



Bulletin 2022-7 Rally Technical Rule Changes for 2022

1/9/2022

The following changes to the ARA Rally Technical Rules are effective immediately and in place in the 2022 RTR book.

Updates to helmet standards

1.1.1 Helmet Standards

Only helmets meeting one of the following standards will be accepted for competition in any performance rally and must be worn by all competitors when travelling on special stages:

- FIA Standards - ~~8860-2004~~, 8860-2010, 8859-2015, or ~~8860-2015~~ 8860-2018
- Snell Foundation certification - SAH 2010, SA 2010, SA 2015, EA 2016, or SA 2020

For helmets with dual FIA/SA certification, the later expiration date shall take precedence.

Snell SAH 2010 and SA 2010 certified helmets will not be accepted after December 31, 2023

~~FIA 8860-2004 certified helmets will not be accepted after December 31, 2021.~~

Additional definitions

2.1 Definitions

The following definitions shall apply to all vehicles and sections addressed in these Rally Technical Rules.

Hood

The bodywork forward of the base of the windshield between the front fenders and behind the front fascia.

Front Bumper

The front fascia furthest-forward projection between the headlights.

Fascia

The front body work forward of the front wheel openings and front hood cut line that integrates with the fenders.

Radiator opening

A recess and opening in the fascia or front bumper allowing air to access the forward-most engine compartment heat exchangers.

Front fender

The body side forward of the front door front cut line and outboard of the hood side cut line.

Front air dam

The lowest 100mm of the front fascia/bumper/fender forward of the wheel openings.

Plan view

Outline of vehicle as seen from directly overhead.

Rear diffuser

Any underbody bodywork element rear of the centerline of the rear wheels.

Rationale: Added definitions to coincide with the bodywork rules updates.

Added Weight Penalty for NA4WD Sequential

4.3.1 Engine and Transmission

Engine must be normally aspirated. Engine block and chassis manufacturer must match. Transmission manufacturer is free. Sequential shift allowed but is subject to a 100 lb. weight penalty.

Rationale: While NA4WD is considered an open class, sequential transmissions are a considerable performance upgrade compared to the majority of the cars competing in that class.

Changes to the RC2 rules reference

4.7.1 Summary

Vehicle conforming to FIA rules for the following vehicle categories are eligible to compete in the RC2 class:

- Group Rally2 (VRa2) and Group R5 (VR5)

Vehicles conforming to the most current Appendix J 2024, Art. 261

- Group R4 (VR4)

Group R4 cars conforming to Appendix J 2018, Art. 260

Cars fitted with R4 Kit conforming to the most current Appendix J 2024, Art. 260E

Rationale: Change so the reference year doesn't need to be continually updated.

Changes to 3.6

3.6 ~~Canadian~~ International Vehicles

3.6.1 Vehicle Class

~~Canadian~~ International vehicles entered in ARA rallies shall be classified by ARA vehicle class regulations.

3.6.2 Vehicle Eligibility

The vehicle must be based on a model built by a recognized manufacturer. ~~The manufacturer must be listed in the NADA Official Used Car Guide.~~ It is the intent of these rules that all vehicles be based on production vehicles. Eligibility is restricted to street licensed, closed-bodied vehicles. Non-production-based vehicles built from the ground up, are explicitly prohibited.

Rationale: Clarify the vehicle eligibility for international models.

Changes to limited bodywork

4.4.2 Bodywork

Bodywork must be OEM with regard to materials and appearance. Vents for cooling or cabin airflow allowed. Underbody protection may be added provided it intends to serve no other purpose.

4.6.2 OEM Bodywork

Bodywork must be OEM with regard to materials and appearance. Vents for cooling or cabin airflow allowed. Underbody protection may be added provided it intends to serve no other purpose.

Rationale: Clarify the addition of underbody protection is permitted.

Changes to Rotary Engine Rules

Update to table A in regards to O2WD rotary line. Rotary minimum weight is based on the adjusted displacement, in line with the rest of the engine types and classes.

Class	Engine	Max. Disp.	Restrictor	Min. Weight
Open 4WD	Forced induction	2600	34mm @ 27 PSI	2900
	Nat. aspirated	3320	none	2900
	Nat. aspirated	4500	none	2900
	Nat. aspirated	6300	Subject to Technical Review of specific engine proposals	2900
Naturally Aspirated 4WD	Nat. aspirated	2500	none	2500
	Nat. aspirated	3320	none	2900
Limited 4WD	Forced induction	3000	34mm @ 27 PSI	3100
	Forced induction	3000	36mm @ 22 PSI	3100
	Nat. aspirated	2800	none	3100
	Nat. aspirated	6300	none	3300
Open 2WD	Forced induction	1800	none	1950
	Forced induction	2600	none	2200
	Forced induction	3500	none	2800
	Rotary	2600	none	2200
	Nat. aspirated	1800	none	none
	Nat. aspirated	4500	none	2100
	Nat. aspirated	6300	none	2800
Limited 2WD	Forced induction	1600	none	2300
	Nat. aspirated	2500	none	2200
RC2	Refer to applicable FIA regulations			

4.1.1 Class Displacement and Weight Rules

All class displacement and weight rules per Table A. The use of securely fixed ballast to complete the weight of the car is permitted. Rotary engines are subject to a displacement multiplier of 1.8.

4.2.4 Rotary Engines

~~Rotary engines are restricted to twin rotors and subject to a displacement multiplier of 1.8.~~

4.5.2 Rotary Engines

~~Rotary engines are restricted to twin rotors and subject to a displacement multiplier of 1.8.~~

4.6.10 Engine Limitations

- b) Cylinder heads must be OEM and match the engine. Porting of cylinder heads or ~~rotor housings~~ is not allowed.

4.6.11 Engine Components

- c) Rotary engines are restricted to twin rotors and subject to a displacement multiplier of 1.8. Peripheral porting is not permitted. Street porting is permitted with approval from the ARA Technical Director. Such requests must be made no less than 45 days prior to event.

Rationale: After feedback and requests from competitors, restrictions on rotary engines have been removed or lessened.

Bodywork Changes and additions

3.1.4 Spoilers

~~Spoilers, plates or wings may not extend beyond the body as viewed from above nor extend above the roof line by more than 3 inches when viewed from the side. Devices forward of the windshield must be below the hood line when viewed from the side. ARA technical inspectors reserve the right to refuse any aerodynamic component based on safety concerns.~~

3.1.4 Wings, plates, and additions to bodywork

- a) Wings, their elements, and mountings must not extend beyond the body as viewed in plan view nor extend above the roof line more than 76 mm when viewed directly from the side. Wings, their elements, and mountings are not considered part of the plan view in any case and may not define it. Wing end plates must be a minimum section of 3mm.
- b) Devices or additions forward of the windshield must be below the line of the hood when viewed from the side. They cannot define the plan view and must fall within it.
- c) Any aerodynamic plates or element extending from major body surfaces must have a 10 mm minimum section width at outside edge.
- d) ARA technical inspectors reserve the right to refuse any bodywork or aerodynamic component based on safety concerns.
- e) Any moveable element adjustment is only allowed from outside the vehicle while the car is stationary.

4.1 All Open Classes (Open 4WD, Naturally Aspirated 4WD, Open 2WD)

4.1.2 Production-based

- a) Must be a production-based chassis.
- b) All vehicle measurements will be done in whole millimeters +/- 1%. Any digits to the right of the decimal will be dropped.
- c) Competitor must declare vehicle year, make, model, and variant for dimensions used.
- d) Front door openings shall remain unmodified
 - o Including width of chassis, height of opening, and length of opening
 - o Measured at pinch weld of opening
- e) Rear luggage opening shall remain unmodified
 - o Including location, size, and shape,
 - o Measured at pinch weld of opening
- f) Windshield base and angle must remain in OEM position and angle

4.1.4 Body Panels

- a) All bodywork changes from OEM must be submitted to ARA Technical Director for approval a minimum of 45 days before start of event and approved by ARA before being used in competition.
- b) Roof, A & B pillars must be metallic and retain factory profile. C pillars must retain factory profile.
- c) Fenders and quarter panels may be modified or replaced but must cover tires completely as viewed from above.
- d) Bumpers and fascias are to be made from rigid materials.
- e) The radiator opening of the front bumper and fascia may be enlarged or reduced. Additional openings in the front bumper or fascia may be added for the sole purpose of providing cooling air flow to the front brakes or auxiliary heat exchangers located in the front engine compartment.

4.1.5 Wheelbase, Overhang, and Widths

- a) Wheelbase may not be modified more than 75mm 3.0 inches +/- from factory specification.
- b) Total vehicle length not to exceed OEM length plus 3 %
- c) Front overhang not to exceed OEM plus 7%
 - Measured from centerline of front wheels forward
- d) Rear overhang not to exceed OEM plus 7%
 - Measured from centerline of rear wheels rearward
- e) Total width not to exceed OEM width plus 10 %
 - Measured at any point.
 - Total width not to exceed 2000 mm in any case including mirrors
- f) The front air dam
 - May be modified by downward or forward extension.
 - May extend no more than 60 mm forward of the furthest point forward of the front bumper face at any point.
 - Must fit within the front overhang and total length percentages and may be no wider than the front fenders.
- g) Rear diffusers
 - May be added but must be below the lower luggage opening in their entirety.
 - May define the plan view but cannot extend rearward more than 50mm of the rearmost point of the rear bumper.
 - It must fall within the approved body and overhang dimensions.

4.1.12 Bodywork

~~Driver and co-driver doors must be structurally unaltered. If the original structure has been removed or altered, either a door panel that is compliant with FIA drawing 255-14 must be installed or the safety cage must include a sill bar plus 2 continuous door bars containing four vertical studs. Homologated roll cages may not be modified. All sharp edges must be protected by a door panel, edge guard, or similar.~~

Driver and co-driver doors must be structurally unaltered with the following exceptions.

If the original structure has been removed or altered, either:

- A door panel that is compliant with FIA drawing 255-14 must be installed
or
- the safety cage must include a sill bar plus 2 continuous door bars containing four vertical elements. Homologated roll cages may not be modified.

All sharp edges must be protected by a door panel, edge guard, or similar.

Rationale: Clarified the aero/bodywork rules to better define specifically what is and isn't allowed.

Preston Osborn



ARA Competition Director