2026 BTRDA CLUBMAN'S RALLYCROSS CHAMPIONSHIP
Appendix 2a
Modified 4x4 Technical Regulations

5.5.1 INTRODUCTION

The following Technical Regulations are set out in accordance with the Motorsport UK specified format and it should be clearly understood that if the following texts do not clearly specify that you can make a modification you should work on the principle that you cannot.
It should be clearly understood that unless a modification or removal/change of an item is specifically permitted by these regulations, that any modification or removal/change or repositioning of an item is prohibited. The provision of evidence to determine eligibility is the responsibility of the entrant/driver.

Modified 4x4 will be one class, comprised of 4 different specifications [Spec.];
Spec. A – Up to Capacity 1700cc – Modified
Spec. B – Up to 2500cc – Production
Spec. C – Up to 2500cc – Modified
Spec. D – Up to 3200cc – Naturally Aspirated
Where present as standard, forced induction is permitted for all types except Spec. D.

For the purposes of these regulations;
The term **'make'** refers to the manufacturer of the vehicle.
The term **'model'** refers to the product ONLY. It does not refer to the model variants, trim level or specification.
As per the Motorsport UK National Competition Rules, the term **standard** implies that the specification, features, location and method of operation of a part are as supplied when new by the motor manufacturer for the model and date of car as shown on the entry form.

HOMOLOGATION SPECIALS OR MANUFACTURER 'SPECIAL EDITIONS' WHEREBY THE NUMBER OF CARS PRODUCED IS LESS THAN 1000 ARE NOT PERMITTED.

Eligibility reference for any parts or assemblies is by reference to manufacturer's official publications, the relevant Haynes manuals, Manufacturers original repair manual and Autodata Workshop Application ONLY.

5.5.1.a Modified 4x4 cars are 4-wheel drive four-seater cars that must meet the definition of a series production car as set out in Motorsport UK National Competition Rules Ch.1 App.1. The class is for cars that are or have been available on general sale to the public.
5.5.1.b Competitors should be aware that the organisers intend to develop this class in future years, which may include restricting modification from standard parts. Therefore, before making any modifications from standard, competitors should advise the Championship Coordinator on a confidential basis.

5.5.2 GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS

5.5.2.a Cars must comply with the Technical Regulations published by the Organisers for **the event** throughout official practice, qualifying heats and finals.
5.5.2.b All cars must comply fully with the current Motorsport UK National Competition Rules Ch.7, Ch.9 and Rallycross Technical Sections Ch.16B App.10 inclusive and these supplementary regulations.
5.5.2.c No approved modification may give rise to an unapproved one.
5.5.2.d The use of magnesium alloy sheet is not permitted. Titanium sheet may only be used for heat shields.

5.5.3 SAFETY REQUIREMENTS

5.5.3.a Minimum, all cars must comply fully with the 2026 Motorsport UK National Competition Rules Ch.7, Ch.9 and Ch.16B App.10 as appropriate. Double longitudinal door bars must be fitted to the driver's side of the roll cage in accordance with Ch.7 App.13 diagrams number 21(g) or 21(h).
In addition:
5.5.3.b Seats must comply with Ch.7 App.7 Art.2. As per the Motorsport UK National Competition Rules Section Ch.16B App.10 Art.12.8 it is mandatory for all seats to be FIA homologated. As per Ch.16B App.10 Art.12.9 FIA homologated seats manufactured to FIA Standard 8855-1999 may be used for up to two years beyond the expiration of the original homologation label validity. FIA homologated seats manufactured to FIA Standard 8862-2009 and FIA Standard 8855-2021 may be used until 31st December of the year stated on the label. The seat must be entirely mounted to one side of the vehicle's centreline.
5.5.3.c Race harnesses minimum requirement; complying with Ch.7 App.7 Art.5, Ch.7 App.7 Art.8.1 and Ch.7 App.7 Art.10. For clarity, harnesses must be a minimum of a six-point harness (Ch.7 App.7 Art.9.1). FIA homologated harnesses are strongly recommended. Harnesses which are homologated to FIA standard 8853-2016 may be used for up to five years after the year stated on the label as per Ch.7 App.7 Art.10.5.
5.5.3.d From a 'race ready' position with race harness fastened, the driver must be able to vacate the car in 10 seconds. Refer to Ch.7 App.2 Art.20.2.
5.5.3.e A fire extinguisher MUST be fitted; the minimum specification must be to current Motorsport UK Regulations (Ch.7 App.6 Art.1 or Ch.7 App.6 Art.3 minimum).
5.5.3.f Clothing and personal safety equipment as per Motorsport UK National Competition Rules Ch.16B App.8 Art.4.5a-e inclusive. For clarity. A crash helmet which complies with Ch.9 Art.5-9 inclusively and bearing an ASN approval sticker. The helmet must be of a standard listed in Ch.9 Art.7.1.a (for Motorsport UK National events). Flame-resistant balaclavas (Ch.9 Art.12.3) and flame-resistant gloves (Ch.9 Art.12.6) are mandatory. Flame-resistant socks, shoes and underwear are strongly recommended.
5.5.3.g. If the engine/motor(s) is run with the drive engaged whilst the vehicle does not have any of the driven wheels in direct contact with the ground the vehicle must be securely supported on stands (not jacks) and:
a) a competent person must be in the driver's seat while the engine/motor(s) is running and
b) there must be a safe zone around the car with only essential personnel admitted while the engine/motor(s) is running and
c) each driver/entrant is responsible for controlling and managing the above obligations within their own paddock space and for briefing their own personnel on all matters of safe work practices.

5.5.4 CHASSIS and BODYWORK

5.5.4.a The standard body shell MAY NOT be strengthened except for the following: -
i) The fitting of the roll cage as 5.5.3.a & b
ii) The reinforcing of the standard suspension mounting points may extend to a maximum of 200mm from the centre of the suspension point. The roll cage may be extended onto the front suspension tower side, except for front strut braces. Rear suspension points may be removed, and new rear towers may be installed.
iii) To prolong the life of the body shell it is permitted to carry out seam welding.
iv) On R60 Minis Only, The crumple area of the left and right front chassis legs may be reinforced.
5.5.4.b The exterior of the car MUST remain as standard including mirrors, door handles and bumpers, although it is permitted to remove body mouldings, badges and the radio aerial. The car's exterior body panels may be substituted for composite ones (fiberglass). The visual appearance of these parts shall be identical to the standard panels except for the wheel arches and side sills. Bonnets vents may be fitted. Side skirts may be replaced or modified, but the width shall not exceed beyond the front and rear wheel arch extensions, and must be made of composite materials only
It is permitted to fit guards to engine sump and fuel tank. Any guards may protect but NOT strengthen.
It is NOT permitted to reinforce the bumpers or their mountings.
5.5.4.c Glass sunroofs MUST be replaced as per Motorsport UK National Competition Rules Ch.12 App.13 Art.11.8.
5.5.4.d. Must have a windscreen as Ch.16B App.10 Art.2.5and Ch.7 App.2 Art.22.8. All side and rear windows may be replaced with polycarbonate of minimum 4mm thickness. Windows must remain in a fixed upright position.
5.5.4.e The interior of the car MUST have the roof lining, carpets and all the seats, apart from the driver's

(See5.5.3.c), removed. It is also required that any audio equipment, spare wheel, tools and standard seat belts be removed. It is permitted to remove the door trim panels and the window regulators (the windows must then be fixed to prevent them opening). It is recommended that trim panels are replaced by aluminum or Kevlar panels.
5.5.4.f An interior mirror of a minimum of 50 sq. cm. MUST be fitted. The original dashboard MUST be retained although instruments may be replaced. Dashboards are free
5.5.4.g Mechanical Quick release and non-locking bonnet and boot lid retention must be used to allow access from outside of vehicle in any condition

5.5.5 ENGINE

5.5.5.a The engine must be as originally fitted as original equipment to the car and be in the original location unless specifically noted below.
5.5.5b Engines must comply with one of 4 Specs;
Spec. A – Up to 1700cc, Modified
For All 4 Mini Cars specifically, The engine must be either N14 or N18 of the type originally fitted to the Cooper S models.
Spec. B – Up to 2500cc – Production
Spec. C – Up to 2500cc – Modified
Spec. D – Up to 3200cc – Naturally Aspirated
Where present as standard, forced induction is permitted for all types except Spec. D.
5.5.5.c For Specs. B and D: Pistons must be unmodified standard production or approved replacement pistons subject to a maximum oversize of +0.5mm. (even if this increases the capacity beyond 2000) Competition pistons are prohibited. Stroke must comply with Manufacturer's original specification. Material may be removed from the skirt area only for balancing purposes. In this case ONE piston must remain unmodified.
For Specs A and C: Pistons are free subject to a maximum oversize of +0.5mm. (even if this increases the capacity beyond 2000). Stroke must comply with Manufacturer's original specification.
5.5.5.d For all Specs: Only the standard crankshaft is permitted. Lightening of crankshaft is prohibited. Balancing may be carried out by pin drilling only.
5.5.5.e For Spec D: Only the standard connecting rods are permitted. Lightening of connecting rods is prohibited. Balancing may be carried out by pin drilling only.
For Specs A, B and C: Connecting Rods are free
5.5.5.f For Specs B and D; Camshaft must be standard as originally supplied for type of engine used. It may not be machined or reprofiled. Original timing gear must be used. Offset keys or adjustable vernier drives may not be used, unless fitted to the original engine.
For Specs A and C; Camshafts and timing gear are Free
5.5.5.g For specs A, B and D: Cylinder head(s) must be standard as originally fitted to the type of engine used. No gas flowing or polishing is allowed. The original terrain must be visible in the inlet & exhaust ports and in combustion chambers. Heads may be skimmed for maintenance purposes only and may not be less than Manufacturer's minimum dimension.
For spec C: The cylinder head(s) must be the standard part as originally fitted to the type of engine used, however gas flowing, polishing and porting of the head is permitted. Valves must remain the standard size.
5.5.5.h For all specs; Flywheels are free
5.5.5.i For all specs; It is permitted to baffle the standard sump and modify the oil pick up pipe. Dry sumping is not allowed.
5.5.5.j For all specs; It is permitted to fit an oil cooler and/or filter within the engine compartment.
5.5.5.k For all specs; It is permitted to remove/replace the original air filter and filter housing with a performance filter or induction kit. Where engine breather pipes cannot be refitted to the induction system, breather pipes must go to a breather catch tank of adequate size. It is permitted to change carburetor jets or injectors.
For spec B: It is NOT permitted to modify the inlet manifold system including the throttle mechanism, carburetor, fuel pressure regulators, and throttle body apart from fitting an additional external throttle spring
For specs A, C and D: Inlet manifolds are free, but standard throttle body or bodies must be retained.
5.5.5.l For all specs; Engine management is free

5.5.5.m For all specs; All water radiator and hoses are free, but the original radiator location MUST be retained. Heater may be removed and pipe work blanked off or linked together in the engine compartment. Additional electric fans and water pumps are permissible but must remain within the engine compartment. Modification or removal of the radiator shield/cowl is permitted
5.5.5.l For All Specs: All drive pulleys, belts and tensioners are free
5.5.5.n For All Specs; To allow for scrutineer's seals at least two adjacent sump bolts and two adjacent rocker/cam cover bolts must have suitable sized holes drilled.
5.5.5.o Turbocharging;
For Spec A: Turbo or Superchargers are free
For spec B: Forced induction and turbo must be as standard for make model, and engine size.
For Spec C: Turbo or Superchargers are free, however all the air necessary for feeding the engine must pass through a restrictor which must respect the following;

- The maximum internal diameter of the restrictor is 32 mm.
- This diameter must be maintained for a minimum length of 3 mm.
- This length is measured upstream of plane A.
- Plane A is perpendicular to the rotational axis of the turbocharger and is at a maximum of 47 mm upstream of plane B, measured along the neutral axis of the intake duct.
- Plane B passes through the intersection between the most upstream extremities of the wheel blades and a cylinder of 45 mm diameter the centreline of which is the rotational axis of the turbocharger.

This diameter must be complied with, regardless of the temperature conditions. The mounting of the restrictor onto the turbocharger must be carried out in such a way that two screws have to be entirely removed from the body of the compressor, or from the restrictor, in order to detach the restrictor from the compressor.
Attachment by means of a needle screw is not authorised. For the installation of this restrictor, it is permitted to remove material from the compressor housing, and to add it, for the sole purpose of attaching the restrictor onto the compressor housing.
Local modifications (machining and/or addition of a sleeve/connector) to the outside of the compression housing are permitted at the level of the air outlet in order to improve the connection with the charge pipe.
The heads of the screws must be pierced so that they can be sealed.
The restrictor must be made from a single material and may be pierced solely for the purpose of mounting and sealing, which must be carried out between the mounting screws, between the restrictor (or the restrictor/compressor housing attachment), the compressor housing (or the housing/flange attachment) and the turbine housing.
(or the housing/flange attachment).
For Spec D: Forced induction is not permitted
5.5.5.p Anti lag systems are not permitted. Switchable maps are not permitted – any controller must be out of reach of the driver so adjustments cannot be made while in a race-ready position
5.5.5.q Launch control is not permitted.

5.5.6 TRANSMISSION

5.5.6.a The standard gearbox casing and all internals MUST be retained except as permitted in 5.5.6.a.(i). Gear ratios & final drive ratios must
be the same as originally supplied for that make and model of car.
5.5.6.a.(i) A 5-speed gearbox may be replaced by a 6-speed gearbox (and vice versa) from the same manufacturer.
5.5.6.b Front and rear limited slip differentials must be mechanical. Active differentials are not permitted. Mechanical limited slip differential means any system, which works purely mechanically, i.e. without the help of a hydraulic or electric system. A viscous clutch is not considered to be a mechanical system.
The only exception to this is as per 5.5.6.b.i and ii as below
5.5.6.b.i) Haldex systems:
Haldex systems are permitted with the rulings below.
The system MUST have a programmed controller fitted that is set prior to an event. The term 'programmed' controller means it is using a pre-determined setting for power split per axle and not actively changing. Controllers that respond to throttle traces are NOT permitted.
ABS Sensors must be removed to disable the road Haldex operating system (One speed sensor may remain for speed monitoring)

This controller must be out of reach of the driver so adjustments cannot be made during competition.
At any time, the drive to the rear axle may not exceed 50% torque.
5.5.6.b.ii) Viscous couplings are permitted, however any kind of electronic control is prohibited
5.5.6.c All forms of traction control are prohibited.
• All sensors on the wheels, drive shafts and differential are prohibited.
• In order to measure the speed of the car, a single sensor on one driven wheel may be used.
• Whatever their positions, optical sensors for measuring the speed of the vehicle are prohibited.
5.5.6.d Standard drive shafts must be retained.
5.5.6.e The clutch is free.
5.5.6.f The addition of a hydraulic system or a viscous clutch to the central differential is allowed; in order to limit the slip, but this system must not be adjustable when the vehicle is in motion.
5.5.6.g Any sensor, contact switch or electric wire on the four wheels, gearbox or front, middle or rear differentials are forbidden. Only one sensor for displaying the ratio engaged is authorised on the gearbox, on condition that the sensor/electric wire/display assembly is completely independent of the engine control system.
5.5.6.h A maximum of two wires are permitted to the centre differential to power an electric oil pressure pump, provided that the wires serve no other purpose, and the differential is standard equipment for the make and model of vehicle. The system must not be adjustable when the car is in motion.
5.5.6.i Short-shift gear linkages are permitted

5.5.7 SUSPENSION and STEERING

5.5.7.a It is permitted to fit non-standard shock absorbers and springs provided that they mount onto the body at the standard suspension mounting points, with the exception of R60 Minis which may have modified rear suspension top mounting.
5.5.7.b The ride height may be altered. Adjustable spring platforms are permitted
5.5.7.c It is permitted to fit up rated bushes to the suspension (No rose type joints permitted)
5.5.7.d It is permitted to fit, remove or up rate anti-roll bars. (No rose type joints permitted)
5.5.7.e The static negative camber of any wheel may not exceed 4 degrees
5.5.7.f Strut braces are permitted, and their design and material are free.
5.5.7.g The steering lock must be removed.
5.5.7.h Competition bushes or rose joints are permitted
5.5.7.i Pressed steel suspension arms may be strengthened by means of welding on additional material
5.5.7.j Quick release steering wheels are permitted and steering wheels are free
5.5.7.k Steering racks and power steering systems are free

5.5.8 BRAKES

5.5.8.a Handbrakes are free, their operation must be sufficient to hold the car on a slight gradient
5.5.8.b Friction material is free.
5.5.8.c Drilled or grooved discs are permitted, providing they are as per the OEM Diameter and Thickness
5.5.8.d Pedal Box assemblies are free and servo assistance may be removed
5.5.8.e Brake lines may be re-routed. It is recommended that flexible braided brake lines be installed.
5.5.8.f It is permitted to replace/add a brake pressure limiting valve. Any such valve must not be able to be adjusted by the driver while driving the car. It must comply with Motorsport UK Ch.16B App.10 Art.8.3.
5.5.8.g It is permitted to remove or deform brake back plates and add additional ducting to aid brake cooling.
5.5.8.h ABS Braking systems must be removed

5.5.9 WHEELS

5.5.9.a Wheels must be no larger than 17” in diameter and 8J in width.
5.5.9.a(1) Where a control tyre of correct dimension is not made, the organisers may, at their discretion authorise a wheel with a different diameter and/or width.
5.5.9.b Have all nuts securing road wheels, excepting those of centre-lock type, of steel and in thread contact over a minimum length of 1.5 bolt/stud diameters reference Ch.16B App.10 Art.9.2. Extended or composite wheel bolts/studs are prohibited. Safety wheel nuts to prevent wheels pulling over the standard nuts are strongly recommended. Wheel spacers are prohibited.

5.5.10 TYRES

5.5.10.a The controlled tyre manufacturer will be MRF Tyres. The **only** permitted tyre for use is the MRF branded MRF 'ZTR' RX tyre. Tyres must be purchased from Waltham Services – these tyres will be stamped to prove place of purchase and this will be monitored. Non-compliance will be considered a breach of the technical regulations.
5.5.10.b In the event that MRF are unable to supply the required tyres across the entire category, competitors may be notified via Championship bulletin of an alternate tyre for use for the duration of the shortage only.
5.5.10.c The use of tyre heating/heat retention devices, tyre treatments and compounds are prohibited.
5.5.10.d No alteration to the tyre from the manufacturer's specification is permitted.
5.5.10.e Re-cutting, re-grooving or in any way modifying the tread pattern is not permitted.
5.5.10.f All the manufacturer's \data must be clearly visible. Buffing of the sidewalls to remove data is prohibited.

5.5.11 ELECTRICS

5.5.11.a Only one battery may be fitted. The type of battery is free, but it must be sealed and can be located anywhere within the vehicle in accordance with Ch.7 App.5 Art.1.
5.5.11.b The battery must be capable of repeatedly starting the engine at any time when requested.
5.5.11.c It is recommended that all lights are removed, and similar shaped covers are fitted to the resulting holes.
5.5.11.d Two high-level brake lights MUST be fitted to the inside of the rear window in accordance with the Motorsport UK Ch.16B App.10 Art.7.3.
5.5.11.e A red rear warning light complying with current Motorsport UK National Competition Rules Ch.7 App.5 Art.6 must be fitted.
5.5.11.f Both charging and starting circuits must be standard and function efficiently.

5.5.12 WEIGHT

5.5.12.a It is not permitted to lighten the vehicle unless specifically permitted in these regulations.
5.5.12.b. Minimum weight for any unlisted vehicle is 1250kg.
Mitsubishi Evo VI – 1400kgs
First Generation Subaru Impreza (including WRX)– 1200kgs
Second Generation Onwards, Subaru Impreza (including WRX) – 1250kgs
Nissan Pulsar – 1250kgs
R60 Mini Countryman – 1150kg
These weights will be reviewed throughout 2026 and may be amended for 2026.
5.5.12.c As the class is aimed at inexpensive and competitive racing BTRDA reserves the right to equalise performance by altering specific vehicle weights. A maximum of 30kg may be added at any time. Where this regulation is enforced the weight established will be published in a Championship Bulletin issued prior to the next event.
5.5.12.d Any ballast needed MUST be mounted as per Ch.7 App.2 Art.19.2.

5.5.13 FUEL TANK and FUEL

5.3.13.a Be equipped with an effective method of stopping the fuel supply that can be operated by the driver when normally seated with seat belts secured
5.5.13.b The fuel pump, filter and fuel lines are free.
5.5.13.c Cold start systems may be disconnected or removed.
5.5.13.d Only permitted fuel, as defined in 2026 Motorsport UK National Competition Rules Ch.1 App.1 and Ch.8 App.1 Art.1.7.a and Ch.8 App.1 Art.1.7.b, may be used. For clarity, this includes the use of Carless Superplus or Carless Turbo Ultimate Dev2 as supplied by Vital Equipment. Other Vital Equipment fuels are not permitted unless included in Ch.1 App.1 or Ch.8 App.1 Art 1.7a and Ch.8 App.1 Art.1.8.b.
5.5.13.e The original fuel tank may be replaced by another provided it is located in the original location
5.5.13.f If the fuel tank is located inside the car, a safety, currently FIA homologated, FT3 type must be fitted if the standard tank is not used.

5.5.13.g An alloy fuel tank, maximum capacity 5 litres, fitted with fuel tank foam may be fitted inside the engine compartment.
5.5.13.h Have sufficient fuel for a fuel test present at any time during the meeting to comply with the fuel sampling requirements as laid down in the Motorsport UK National Competition Rules Ch.3 App.0 Art.12 Procedure for fuel testing.

5.5.14 EXHAUST and SILENCING

5.5.14.a For Spec B: The standard exhaust manifold MUST be retained.
For Specs A, C and D: The exhaust manifold is free.
5.5.14.b The exhaust system beyond the existing manifold is free but it MUST exit from the rear of the car.
5.5.14.c Exhaust gas re-circulatory systems may be removed.
5.5.14.d Exhaust manifold must remain a complete component

5.5.15 PERFORMANCE EQUALISATION

5.5.15.a This class is aimed at cost effective and competitive racing. The organisers reserve the right to equalise performance of vehicles during the season. Such equalisation may be by any means, but may include turbo restrictors, weight limits and time penalties. Any such equalisations will be notified to competitors by official bulletin.

5.5.16 ELIGIBILITY SCRUTINEERING REQUIREMENTS

5.5.16.a All cars **MUST** have the following studs, nuts and bolts drilled to enable seals to be affixed. Drillings must be of at least 3mm diameter. Failure to have the following drilled is deemed to be a breach of vehicle eligibility:
(i) at least two adjacent rocker cover fastenings so it is impossible to remove the head(s) without disturbing the seals; and
(ii) at least two adjacent bolts connecting the gearbox to the engine block, so it is impossible to separate the gearbox from the engine without disturbing the seals.
(iii) Sealing points should be available so that it is impossible to open / remove / change any part of the gearbox without disturbing the seals.
5.5.16.b The event organisers, and/or the Championship eligibility scrutineer / his representative reserve the right to make random eligibility checks and subsequently seal any parts for later inspection at any Championship round. Any components which are sealed, at any point in the Championship, will be checked within 30 days of the final round (subject to any extenuating circumstances which may result in a deadline extension being sought from Motorsport UK). All eligibility testing costs are borne by the competitor. It is a condition of entering the Championship that the competitor will submit any component and/or for sealing and later inspection when requested to do so.

5.5.17 TELEMTRY / VOICE COMMUNICATIONS

5.5.17.a Any form of wireless data transmission between the vehicle and any person and/or equipment (other than that required by the timekeepers) is prohibited while the car is on the track. Pit to car radio by any means, including the use of mobile phones, whilst on track is not permitted.
5.5.17.b Data transmission through a temporary physical connection is allowed in the paddock only.