

2025 Technical Regulations – Changes Summary v1.1 (Published) 5th February, 2025

Summary

Following a meeting of the BriSCA F2 Technical Committee, and subsequent ratification at the full BriSCA F2 General Council meeting this month, the following changes to the Technical Car Specification Regulations have been approved.

Once again stability in the sport is key, and to that end there are NO wholescale changes that require drivers to undertake significant modifications to their cars. The majority of regulation changes detailed below are either...

- 1. Clarifications... e.g. fuel tank breather safety valve position, rear axle link bar mountings.
- 2. Non-mandatory options to current regulations... e.g. permitted use of a secondary emergency ignition cut-off switch instead of a pull-cord.
- 3. Additions to prevent future unwanted development... e.g. carburettor airflow enhancement devices, telescopic link bars on the front axle.

As a result of inspection observations or necessary safety improvements there are a small number of regulation changes that may require some relatively simple modification to some cars (e.g. ECU location, or fuel filter location).

Finally, there are two mandatory requirements that will entail minor changes to all cars, however, appropriate implementation dates have or will be set (one in mid-May, the other still to be agreed), giving drivers the time to undertake the necessary actions.

Effective Date: Unless otherwise stated, ALL regulation changes/updates will take effect from the start of the season, **Saturday 1**st **March 2025**.

1 Mandatory Requirements – Will require changes to <u>ALL</u> cars

1.1 Zetec Engine - Crankshaft (Flywheel) Speed Sensor Housing

It is necessary for all Zetec engines to be retro-fitted with a BriSCA F2 specification crankshaft (flywheel) speed sensor housing in place of the original Ford component. (The original Ford crankshaft speed sensor itself, or a permitted aftermarket replacement item, as per regulation 233.19.01, will continue to be used). Inconsistencies with the original Ford standard housing have been identified which can lead to altered ignition timing, in contravention of the regulations for this engine.

Zetec engine kits supplied by BriSCA F2 will include the required housing in the future; all other Zetec engines in use will require the replacement housing to be purchased and fitted.

Effective Date:

New BriSCA F2 specification housings are now available with immediate effect from the Autospeed online shop (http://shop.autospeed.co.uk/official-zetec-brisca-ssca-cranksensorhousing.html). It is recognised that manufacturing, purchase, shipping and installation takes a degree of time, and therefore the implementation date from which all Zetec engines must run the new specification component is the first official BriSCA F2 championship of the year... the English Open Championship, on Saturday 17th May 2025.

1.2 Coil Spring Tethers

All coil-over shock absorber springs (front & rear, outboard & inboard) will be required to be tethered to the chassis by way of a standard specified cable tether, in order to help reduce the likelihood of an errant spring causing injury to a person. The implementation date, along with information on the specified tether and purchasing, will be advised once supplier details, available quantities, and lead-times have been confirmed... a process currently still ongoing.

Effective Date:

To be advised

2 Mandatory Requirements – May require changes to SOME cars

2.1 Zetec ECU / Pinto Rev-limiter Positioning

Existing regulations state the ECU must be positioned in an easily accessible position; however a number of examples have been observed whereby ECUs are hidden away almost underneath the driver's seat... certainly not easily accessible for mechanics or scrutineers. As a result, all Zetec ECUs, and Pinto Rev-Limiters will therefore be required to be mounted above the level of the main chassis rails to facilitate more/easier checks.

Effective Date:

Following feedback from drivers, BriSCA F2 has agreed to delay the implementation of this requirement until the **2026 season**.

2.2 Fuel Filters

The current practice of fitting an in-line fuel filter will be expressly permitted, although remain optional; however, any such item MUST be fitted outside of the driver cab compartment for driver safety.

2.3 Roof Colours

The existing regulation will be updated to prohibit "shades" of red that to the casual observer would be described as orange, pink, or any other variant, even if it says "red" on the tin/colour chart.

3 Regulation Changes – Optional driver choice

3.1 Ignition Pull-Cord/Cut-Off

The option to fit a <u>secondary</u> emergency electrical cut-off switch in the rear window of the car, instead of a mechanical pull-cord, will be permitted. Any such switch must be fitted in the same location as the pull-cord handle, facing the rear of the car, to the left of the driver seat (when viewed from the rear). The original primary electrical cut-off switch, mounted to the dashboard at the base of the windscreen, MUST be retained and operational.

3.2 Brake Bias Valves

BriSCA F2 will permit the use of 2 bias valves in the braking system, if desired, at the request of drivers, to help alleviate cost and complexity by making it more practical to fit calipers/pads in pairs on an axle, rather than use unique components on each corner.

3.3 Zetec Wiring Loom Coil Plug Replacement

The replacement of a broken/damaged coil plug on the standard Zetec wiring loom will be permitted, in-line with the current regulation permitting replacement of the plug for the crankshaft speed sensor.

4 Regulation Clarifications

4.1 Wheel Back-depth Clarification

Current regulations regarding equal wheel back-depths assume a matching pair of wheel rims with the same bead design. BriSCA F2 recognises this is not always the case and drivers do mix and match wheels from different manufacturers and/or of different designs with the same offset (ET) but differing bead designs, to help keep costs down and maximise the use of existing wheel stocks. The regulation will be updated to clarify that the ET measurement may be used by a scrutineer when it is not possible to accurately compare back-depths due to differing bead designs.

4.2 Zetec Camshaft Cover Fixing Bolts

The regulations will be updated to expressly permit the use of replacement camshaft cover fixing bolts currently in use, e.g. socket head cap bolts, as this is an acceptable practice.

4.3 Fuel-Tank Breather Safety Valves

As per regulation 222.02.09 ("A one-way safety valve MUST be fitted in the fuel tank breather pipe to prevent fuel spillage, and MUST be in full working order") the one-way safety valve must be in the breather pipe, not in the tank. The regulation will be updated to clarify that the safety valve must be external to the fuel-tank (i.e. fitted in, or at the open end of, the breather pipe), and clearly visible/accessible to the scrutineer for inspection.

4.4 Roof Colours

The regulation will be updated to reflect the current practice of darker shades of blue as acceptable for "A" (Blue) grades.

4.5 Rear Axle Link-bar Mountings – Applies to Vertically Mounted Bolts

The existing regulation will be updated to clarify the current accepted use of a short vertically mounted bolt to connect rear axle link bars to the chassis/axle, with NO vertical adjustment, subject to the following:

- The bolt must be mounted in double-shear
- The gap between the two internal faces of the double-shear mount must be no greater than 50mm.
- The rod end (rose-joint) MUST be located centrally in the mount, with equal sized spacers (if required) on either side between the rod end bearing and the double-shear bracket faces.
- The use of unequally sized spacers, or any method of attaching the rod-end to the bracket such that it is offset from the centre is NOT permitted.

Note: BriSCA F2 is not aware of any cars failing to meet this requirement currently; this update simply clarifies the permitted use of such a mounting method, within acceptable specified boundaries.

5 Updates to Prevent Unwanted Development

5.1 Wing Panel Lower Edges

The scalloping of the lower edges of wing side-panels, in an attempt to circumvent the regulations regarding wing clearance over the cab will be expressly prohibited.

Note: BriSCA F2 is not aware of any cars failing to meet this requirement currently.

5.2 Radiator Position

The radiator must be mounted in front of the engine, within the footprint of the chassis rails, and no higher than the top of the engine cam-shaft cover.

Note: BriSCA F2 is not aware of any cars failing to meet this requirement currently, but this is a safety measure intended to prevent positioning a radiator containing boiling water close to the driver where a leak/burst hose would more likely cause injury.

5.3 Carburettor - Air Flow

The use of forced air induction, ducting, tapered air filter base plates, remote air filters, or any other device to enhance air-flow to the carburettor will be expressly prohibited. Air filters currently widely in use such as the oval-shaped ITG foam item, or the cylindrical K&N filter with screw-on lid for example, continue to be permitted.

Note: BriSCA F2/SSCA is not aware of any cars currently running such prohibited devices, but a couple of drivers in the past have been asked to remove such items when found.

5.4 Front Axle Link Bars

A new regulation will mandate that axle **link bars** for front live/beam axles, MUST be of solid fixed-length design/construction, such that their length cannot change/be changed under load during racing (i.e. NO in-built springs, damping or telescopic devices). Adjustable rod-ends which can be adjusted in the pits remain acceptable.

Note: This is in line with current regulations for rear-axle link bars, and is to prevent any future unwanted development/expense in this area on front axles. Current practices of using items such as rotating mounts or sliders to mount front axle link bars to the chassis remain acceptable.

5.5 Brake Calipers

The existing regulation will be modified to mandate the use of original/OEM brake calipers only. The use of non OEM specification replacement calipers, racing calipers, or any alternate calipers not to an original road-car design will be explicitly prohibited.

Note: BriSCA F2 is not aware of any cars failing to meet this requirement currently.

6 Miscellaneous Additional Updates

6.1 Chassis Rails

The two main chassis rails must be of equal external dimensions within the current permitted size range, e.g. both 50mm SHS. The use of two differing (external) sizes of material will be expressly prohibited e.g. one rail 40mm SHS, the other rail 70mm SHS.

Note: There are a small number of existing chassis in BriSCA F2 employing two differently sized chassis rails. Owners of such cars must register them with BriSCA F2 and their continued

use will subsequently be "grandfathered in" (in much the same way as the Duratec engine was for example). New cars/chassis, with immediate effect, must NOT be constructed with differing (external) sized chassis rails, and only those registered with BriSCA F2 will be permitted for use.

BriSCA F2 has already spoken to the owners/constructors of known cars with such unequally sized chassis rails; however, any other drivers in possession of such a chassis should contact the BriSCA F2 Chief Technical Consultant via email with details... briscaf2tech@outlook.com

6.2 Illegal Components

Regulation 200.03.01 will be updated to expressly state that any items/components observed not to conform to the regulations prior to the commencement of a meeting will be retained for at least the duration of the meeting to prevent their use, or longer if necessary to perform additional checks, before being returned to the driver. Illegal/non-conforming components observed during the course of a meeting, or at post-race inspection/scrutineering, will be retained for a minimum of 12 months, or the length of any resultant racing ban (whichever is the longer).

7 Regulation Changes Under Evaluation – Driver Input Required

7.1 Super-Finished Differentials (Internals)

Drivers in some quarters have called for a ban on super-finished differentials (internals), while others have requested they be formally permitted. BriSCA F2 is keen to seek general driver opinion on this matter before making a decision, and therefore drivers will be canvassed by way of their registered email address for their views.

7.2 Shock Absorber Adjustments

BriSCA F2 has been made aware of potential unauthorised practices in the production of specialist shock absorbers in an attempt to circumvent existing regulations with regard to multiple adjustments and mono-tube units.

Research is ongoing with shock-absorber specialists to determine any appropriate regulation change to prevent such practices designed to circumvent the current regulations. It has been proposed that a regulation change should be implemented to mandate that the single adjustment is permitted only on the side of the shock-body, at the base, (as is the case for 99% of all shock-absorbers in use within the current regulations). An update will be provided once additional research has been completed, but drivers should be aware of this when purchasing new shock absorbers.

Update:

Following feedback from drivers regarding shock absorbers (including damping, the possibility of control shock absorbers, and a price-cap), BriSCA F2 will review this topic in a wider context, and therefore any changes will likely be from the 2026 season.