

Bulletin 2024-8 Rally Technical Rule Changes for 2024 1/13/2024

The following changes to the ARA Rally Technical Rules are effective immediately, other than 1.2.2, and in place in the 2024 RTR book.

Snell Helmet Update

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 8860-2010, 8859-2015, or 8860-2018
- Snell Foundation certification SAH2010, SA2010, 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.

Rationale: Snell 2010 helmet certifications are no longer current.

HANS Tether Update – EFFECTIVE 7/1/2024

1.2.2 Tethers

Tethers for FIA Certified devices must be FIA approved <u>and be dated less than 5 years old</u>. The Frontal Head Restraint system should be considered as an ensemble which involves the seat, the harnesses, the frontal head restraint unit, its tethers, and helmet. For more details, "Guide for the use of HANS in International Motor Sport" published by the FIA Institute for Motor Sport Safety, can be found on <u>www.fia.com</u> under the heading FIA Sport – Regulations – Drivers' Equipment.

Rationale: Standards have changed in regards to tether replacements. The change is to fall in line with current homologation standards, while giving competitors time to make the change.

Bolt In Cages

2.2.2.c Roll Over Protection

4) No bolt in style cages are permitted. All roll cages must be fully welded at all joints. Cages with bolt together design members will not be allowed regardless of homologation status.

Rationale: Further clarity was needed regarding bolt-in cages.

Roll Cage Padding Clarification

2.2.3 Protective Padding

All tubing forward of <u>and including</u> the main hoop in the roofline must be padded. Any other tubing which may contact the helmet while seated must also be padded. Padding must comply with FIA Standard 8857 2001, type A (see technical list n° 23 "Roll Cage Padding Homologated by the FIA") or SFI 45.1 Specification. <u>See example below:</u>



Rationale: The rule was not being enforced consistently, so a diagram and additional wording was added.

Battery Clarification

2.2.4 Batteries

a) Batteries must be securely mounted <u>and attached to the primary structure of the vehicle</u>.
b) If removed from the original location, all <u>wet-cell</u> lead-acid batteries shall be mounted inside covered, non-conductive boxes and equipped with leak proof caps. <u>All batteries must be securely attached to the primary structure of the vehicle</u>

<u>c)</u> The hot terminal shall be insulated in all vehicles.

Rationale: Cleaned up the wording and gave distinction between wet-cell and non-wet-cell lead-acid batteries.

Window Clarification

2.2.6 Windows

d) Window safety nets must be used in lieu of having windows rolled-up during stages. (See illustration for proper window net installation). All window nets must meet FIA article 253 or SFI 27.1 certification.

f) <u>All windows, except the forward windshield, Glass side windows</u> may be replaced with polycarbonate material of at least 3mm thickness. However, competitors must be able to display to the satisfaction of the Chief Scrutineer that the mounting of the substitute windows will allow both emergency escape from inside the car and access by rescue from the outside of the car.

Rationale: Polycarbonate windows have been permitted for all windows except the windshield. Reworded for clarity.

Parking Brake Clarification

2.2.19 Parking Brake

The parking brake must be able to hold the vehicle from moving, with the parking brake set and no occupants in the vehicle, by locking a minimum of two wheels on a horizontal surface with 50kg of force applied to the front or rear tow point. Parking brake can be a traditional inner drum arrangement, hydraulic line lock type arrangement or a lock on the handbrake mechanism.

Rationale: There was no clear rule in the rulebook requiring a parking brake to hold the car. Because it is required, added wording and how it would be tested.

Fire Extinguisher Changes

2.3.5.a

2) All such systems will be installed and serviced in accordance with the manufacturer's instructions <u>and with nozzles discharging in both the engine compartment and passenger cockpit</u>. Installed system must meet one of the following standards:

• SFI Spec 17.1 and display a manufacturer appearing on the current respective list of SFI Spec 17.1 manufacturers at sfifoundation.com

• FIA 8865-2015

• Currently listed as homologated for Rally on Technical List n° 16 of the FIA website (fia.com)

Rationale: Some systems do not include specific instructions for installation. The best practice is for at least one nozzle in the engine compartment and one for the occupants.

2.3.5.a

4) The following are considered equivalent substitutes for one 10-B:C hand held extinguisher: Minimum quantity of extinguishant:

- AFFF 2.4 liters
- FX G-TEC 2.0 kg
- Viro3 2.0 kg
- Novec 1230 2.0 kg
- <u>4Fire 2.0 liters</u>

Rationale: A new type of extinguishant has been requested. After review, it has been added to the accepted extinguishants.

Cabin Vents

<u>3.1.1.j</u>

Vents for cabin cooling or cabin airflow are permitted provided they intend to serve no other purpose.

Rationale: All references to cabin vents have been moved to Section 3, which covers all classes. Cabin vents for cooling purposes are permitted for all cars.

Side Mirrors

3.1.8 Side Mirrors

Side mirrors may be relocated and replaced with non-OEM parts. The reflective surface of the mirrors must be at least 100cm2.

Rationale: Side mirrors have been ambiguous within the rules. All classes can change mirrors, provided they meet the specified standards.

Steering Column Change

3.8.2 Steering column

All steering columns must be one of the following:

- <u>OEM</u>
- Collapsible shaft type
- Utilize a minimum of two offset joints in the main steering shaft

Rationale: Steering columns have not been specified in the rules previously, creating concerns for driver safety.

External Accessories

3.8.3 External Accessories

External accessories, such as camera mounts or antennas, extending more than 300mm from the bodywork may not be used without approval. The accessories must be presented at scrutineering for review. Only the chief scrutineer, ARA Technical Director, or ARA Steward may approve its use.

Rationale: Long arm accessories, such as camera mounts, have gained in popularity. While we welcome competitors to use long arm mounts for the exciting footage they create, scrutiny needs to be given for volunteer and spectator safety. Scrutineers will check to make sure the mounts are mounted firmly and tethered to control the risk of coming off the vehicle.

Weight Penalties Removed

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 45 kg weight penalty.

4.4.26 Sequential Shift

<u>Manual</u> Sequential shift is allowed but is subject to a 45 kg 100 lb. weight penalty. <u>No electronic</u> activation is permitted unless it is using an OEM system.

4.4.19 Turbocharger/Supercharger Restrictions

a) Turbocharger including wheels, shafts and bearings must remain OEM or appear on the list of approved alternate turbochargers, which are subject to a 45 kg 100 lb. weight penalty. Compressor

housings may be modified the minimum amount necessary to accept a mandatory restrictor. Housings may be rotated.

Rationale: In review of the L4WD and NA4WD classes, it was determined the weight penalties were unnecessary.

Aftermarket Bodywork Allowances

4.4.2 Bodywork

Bodywork must be OEM with regard to materials shape and appearance. <u>Alternative materials may</u> be used for removeable bodywork, but must weigh within 10% of the original factory parts. 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 shape and appearance. <u>Alternative materials may</u> be used for removeable bodywork, but must weigh within 10% of the original factory parts. Vents for cooling or cabin airflow allowed. Underbody protection may be added provided it intends to serve no other purpose.

Rationale: On some of the older Limited cars, bodywork is no longer created to the OEM standards. This change will give the limited classes some flexibility for replacement bodywork.

Table A Regional (2023 only) – Class, Engine Type, Maximum Displacement, Restrictor, Minimum Weight

Class	Engine	Max. Disp.	Restrictor	Min. Weight
Open 4WD	Forced induction	2600	<u>33mm @ 2.5 bar</u> absolute	<u>(kg)</u> 1315
	Nat. aspirated	3320	none	1315
	Nat. aspirated	6300	Subject to Technical Review of specific engine proposals	1315
Naturally Aspirated 4WD	Nat. aspirated	2500	none	1135
	Nat. aspirated	3320	none	1315
Limited 4WD	Forced induction	3000	<u>33mm @ 2.5 bar</u> <u>absolute</u>	1405
	Force induction	3000	36mm @ 2.0 bar absolute	1405
	Nat. aspirated	2800	none	1405
	Nat. aspirated	6300	none	1495
	Group Rally 3: Refer to applicable FIA Regulations			
Open 2WD	Forced induction	1800	none	885
	Forced induction	2600	none	995
	Forced induction	3500	none	1270
	Nat. aspirated	1800	none	none
	Nat. aspirated	4500	none	950
	Nat. aspirated	6900	Subject to Technical Review of specific engine proposals	1270
Limited 2WD	Forced induction	1600	none	1040
	Nat. aspirated	2500	none	995
RC2	Refer to applicable FIA regulations			

Rationale: We worked with regional competitors to identify an alternative solution for the 33mm restrictor. The 36mm restrictor is meant as a lower power but less stressful option.

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