

J1000 Technical Regulations

Valid from 01.01.2023

1. GENERAL

The whole aim of this class is to inspire and promote young talent. We do not want to find anyone in contravention of these regulations. You are given fair warning that from 2020 onwards the checks on cars will be much more stringent and much more regular. We intend to have a dedicated J1000 Championship Motorsport Ireland Scrutineer at all events. If you have any queries regarding anything written here please get in touch. We have said many times, if these pages don't say you can do it then assume you can't. If your engine has had anything done to it at all other than the head skimmed and the cam timing adjusted, then it is illegal. If your ECU has been touched in any way, by anybody other than the nominated company then it is illegal. Furthermore, the organisers reserve the right to instruct a competitor to take their car to an approved rolling road for a power check at any time. This will be at the registered competitors' expense. If you require any clarification on any part of these regulations or just simple advice then contact us. The following pages give the specific details regarding all aspects of the Technical Regulations please take time to read them. A lot of time and effort has gone into these to ensure that we have a fair and friendly class. These regulations will be enforced rigidly.

1.1 For the purpose of these regulations' models of any differing specification including alternate manufacturers names will be considered the same vehicle. K11 Micra's of any age are considered the same as each other. Toyota Aygo, Citroen C1, Peugeot 107 are considered the same. Nissan Pixo and Suzuki Alto are considered the same. New model Toyota Aygo, Citroen C1 and Peugeot 108 are not considered the same vehicle as each other or their earlier model versions. For clarification please contact the Motorsport Ireland Forestry Sub Commission.

1.2 TECHNICAL REGULATIONS IN DETAIL

The following text is in addition to Appendix 2 and Appendix 29.1 of the current Motorsport Ireland Yearbook. Championship Organisers or Motorsport Ireland may require any engine or transmission part or parts to be stripped for inspection. Sealing may be carried out with a view to stripping such components at a later date. Refusal to allow this will result in all championship points up to and including the date of the request being forfeited. The cost of any stripping will be borne by the competitor.

2. ENGINES

2.1 Engines must be a maximum capacity of no more than 1000cc. There is no re-bore allowance. If your engine is worn or suffers a failure, then a replacement engine of the same type and of the correct capacity and of the same related model may be fitted. The fitting of a later engine from a newer model is not allowed, e.g. a Micra K11 engine cannot be fitted to a K10. If such replacement is not available, then re-boring for the purposes of re-lining the engine to the correct capacity and stroke is allowed. Re-boring an engine and short stroking by swapping or modifying the crank in any way so as to achieve the correct engine capacity is strictly forbidden.



2.2 It may be permitted to transplant a sub 1000cc engine into an originally higher specification car. E.g. Nova GTE with a sub 1000cc Vauxhall engine. (Please if you think this may apply to you then contact the Motorsport Ireland Forestry Sub Commission for clarification BEFORE you spend time and money).

2.3 Carburettor or fuel injection is only permitted as originally fitted to the sub 1000cc engine. This includes fuel injectors which must remain the standard injectors fitted to that specification of engine by the manufacturers, larger injectors or injectors from another model or engine are forbidden. Carburettor and throttle bodies must also remain as standard and contain all the components as the car left the factory. The machining, enlarging or any other type of modification is not allowed. The diameter of the throttle body and any butterflies or bridges must remain within the manufacturer's tolerances for that model and year of car. The carburettor/throttle body may not be replaced with any such item from another model of that car or any other car in the manufacturers range.

2.4 Air filters must be fitted; open ram pipes are not allowed. Air filter and trunking are free but must be fitted. These may be modified to aid air flow but all incoming air must pass through the air filter, i.e. no bypass systems. Filters must not be outside the body area of the car or protrude through any part of the body, grille or bumper area of the car.

2.5 Cold air boxes may be fitted.

2.6 Carburettor/s may be set up to optimise jetting.

- 2.7 Fuel pumps are free.
- 2.8 Adjustable fuel pressure regulators may be fitted.

2.9 The inlet manifold must be of a type fitted to that model of car and must be original and unmodified in any way.

2.10 The exhaust manifold must be of a type fitted to that model of car and must remain standard and unmodified in any way up to the entry of the catalytic converter or other junction whichever is sooner.

2.11 The routing of exhaust pipes and silencers is free from the exit of the exhaust manifold, however catalytic converters must remain on cars manufactured after 31/12/99. Exhaust/Catalytic converter by pass systems are not allowed.

2.12 It is permitted to fit a sub 1000cc engine into a car of the same model, but all other performance related parts must be from that sub 1000cc engine. E.g. when fitting a 993cc engine into a 1300cc Corsa it is not permitted to use the fuel injection from the 1300cc engine.

2.13 Modifications of any kind to the engine block, any internal engine parts or rotating masses are not allowed except as detailed in the cylinder head section of these regulations. Non-original steel cranks or bottom ends are not allowed. Modifications such as balancing and or lightening are not allowed. The lightening or balancing of con rods and or crankshafts is forbidden. The use of nonstandard pistons and or gudgeon pins is forbidden. Only a flywheel as supplied as original equipment for that model of car is allowed. The machining and or lightening of flywheels is forbidden. If an engine block is no longer available for the car e.g. classic Mini, it is permitted to machine the top of the block of a larger cc engine of the same make to bring the engine to the correct displacement as long as the bore and stroke of that engine are not changed.



2.14 Oil coolers may be fitted. These must be contained within the profiles of the body, grille and bumper area.

2.15 Radiators may be modified and increased or decreased in either size or number. Location may be altered from the standard position but must remain in the engine bay.

2.16 Rev limiters whether electronic, fuel or mechanical are to remain unchanged from standard specification for that make and model of car. The rev limiter must operate within the range and limits as specified for that make and model of car. NO tolerance will be given for cars that do not comply and the penalty for this will be exclusion.

2.17 The drilling and or machining of any parts of the engine and any of its ancillaries other than to facilitate the application of a seal is expressly forbidden. This is deemed as lightening and includes any grinding or machining of lips ridges or any other webs or excess metal on any engine parts.

2.18 Engines, or any other component in the vehicle where specifications apply must be made available for sealing at any time that the Championship Organisers or Motorsport Ireland so request. See Appendix 2 Art 28.6 and 28.6.1 for sealing requirements (This should also include manifolds, carburettor, throttle body, engine electronic control unit etc as well as rocker cover/cylinder head bolts). For any engine which carries a seal that needs to be replaced, approval must be sought from the Technical Commission and Forest Rally and MIJRS Championship Organisers before any changes can occur. Any engines without a seal may have seals imposed on them should they suffer a failure, with the Technical Commission and Forest Rally and MIJRS Championship Organisers reserving the right to inspect that engine. If anything within a sealed motor is found to be illegal, the competitor involved will be disqualified from the championship with no right to appeal.

2.19 Diesel engines are not allowed.

2.20 Rotary (Wankel) engines are not allowed.

2.21 Hybrid cars are not allowed.

2.22 Forced induction in any form is not allowed.

3. CYLINDER HEADS

3.1 It is permitted to skim the cylinder head up to a maximum of 0.635mm (0.025"). A cylinder head may only be skimmed once. Should a cylinder head fail after it has been skimmed then a replacement must be obtained, this may then also be skimmed within the same tolerances.

3.2 The cylinder head must be the correct cylinder head for the make and model of the car entered. It is not permissible to replace the cylinder head with one from a larger engine car and or a different model of the car.

3.3 Any machining or polishing of any part of the cylinder head other than that detailed in 3.1 is also forbidden. In particular, any part of the inlet and or exhaust ports or chambers, the valve seats and or chambers.

3.4 Inlet and exhaust valves must be the standard size type and fitment for the make and model of car entered. Any machining lightening of the valves or any part of the valve is forbidden. The fitting of



modified or oversize valves is forbidden. Valve from any other specification of engine are also forbidden.

3.5 Valve springs; rockers and any part of the valve operating mechanisms must be as standard fitment for the make and model of car and any aftermarket items are forbidden.

3.6 Camshafts must be the original standard equipment camshaft/s for the make, model and engine capacity of the car entered. No reprofiling of cam lobes and or bearings and or carriers is allowed. The use of uprated or modified camshafts is strictly forbidden.

3.7 It is permissible to adjust camshaft/s to bring valve timing back to standard after the head has been skimmed as per 3.1

4. Engine Control Units (ECU's)

4.1 ECU's must be standard and unmodified in any way from the original ECU for the make and model of car entered other than detailed here.

4.2 The modification of any engine and or ancillary control unit for the engine is forbidden. Especially to raise the rev limiter of the car, and or fuel mapping, and or ignition timing.

4.3 The fitting of any auxiliary and or piggy back ECU is not allowed.

4.4 The fitting of any electronic device to attempt to increase the performance of a car is not allowed. i.e. aftermarket plug in chips. All sensors that effect engine performance must remain in their original position and operate to standard manufacturers tolerances. No inline resistors or similar to attempt to disrupt signals to any engine sensors or ECU's are permitted.

4.5 Removal of certain functions such as anti-yaw, traction control etc. may only be carried out by a nominated MI approved J1000 Remap Agent or nominated company. No alterations to the engine mapping may be carried out.

4.6 The ECU must be securely fitted to the body or frame of the competing car. The unit must be bolted or screwed securely with a minimum of two fixings. No temporary fixings such as Velcro, tie wraps or double sided tape will be permitted.

4.7 All ECU's shall carry an MI official seal. All ECU's shall carry an official seal always.

4.8 ECU's may be removed at any time and sent away to confirm they are standard to the manufacturers specification to MI Approved remap Agent or nominated test company.

4.9 If an ECU is tested and found to not comply with these regulations in any form no matter how small and whether it provides any performance advantage or not, then the competitor will be deemed to have run that ECU since the date the Motorsport Ireland seal was applied and will forfeit all points scored from that date, up to and including the time the unit was tested.

4.10 The Championship organisers or MI reserve the right to ask any competitor to run an ECU provided by the Championship organisers or MI at any time during the season or at any time during an event.



4.11 If an ECU is suspected to infringe these regulations and is removed as per 4.8, and is found to not comply with regulations in any way other than modifications that are allowed in these regulations, and have been carried out by Motorsport Irelands approved agent or nominated company then the cost of the ECU being checked will be borne by the competitor.

4.12 MI reserve the right to attach any type of data logging equipment to a car. The data collected will be shared with the competitor and Motorsport Ireland. The Motorsport Ireland approved agent or nominated company for ECU checking will interpret the data and decide whether any further tests are required.

4.13 All cars must have the manufacturers OBD/OBD II or diagnostic socket mounted in such a way that easy access is available to attach diagnostic or ECU reading equipment by event scrutineers or Motorsport Irelands approved agent or nominated company for ECU checking.

4.14 The wiring loom is free and may modified and redundant wires removed. However the engine loom wiring and connections to both ECU and ODB and or diagnostic port must remain. Removal of wires to either of these items that results in scrutineers and or their representative not being able to communicate fully with the ECU will be taken as the ECU having been modified and penalties applied as per 4.9.

5. BODYSHELLS

5.1 The body shell of the car may be freely strengthened including roll cage and suspension areas.

5.2 Gusset/Triangulations panels (or similar, seam weld and weld on braces are all permitted.

5.3 Bolt on strut braces across suspension turrets are permitted.

5.4 Carpets, headlining's and sound deadening may be removed.

5.5 All body shell panels shall be of the original material as specified by the manufacturer for the age and model of your car. These panels should be of steel unless a composite material was used in the cars original manufacture. The replacement of standard steel items by composite or GRP is not allowed.

5.6 Additional or alternative instruments are permitted as are interior accessories e.g. intercom, trip meter etc.

5.7 Under body guards are permitted.

5.8 Strengthening, adding or replacement of engine and/or gearbox mounts is permitted.

5.9 Brake and fuel lines are free and their positioning can be changed.

5.10 Bonnet and boot fastenings are free, all doors (except tailgate) must retain the original manufacturers fastening and all doors must be able to be opened from outside the car.

5.11 All glass areas MUST remain glass. The replacement by any other material than glass is NOT permitted. Glass must remain original factory thickness. All side glass must be covered with protective film as per Motorsport Ireland Yearbook Appendix 2 Scrutiny Requirements



5.12 A minimum of four rear view mirrors must be fitted to all cars. They will consist of two interior rear view mirror and two door mirrors. The first interior rear view mirror location may be moved to allow free vision after the fitting of a roll cage, it must however be in such a position that it can be used by either competitor when seated in the driver's side seat. The second interior mirror is for the use of the navigator only and must be mounted in such a position that it can be used whilst that person is seated and belted in the car. The door mirrors must be fitted in the original manufacturers position and must be fully extended outwards at times during an event. The door mirrors must be a single pane and should be the original equipment for the car or an equivalent aftermarket part. It is permissible to substitute electrically operated door mirrors for manual versions on a cost basis but they must be the correct mirrors for the car and of the correct dimensions. A minimum of one replacement glass for each door mirror must be carried in the service vehicle to allow for replacement in the event of a breakage. If both door mirrors and replacements should be broken during an event then as a minimum an internal mirror must remain in place and be suitable to allow rear view for the navigator. In the event of a vehicle being registered prior to 1st August 1978 where only one mirror was required by law, then these cars must be retro fitted with door mirrors with a surface area of not less than 100mm high and 150mm wide.

5.13 Lightening of the body shell is not permitted, however in the interest of safety and for the purpose of fitting equipment, removal or alteration of internal trim, mountings and brackets is not considered as lightening. Bonnets, boots/tailgates and doors must not be lightened and any strengthening bars MUST NOT be moved from standard position in the vehicle or removed altogether. Trim removal and drilling to affix handles or fittings are not considered lightening. Fixings may be removed, shortened or replaced with items made from any material.

5.14 The dashboard and instrument panel must remain in their original positions and must not be removed. The edges of the dashboard may be cut to allow the fitting of a roll cage. The dashboard (dash top) must be the original for the car; this item cannot be substituted for an aftermarket item.

5.15 Indicator and wiper/washer's switches must remain in the original positions on the steering column and operate in such a position. It is permitted to fit secondary switches for wipers/washers/ horn that can be operated by the navigator.

5.16 Heaters must be fitted in all cars and shall be the original item for the car. The heater specifically MUST be able to blow warm air onto the screen of the car through the manufacturers original dash top outlets or vents. The system must be capable of keeping at least 80% of the cars windscreen clear at all times. This applies even if a heated screen is fitted and must meet this criteria even with the screen element turned off.

5.17 Air conditioning systems including pumps, condensers and or radiators may be removed.

5.18 The removal of the roof anti flex bar is allowed. The removal of the glove box is permitted.

5.19 The battery must remain fitted in the original position. The method of strapping the battery is free and the size of battery fitted is free.

5.20 Bumpers are not classed as trim and are not allowed to be lightened. The original steel back plates, or crash bars must be fitted. The drilling of holes in the bumpers themselves and or the steel backing or crash bars will be classed as lightening and is not allowed.



5.21 Only spoilers or aerofoils as fitted originally to that model of car, by the manufacturer of the car concerned are permitted. No aftermarket or altered versions are allowed.

5.22 Bonnet vents, scoops or any other modification to the bonnet area is not allowed. A bonnet vent will only be allowed if it was fitted as standard to the make and model of car entered.

5.23 A roof mounted vent pod is allowed.

5.24 Door cards must be fitted to doors; original door cards can be replaced with carbon fibre or such other parts (reference Appendix 2, Art 14.3). The original interior release handle must be retained and operational.

5.25 Tinted windows are allowed within the limits as laid down in Appendix 2 Art 19.2 of the current MI Yearbook

5.26 The radiator grille or bumper air intakes must be fitted. It is permissible to replace these with another material to increase air flow but they must be fitted.

5.27 The removal of or replacement using a lighter material of the petrol filler cap or flap is not permitted.

5.28 The profile of the bodyshell must remain as standard, no modification to wings or wheel arches (i.e. widening) is allowed.

5.29 The minimum weight of the complete car inclusive of crew and crash helmets is 950kg. Any car which has had its weight adjusted must comply with the new weight limit at all times. Competitors may be subjected to weight checking throughout any event at any time from the start of Pre event scrutineering to completion of post event scrutineering. Any car inclusive of crew below 950kg at any time during an event will score 0 for that round. It will also count as one of their scoring rounds for the championship, (one of the six) and cannot be used as a dropped score. The results of the scales will be deemed as final. IT IS YOUR RESPONSIBILITY TO ENSURE YOUR VEHICLE/CREW IS OVER THE MINIMUM WEIGHT AT ALL TIMES, FROM THE START OF PRE-EVENT SCRUTINEERING UNTIL AFTER POST EVENT SCRUTINEERING.

6. BRAKES

6.1 Pads, Linings and fluids are free.

6.2 ABS systems may be disabled or removed. If this is required to be done by any ECU then this must be done by the Motorsport Ireland approved agent or nominated company for ECU checking

6.3 All major mechanical components of the braking system must remain as standard for the make and model entered, or a direct bolt on replacement from another model in the range. You may fit brakes of a higher specification model, but they must not be aftermarket products.

6.4 Extending the parking brake lever is allowed. The extension must be no more than 200mm in length and must follow the line of the existing lever (NO BENDS). The parking brake must continue to work as per NCT requirements

6.5 Hydraulic Handbrakes are not permitted.



6.6 A brake bias valve may be installed however it must be positioned in such a way that neither the driver nor co driver can operate said valve whilst seated in the car.

7. TRANSMISSIONS AND DIFFERENTIAL

7.1 No modifications or machining to the standard gearbox are permitted.

7.2 All internal parts including gears MUST be standard showroom specification for the make and model entered. The transmission unit must complete as originally supplied by the manufacturer for the make and model of the competing car. It is not permitted to replace any transmission parts with aftermarket parts or parts from another model. This will be deemed as a specialist box and is not permitted.

7.3 Up rated gear linkages are permitted.

7.4 Replacing an automatic gearbox with a manual gearbox is permitted.

7.5 Limited slip or torque biasing differentials are not permitted.

7.6 Clutch linings, covers and release bearings are free.

7.7 Drilling or machining on any external or internal parts of the transmission, gearbox casing, differential casing or any of its ancillaries other than to facilitate the application of a seal is expressly forbidden.

7.8 The gearbox from a Toyota Aygo, Citroen C1 or Peugeot 108 (with final drive that is not 3.550 to 1) introduced from May 27th 2014 must not be fitted to any Aygo, C1 or 107 manufactured before this date.

7.9 The fitting of a Toyota Yaris final drive to any Aygo, C1 or 107 is forbidden.

7.10 Volkswagen Up. Skoda Citigo and Seat Mii models may only use the standard gearbox with 4.17 final drive. No other gearbox is acceptable for these models.

7.11 Final drive and gearbox ratio checks will be carried out at random throughout the year. If any car fails these checks then they will score no points for that event and the event will be counted as one of the six scores for the season and will not be allowed to be counted as a dropped score.

7.12 Uprated drive shafts and or CV joints are permitted providing there is no modification to the gearbox output to allow this.

7.13 Gearboxes must be made available for sealing at any time that the Championship organisers or MI so requests. Refer to Appendix 2 Art 28.6 of the current MI yearbook

8. STEERING

8.1 Aftermarket steering racks of higher ratio than standard are not permitted.

8.2 Power Steering may be added or removed.

8.3 Conversion from left to right or right to left hand drive is permitted.



9. SUSPENSION

9.1 Suspension bushes may be changed for polymer material.

9.2 No all metal spherical, or composite or similar joints are allowed except as defined in rule 9.7.

9.3 Strut top mounting hole movement is permitted to optimise caster, camber or tracking angles.

9.4 All suspension-mounting points MUST be kept in the same position as standard showroom specification, other than item 9.3 but may be strengthened.

9.5 Springs and dampers are free, however remote reservoir dampers are not permitted.

9.6 Struts, springs and dampers may be changed for an up rated version, but MUST be attached to the original fixing points on the car and suspension components.

9.7 Heavy/duty fabricated strut top mounts or similar are permitted, including spherical joints. These MUST fit in the standard body shell location.

9.8 Rear coilovers are permitted as long as the top and bottom mounting of such items mount to the car body and other suspension components in the original way.

10. SAFETY EQUIPMENT

All cars must comply with Motorsport Ireland safety regulations – Reference Appendix 2 of MI yearbook

10.1 Five or six-point safety harnesses are mandatory.

10.2 First Aid Kits are strongly recommended

10.3 It is strongly recommended that the Co-Driver be capable of operating the horn whilst strapped in the passenger seat without undoing any belt to reach/ operate the horn.

11. WHEELS

11.0 Wheels are free provided they are not in contravention of Motorsport Ireland Yearbook Appendix 2 Art 8.1

11.1 Permissible wheel sizes are as follows: Nissan Micra, Citroen C1, Peugeot 107, Toyota Aygo, VW Up, Skoda Citigo, Seat Mii or any derivatives of these cars registered prior to 1st January 2014: 13 inch wheels. Ford Fiesta: 14-inch wheels

These wheel sizes are the only wheel sizes permissible for the Championship. Any car that is not on the list please take advice from the MI Forestry Sub Commission before buying your wheels and tyres.

12. TYRES

12.0 Only tyres listed by the championship organisers are permitted*. The tyre is Pirelli 165/80R13 GM8.

*There is no control tyre in place for the MIJRS J1000 Championship, but competitors registered for both the MIJRS *and* Irish Forestry Championship must use Pirelli tyres.



12.1 The use of tyre warmers is not allowed.

13. FUEL

13.0 Only commercially available pump fuel (petrol) will be permitted.

13.1 Bio ethanol fuel is not permitted

13.2 Only fuel tanks supplied and fitted by the manufacturer of the vehicle concerned are allowed.

14. MISCELLANEOUS

14.1 The sticker for championship sponsors will be required to be displayed these will be as per championship details.

14.2 Social Media: Motorsport Ireland's Social Media policy will be referred to in the event of any queries of this matter

15. SEALS

15.1 The Championship Organisers or MI Reserve the right to seal any item on a vehicle that they choose.

15.2 Any seal placed on a vehicle will have the sealed item inspected for compliance of these regulations in accordance with Appendix 28.9.1 of the MI yearbook

15.3 If any sealed item is found to be in contravention of these regulations, the vehicle/ crew in question will be excluded from the round that the seal was fitted and any subsequent round started with this seal in place.

15.4 Any item which is inspected and found to be in compliance with these regulations will be sealed so as to ensure no future modifications may be carried out on such item. Any breaking of these seals without the written permission of Motorsport Ireland will result in the respective Junior/ Crew being excluded from the Championship