



Technical Car Construction Specification Regulation Changes for 2024 (v1.0 – Published)

Following a meeting of the BriSCA F2 Technical Committee, the following changes to the Technical Car Specification Regulations have been approved.

Once again stability is key, and to that end there are no wholesale changes that will require drivers to make significant changes to their cars. The majority of changes are either clarifications (e.g. definition of a "traditional Watts Linkage"), non-mandatory options to current regulations (e.g. permitted use of an aftermarket Zetec crank sensor), or additions to prevent future unwanted development (e.g. offsetting roll-cages).

Engines

Zetec – Valve Seats

- Clarification will be added to regulation 233.13.06, as per the News item from 7th Oct 2023.
"The original 45-degree valve seat angle (with 90 degree included) MUST be maintained. The only part of the valve seat that may be machined is the 45-degree angle for the purpose of valve seating, and no other part of the seat may be touched."

Zetec – Block-Decking Regulation

- Block decking wording (233.08.01) to be removed (due to contradiction with block height regulations 233.08.02/03).

Zetec – Aftermarket Crank Sensors

- The use of aftermarket standard original specification replacement crank sensors will be permitted.

Zetec – Inlet Manifold Gaskets

- Regulation 233.15.03 (Inlet Manifold Gasket) will be changed to state a **MAXIMUM thickness of 1.2mm**, and a **material of either paper OR silicone** for the inlet manifold gasket.
- The current widely used orange paper gasket is 0.9mm thick, and is therefore within the changed regulation.
- The use of thicker "spacer-plate"/insulator type gaskets will NOT be permitted.

Zetec – Water Pump Pulleys

- As per the note in the current 2023 regulations, regulation 233.22.05 will be modified for the 2024 season to state:
*"233.22.05 ONE of the following drive pulleys MUST be used on the water pump:
(1) The original unmodified standard Ford pulley.
(2) A modified standard Ford pulley – The original standard Ford pulley may be modified to add material for the purpose of drive-belt retention. Removal of original material is NOT permitted.
(3) The BriSCA F2 approved/supplied replacement pulley – Modification of this item is NOT permitted."*
- The use of non-Ford/BriSCA specification pulleys will no longer be permitted.

Zetec – Oil Level Sump Plug

- The installation/use of an oil-level plug in the side of any approved sump will be permitted

All – Engine Position

- Regulation 230.04, originally written for the Pinto engine, will be updated to account for the Zetec engine. The wording *“as fitted to the vehicle of origin”* will be replaced as follows:
“The engine MUST be mounted in an upright position, as fitted to the vehicle of origin, in the chassis, with the top face of the cylinder-block/cylinder-head in the same plane as the chassis rails/cab-floor/roof when viewed from the front/rear [refer to regulation 203.01.04].”

Wheels/Tyres

Gaiters

- The use of a single gaiter on an axle will be permitted, e.g. the left-front only on tarmac.

Track Width

- Regulation 217.14.04 will be modified to state...
“Tyre gaiters are included within the overall track width measurement regulations and MUST therefore pass within any measurement gauges. Any gaiter curving away from the tyre may be pressed against the tyre for the purpose of measurement, however any forced deflection of the tyre itself is NOT permitted.”

Steel Wheel Strengthening Trial

- Two drivers (#43 Marcus Gilbert / #117 Ryan Leeks) will be permitted to trial the use of a strengthening band around the outer edge of steel wheels with a view to preventing bead/outer-edge damage.
- The drivers will need to submit photos/proposals to BriSCA F2 for approval, BEFORE use.
- If the trial is successful, BriSCA F2 will seek to change the regulations to permit widespread use, if so desired.

Wings

Wing Position/Mounting

- The forward/low position of some wings has raised safety concerns with areas of drivers' forward vision being obscured.
- BriSCA F2 intends to introduce a regulation limiting how low any part of such wing devices may extend so as not to block a driver's forward/side vision.
- Input from the BDF/Drivers is being sought.

Wing Design

- The following additional regulations will be added to prevent development in a direction BriSCA F2 does not wish to go.
 - Sectional/Folded Wings** – 226.03.01 – *“The MAXIMUM permitted body centre-section size of a sectional wing is 44in x 44in (1117mm x 1117mm), and must therefore fit in to an imaginary box, 44in square.”*
 - Spoiler Wings** – 226.03.19 – *“The MAXIMUM permitted body centre-section size of a spoiler wing is 48in/1219mm (transverse width) x 18in/457mm (longitudinal length), and must therefore fit in to an imaginary rectangular box, 48in x 18in.”*
 - All Wings** – *The sides of the **centre section** must be straight when viewed from above. (Centre-section profiles, i.e. the shape when viewed from the side, remain free).*
 - All Wings** – *The **side plates** must be straight when viewed from above, i.e. run in a straight-line front to back.*

NOTE:

- It is NOT expected that these additional requirements would impact the legality of any current wings in use.
- These are proposed additional regulations and will be confirmed in the New Year following any feedback from drivers regarding current wings in use.
- If you believe these additional requirements would impact the legality of your current wing, then you should contact the BriSCA F2 Chief Technical Consultant, Adrian Blackwell, with details:

Email: briscaf2tech@outlook.com

Text/WhatsApp: 07840 150524

Chassis & Suspension

Bumper Chains (Multiple)

- **Number** – Regulation 204.23 will be modified to mandate a SINGLE secondary fixing bumper chain on each side of the bumper/chassis.
- **Thickness** – Regulation 204.23.01 will be modified to mandate each bumper chain must be between 8mm and 13mm in thickness.
- **Mounting** – Regulation 204.23.05 will be modified to mandate that each bumper chain must be wrapped in a SINGLE loop around the bumper and the main chassis-rail/cross-member. Wrapping around the lower/under-chassis will NOT be permitted since it is of a lower material specification than the main chassis-rail/cross-member.
- **Use as Ballast** – The use of bumper chains as ballast to add weight to the car will NOT be permitted.

Chassis – Front Cross-member

- A regulation will be added to mandate a front chassis cross-member, connecting the two chassis main-rails together.
- This is currently missing from the regulations, but it is believed that all cars currently have such a cross-member anyway, and therefore no additional work will be required in order to comply.
- Should any car not have a front cross-member installed, the driver is asked to contact the BriSCA F2 Chief Technical Consultant, Adrian Blackwell:
Email: briscaf2tech@outlook.com
Text/WhatsApp: 07840 150524

Roll-Cage Mounting

- A regulation will be added to mandate the symmetrical mounting of the roll-cage on to the main chassis when viewed from the front/rear, e.g., if it's mounted to the outer side of the LH chassis-leg, then it must be mounted to the outer side of the RH chassis-leg.
- It is believed there are no cars currently with offset mounted roll-cages, and the intention is to simply prevent any such unwanted development in this area in the future.
- Should any car have a roll-cage mounted in an offset manner, the driver is asked to contact the BriSCA F2 Chief Technical Consultant, Adrian Blackwell:
Email: briscaf2tech@outlook.com
Text/WhatsApp: 07840 150524

Watts Linkage

- Regulation 215.07.01 will be modified to state...
“Lateral location of the rear axle may only be achieved by the use of (i) a Panhard Bar, or (ii) a traditional Watts Linkage with the two side links mounting to opposite sides of the axle/chassis from the centre link.”

Exhausts

Main Pipe

- Clarification will be added to state that the main pipe (connecting the 4-into-1 collector to the mandated control silencer) may be a single continuous length of pipe, or made up of multiple sections connected together. The regulations regarding a non-varying internal diameter remain the same, and therefore any swaged ends at the joints must be external, not internal.

Silencer Fitting

- The cutting of a maximum of 2 slots, each no more than 1in in length, in the mandated silencer input pipe (inside of which the exhaust main pipe sits) to improve clamping force of a clamp fitted to prevent the silencer from becoming detached, will be permitted. While this is currently accepted practice, it is technically against the current regulations prohibiting any modification of the control silencer.

Fuel

Fuel Additives

- The use of ANY fuel additives for Zetec engines will NOT be permitted. Regulation 222.04.03 will therefore be changed to state...
“The ONLY fuel additive permitted for use is Millers “CVL” in the 2-litre Ford Pinto engine ONLY. The use of ANY fuel additive in the 2-litre Ford Zetec engine is NOT permitted.”

Changes Detailed in the 2023 Regulations

The following changes, agreed during the 2022/23 off-season and documented in the 2023 regulations, will be implemented.

Pinto Engine

Bosch Coil

- The continued use of the Bosch coil with part number 0 221 119 027 will be permitted – to be reviewed again for 2025.

Zetec Engine

HT Leads

- HT leads must be standard OEM or equivalent items (the original intention of the regulation) displaying the manufacturer's original identification part number/code. The use of competition/performance items, e.g. Magnecor HT leads, will be prohibited. The permitted use of longer standard leads, for remote mounting of the coil, will remain.
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Rejected Proposals

The following proposals/changes were reviewed and rejected, or are not being acted upon.

Zetec Engine

Camshaft Pulley Bolt

- NO changes to the current regulations.
- Request to drill the camshaft pulley bolt rejected.

Brakes

- There are NO changes to the brake-system regulations.

Axle/Transmission

- There are NO changes to the axle/transmission regulations

Chassis

- Proposals to (i) trial mud-flaps, (ii) permit the panelling over the top of nerf-rails, and (iii) weigh cars with the driver, were rejected and will NOT be implemented.
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