

Bulletin 2020-7 Rally Technical Rule Changes for 2021

12/10/2020

The following technical rule changes are effective January 1, 2021. An updated rule book for 2021 will include these changes.

Change exception procedures in the following sections:

4.1.8 Alternate Fuels

Alternative fuels (E.G. Propane, Electrical) energy sources (e.g. Propane, Battery Electrical greater than 25 volts) must be pre-approved by ARA Technical Committee Director minimum 45 days before event. There is no assurance given that a request for a technical exception can be fully resolved within 45 days.

4.1.12 Exceptions

Any requests for exceptions to published rules must be submitted to the ARA Technical committee <u>Director</u> no less than 45 days before event. <u>There is no assurance given that a request for a technical exception can be fully resolved within 45 days.</u>

Tech@americanrallyassociation.org

4.4.32 Exceptions

Exceptions to these rules, especially to vehicles built prior to the 2018 season must be requested submitted to the ARA technical committee Technical Director no less than 45 days before the event. There is no assurance given that a request for a technical exception can be fully resolved within 45 days.

Requests may be made to: tech@americanrallyassociation.org.



4.6.16 Exceptions

Exceptions to these rules, especially to vehicles built prior to the 2018 season must be requested submitted to the ARA technical committee Technical Director no less than 45 days before the event. There is no assurance given that a request for a technical exception can be fully resolved within 45 days.

Requests may be made to: ararallytech@americanrallyassociation.org.

Rationale: Clarification of procedures and expectations for exceptions to rules.

Add to rulebook

2.2.18 Hoods

Hoods shall be fixed closed with hood pins accessible from the outside. Other fastening devices (inside or outside) shall be rendered inoperative, except for the secondary catch, which may be retained.

Rationale: Adding rule that was unintentionally omitted from prior versions of the rulebook

Changes to 2.3.7

2.3.7 Warning Devices

Three self-supporting, light-reflecting, daylight-visible triangular warning devices of a minimum size of 12 inches per side shall be carried in the vehicle. One of these must be located within easy reach of the Driver or Co-driver when seated. Warning devices must be permanently marked with vehicle competition number.

Rationale: Pairing of triangles to competition vehicles



Change to 2.3.5 Fire System/extinguisher rule

2.3.5 Fire extinguishers

- a) All competition vehicles must be equipped with <u>all</u> one of the following:
 - i) An "on-board" system that uses either manual or automatic activation. along with one hand held bottle.
 - 1) All bottles will be secured using a metal strap and have a fill gauge that is visible for Scrutineering. Activation point for the fire system must be located within easy reach of the Driver and Codriver when seated.
 - 2) All such systems will be installed and serviced in accordance with the manufacturer's instructions. In addition, a hand-held extinguisher of at least 10 B:C rating shall be installed in accordance with 2.3.5.b below.

<u>Installed system must meet one of the following standards:</u>

- SFI Spec 17.1 and display a manufacturer appearing on the current respective list of SFI Spec 17.1 manufacturers at sfifoundation.com
- FIA 886<u>5-2015</u>
- Currently listed as homologated for Rally on Technical List 16 of the FIA website (fia.com)
- 3) The fire system cylinder shall be securely fastened, in such a manner that it can be checked during a technical inspection and may be removed periodically for weighing.
- 4) All on-board systems shall be identified with 2 circle "E" decals one at the release location and the second on the outside bodywork in line with or as near to the release location as possible.
- ii) Two hand held fire extinguishers with a minimum UL rating of 10 BC each <u>or one hand held extinguisher with a minimum UL rating of 20BC.</u>
 - 1) All bottles will be secured using a metal strap and have a fill gauge that is visible for scrutineering.
 - Each must be installed inside the passenger compartment. During installation, consideration must be given to quick release and security of attachment.
 - 3) One fire extinguisher must be located within easy reach of the Driver or Codriver when seated.



4) The following are considered equivalent substitutes for one 10 BC hand held extinguisher:

Minimum quantity of extinguishant:

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

Rationale: Updating fire system standards and requirements.

Changes to 4.1.11, 4.4.19, 4.6.11 add Fresh Air Valve rule for Open classes clarify for L4WD and L2WD

4.1.11 Turbocharger and Exhaust Gasses

Turbocharger must only be driven by exhaust gasses <u>only</u>. <u>No secondary injection of air, fuel, or otherwise except as allowed by the fresh air valve.</u>

<u>Exhaust gasses are defined as a gas mixture exiting the combustion chambers of the engine.</u>

A fresh air valve between the intake and exhaust systems is allowed provided the following conditions are maintained:

- a) All incoming air must pass through the intake restrictor(s)
- b) The total volume between the restrictor(s) and the butterfly (or butterflies) must not exceed 20 liters.
- c) <u>Components required to actuate the fresh air valve may be added</u> provided they serve no other purpose.

4.4.19 Turbocharger/Supercharger Restrictions

- b) Turbochargers must be driven by exhaust gasses only. No secondary injection of air, fuel, or otherwise to maintain turbocharger speed. Exhaust gasses are defined as a gas mixture exiting the combustion chambers of the engine. A connection between the intake and the exhaust manifold is not allowed. The storage of boost (i.e., an accumulator) is not permitted.
- c) Forced induction engines must have an air inlet restrictor no greater than listed in Table A. This restrictor must have a minimum width (parallel to the air flow path) of 3 mm and must be located within 50 mm of the compressor wheel. All air entering the engine must pass through the restrictor. If a car is



fitted with multiple induction systems, then the total combined area of all restrictors cannot exceed the area of the restrictor listed in Table A.

4.6.11 Engine Components

f) Turbochargers must be driven by exhaust gasses only. No secondary injection of air, fuel, or otherwise to maintain turbocharger speed. Exhaust gasses are defined as a gas mixture exiting the combustion chambers of the engine. A connection between the intake and the exhaust manifold is not allowed. The storage of boost (i.e., an accumulator) is not permitted.

Rationale: Updating allowance based on competitor feedback

Update 4.2.5 c) for clarity:

c) If a car is fitted with multiple induction systems, then the total area of the two all restrictors cannot exceed the area of the restrictor listed in above Table A.

Rationale: Updated for consistency within all classes.

Changes to Table A for 2021

- Open 4WD Naturally Aspirated Max displacement 3320 at 2900 lbs
- Naturally Aspirated 4WD Max displacement 3320 at 2900 lbs

Rationale: Updated displacement size to actual size intended.

ARA is anticipating a change for 2022 of requiring a spec fuel for National entrants. Details will be released via bulletin at a later date.

Preston Osborn

ARA Competition Director