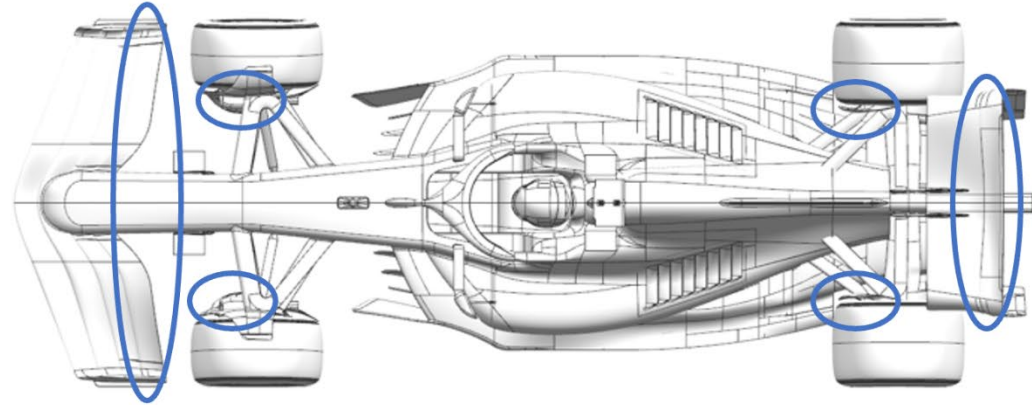
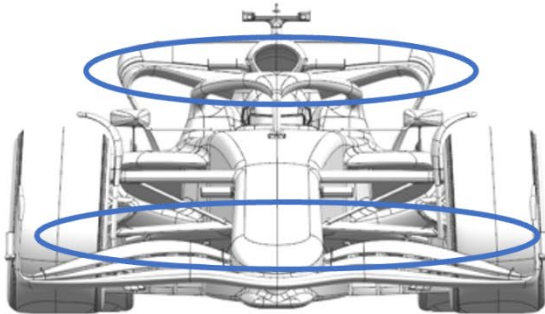
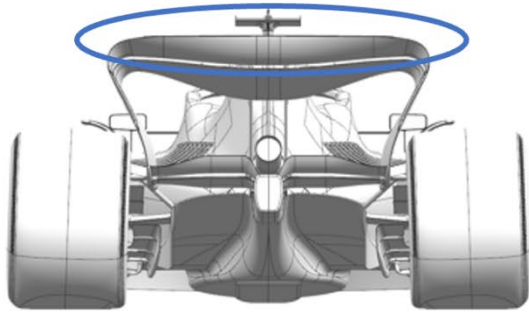


MERCEDES-AMG PETRONAS FORMULA ONE TEAM

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works
1	Front Wing	Circuit specific - Balance Range	Trimmed front wing flap	Trimmed/ smaller chord flap, reduces front wing load to achieve sensible car balance if low downforce rear wing is chosen to run.
2	Rear Wing	Circuit specific - Drag Range	Reprofiled flap	Reducing local flap curvature reduces local flap load and offloads the mainplane - results in a lower downforce and lower drag upper wing.
3	Front Corner	Circuit specific - Cooling Range	Smaller front brake duct inlet and exit	Reducing the brake duct inlet and exit size reduces the mass flow feeding and cooling the brake disc and calliper.
4	Rear Corner	Performance - Local Load	Upper lip realignment	Better aligning the upper caketin lip to the local onset flow improves flow attachment through a range of conditions resulting in more local load.



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SCUDERIA FERRARI

No updates submitted for this event.



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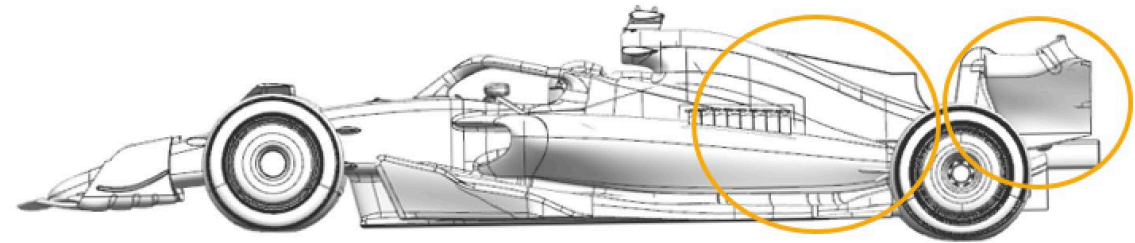
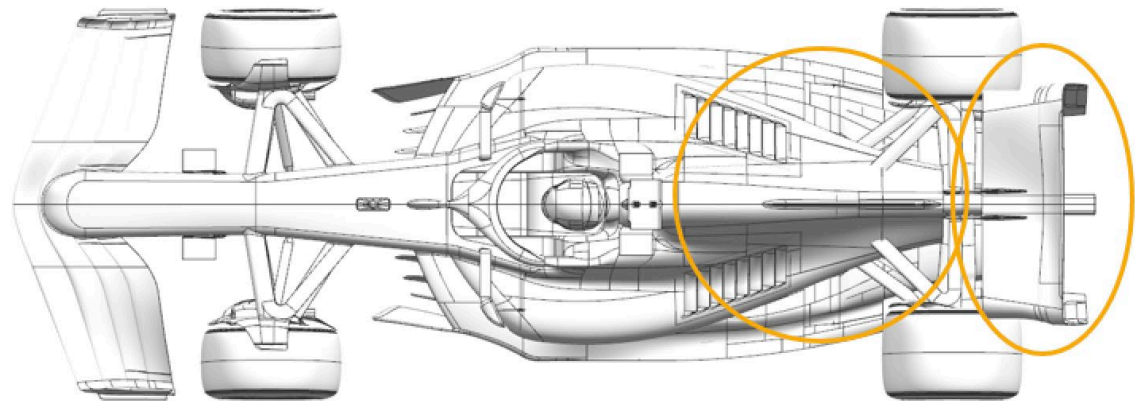
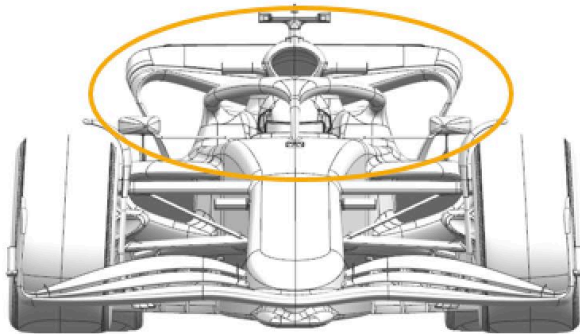
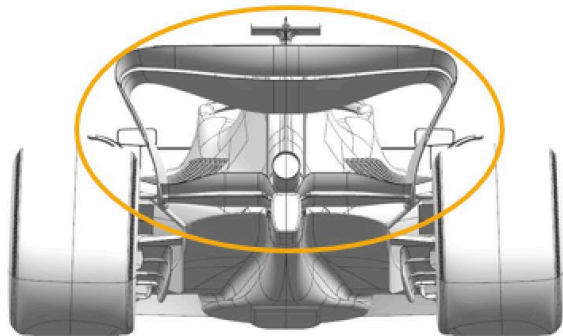


MCLAREN FORMULA 1 TEAM

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works
1	Rear Wing	Circuit specific - Drag Range	Lower Downforce Rear Wing	In anticipation of higher isochronal circuits, a less loaded Rear Wing assembly is introduced for this event, with the aim of reducing drag efficiently.
2	Beam Wing	Circuit specific - Drag Range	High load Beamwing	With the target to widen the operating range of the newly introduced low downforce wing, a high load Beam Wing has been designed to trade downforce and drag efficiently.
3	Beam Wing	Circuit specific - Drag Range	Mid load Beamwing	With the target to increase the operating range of the newly introduced low downforce wing, a mid load Beam Wing has been designed to trade downforce and drag efficiently.
4	Beam Wing	Circuit specific - Drag Range	Low load Beamwing	With the target to increase the operating range of the newly introduced low downforce wing, a low load Beam Wing has been designed to trade downforce and drag efficiently.
5	Coke/Engine Cover	Circuit specific - Cooling Range	Additional Cooling Exit	The new Bodywork features an additional cooling exit, allowing an increase in cooling massflow, resulting in both an increase in overall cooling capacity as well as efficiency.



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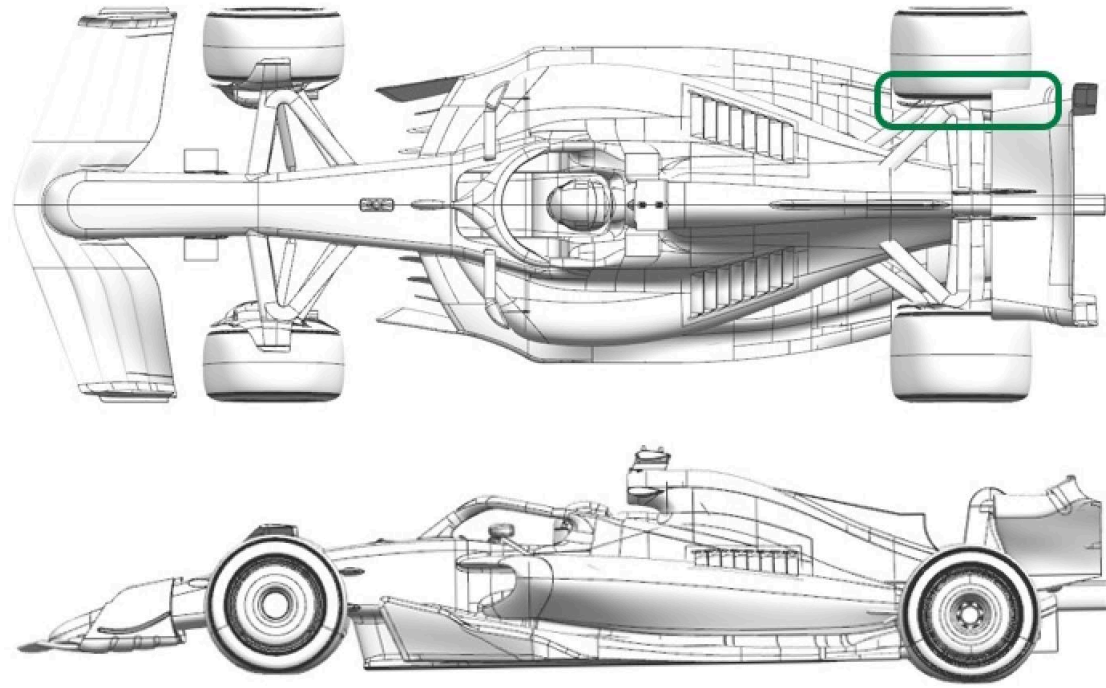
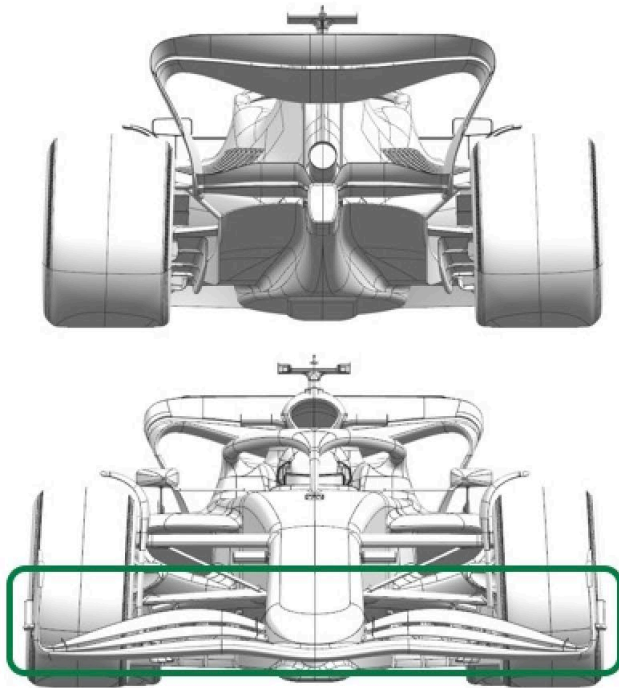


ASTON MARTIN ARAMCO FORMULA ONE TEAM

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update work
1	Front Wing	Performance - Local Load	Modified twist distribution of the wing elements changing the front view shape.	Changing the twist distribution of the wing modifies the spanwise loading to improve the overall performance of the wing and downstream interactions.
2	Rear Corner	Performance - Local Load	The small element on the outboard face of the lip has been replaced with a twin arrangement.	The twin elements offer an improvement in alignment and downwash for improved wheel wake management increasing the load on surrounding geometry.



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BWT ALPINE F1 TEAM

No updates submitted for this event.



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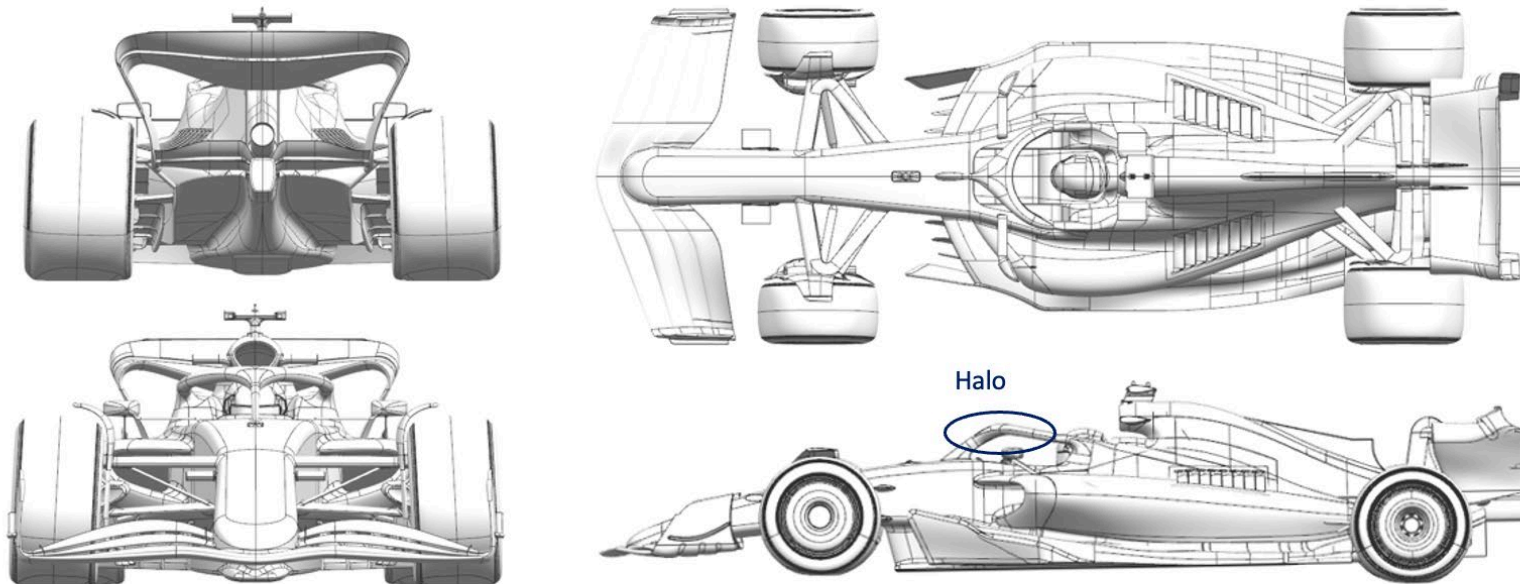
WILLIAMS RACING

No updates submitted for this event.



VISA CASH APP RB FORMULA ONE TEAM

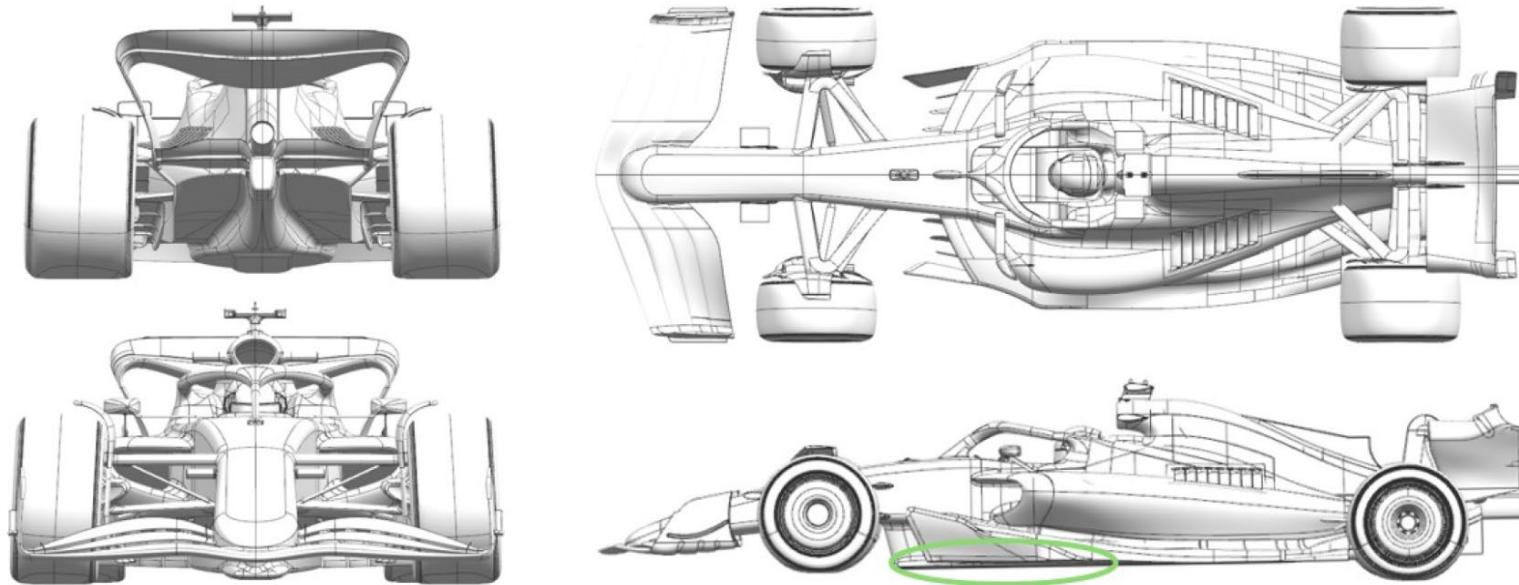
	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works
1	Halo	Performance - Flow Conditioning	The winglet on the top of the Halo will be removed in some configurations.	The airflow around the Halo influences the downstream areas of the car including the rear wing, making removing it relevant in certain circumstances.





STAKE F1 TEAM KICK SAUBER

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works
1	Floor Fences	Performance – Flow Conditioning	An additional, alternative trim of the floor fences	The different trim of the floor fences further optimises the flow of air in this crucial area of the car, improving the overall flow and aero efficiency of the package.





MONEYGRAM HAAS F1 TEAM

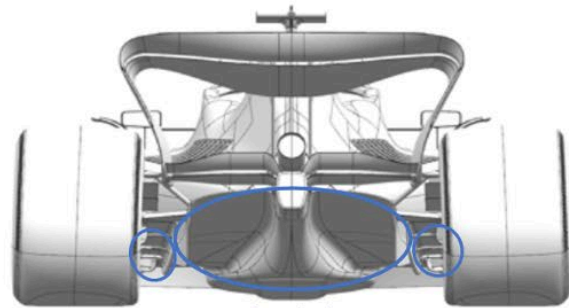
	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update work
1	Floor Body	Performance - Local Load	Modification of the expansion with this new floor	The different expansion increases the floor suction and therefore the underfloor mass-flow, resulting in overall more load coming from the floor.
2	Floor Fences	Performance - Flow Conditioning	Alignment of the floor fences	The new floor geometry requires a different alignment of the front floor fences, as the direction of the incoming floor changes with the floor expansion.
3	Floor Edge	Performance - Local Load	The new floor body required a modification of the floor edge as well	The new floor body has a different expansion and therefore requires an adaptation of the floor edge wing, which is now more coherent with floor body and is able to extract more flow, resulting in a local load increase.
4	Sidepod Inlet	Performance - Flow Conditioning	Updated Inlet geometry, now with a longer higher lip	This geometry allows to deliver a cleaner flow to the rear end of the car, resulting in an overall performance increase.
5	Coke/Engine Cover	Performance - Flow Conditioning	The updated Inlet geometry required a minor revision of the sidepod	The new Sidepod Inlet geometry required changes that protrude quite backwards on the sidepod, which was therefore updated accordingly. The new sidepod is now able to accommodate some top cooling gills as well.
6	Mirror Stay	Performance - Flow Conditioning	The new Sidepod Inlet required a new rear stay of the mirror	The updated rear stay of the mirror has changed position and was optimized to condition the top sidepod flow in order to increase the load of the rear end of the car.
7	Rear Corner	Performance - Local Load	Different position and trim of the lower quadruplane (FIA geometry)	The new floor required to optimize the flow around the rear tyres as well. The improved incoming flow on



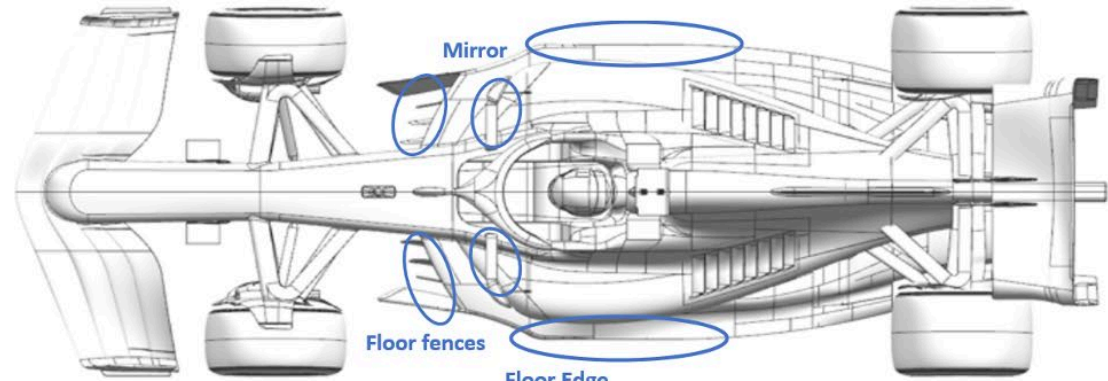
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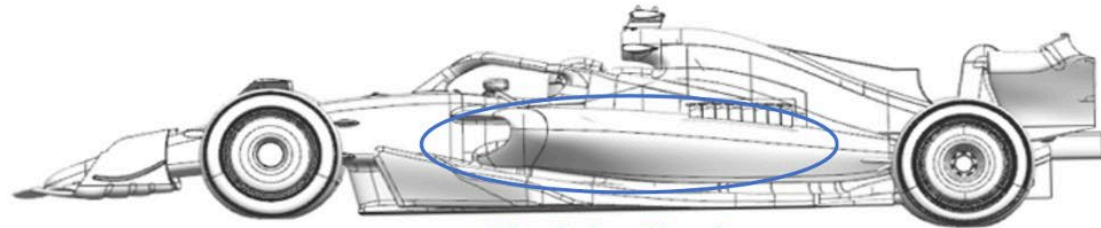
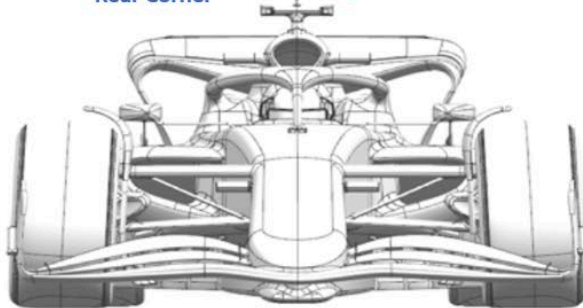
				the rear corner allows an increased expansion, resulting in a higher local load.
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Rear Corner Floor body



Mirror
Floor fences
Floor Edge



Sidepod Inlet + Sidepod