



**General
Regulations
for
Rallies**
Section 4



2024 V16

Notice: The term “RallyMoto(TM)” refers to NASA Rally Sport’s program allowing motorcycles to compete in a stage rally format. RallyMoto(TM) is the NASA Rally Sport’s brand of this kind of competition. Be sure to use the (TM) when referring to the program.

1. Motorcycle Eligibility

1.1. Motorcycle Registration

Each motorcycle entered in a NASA Rally Sport event must have a current and valid motorcycle registration intended for public road use. Each motorcycle must display a license plate issued for this registration for the duration of the event.

1.2. Street Legality

Every motorcycle must carry all the equipment required by State and Federal laws to operate on the public highways of the state within which the rally is occurring. Required equipment must be operational at the beginning of the event and should remain operational throughout the running of the event. Any modifications authorized by these rules must still be street legal.

1.3. Motorcycle Insurance

All motorcycles entered must have coverage meeting or exceeding the minimum insurance coverage levels required for operation on public roads by the state in which the motorcycle is registered.

1.4. Motorcycle Eligibility

Motorcycles eligible for events must be production based two wheel vehicles. Custom bikes specially built from the ground up for competition use are prohibited. To this end, the frame must remain original but may be modified to accommodate authorized additional equipment. Exterior panels, including fenders and cowlings, must be present and visually similar to the original components.

No motorcycles with two stroke engines are permitted.

Sport bikes are prohibited, only upright seating style bikes are permitted.

Sidecars require approval of event officials and will participate in the Exhibition class. Motorcycles with sidecars may only carry a single competitor.

2. Vehicle Preparation Regulations

All motorcycles must meet these NASA Rally Sport RallyMoto(TM) Regulations. Each series or event may impose supplemental regulations.

2.1. General Requirements

Checks may occur at any time during the rally for the proper functioning of any equipment listed in these General Requirements. At any moment during the event it is each competitor's responsibility to prove to technical stewards or sporting officials that their motorcycle conforms to the regulations in their entirety.

2.2. Lights

Lighting may not be powered solely by battery systems. All motorcycles must have a built in charging system sufficient to power the lighting requirements.

1. One headlight minimum.
2. A red rear light and brake light.
3. Front and rear turn signals.

The headlight and taillight must be switched on throughout the race so as to facilitate overtaking of and by other competitors or organizers vehicles. Failure to respect this regulation will result in a one minute penalty per stage or transit where it is observed.

2.3. Wheels and Tires

2.3.1. Wheels

- a) The wheels are free, regarding the maximum and minimum diameter and width.
- b) Wheels made from forged magnesium are forbidden (including OEM magnesium wheels).

2.3.2. Tires for Gravel/Sand/Unpaved Events

- a) The choice of tire is free.
- b) Inner tubes are allowed.
- c) The use of studded tires is forbidden for non-snow/ice events.
- d) Mechanical or pneumatic rim locking systems are permitted.

2.3.3. Tires for Tarmac Events

Tarmac events will be limited by the following additional restrictions. All tires must be designed to work in a rain environment. *Examples* of legal tarmac tires are: Pirelli MT 90 A/T Scorpion, Michelin Anakee, Metzeler Tourance, Continental TKC-80, Pirelli MT60-R.

Tire choice is restricted:

- a. No racing slicks

- b. No knobbies
- c. No DOT knobbies
- d. The stock tire pattern must have grooves that begin within three quarters of an inch of the usable edge of the tire.
- e. Inner tubes are allowed.
- e) The use of studded tires is forbidden.
- f) Tarmac tires that are “full-dirt” or “100% dirt” are are forbidden.
- g) Tarmac tires that are “full-street” or “100% street” are forbidden.
- h) The use of any device for maintaining the performance of the tire with an internal pressure equal to or less than the atmospheric pressure is forbidden. Mousse, Tireballs, or other non-standard inflation systems are prohibited.
- i) The interior of the tire (either within the inner tube or the space between the rim and internal part of the tire) must be filled only with air or nitrogen.
- j) Mechanical or pneumatic rim locking systems are permitted.

2.3.4. Tires for Snow / Ice Events

- a) The choice of tire is free.
- b) Inner tubes are allowed.
- c) The use of studded tires is allowed (competitors are reminded to check the supplemental Regulations for event specific rules)
- d) Stud length, as measured from the outer surface of the tire, is unrestricted.
- e) Studs must be installed from the outside of the tire without piercing the inner wall of the tire.
- f) The quantity of studs installed is unrestricted.
- g) Mechanical or pneumatic rim locking systems are permitted.

2.4. Exhaust System

Even where the GRRs for a class authorize the replacement of the original silencer or complete exhaust system, motorcycles participating on an event run on public roads must always be fitted with an exhaust silencer that conforms to the State and Federal regulations.

Any hot tubes must be sufficiently protected so as to not to cause burns in normal riding positions.

Exhaust systems must not be of a temporary nature. Exhaust gases must exit at the extremity of the system.

Parts of the frame may not be used to carry exhaust gases.

Spark arrestors are not required.

Noise limit testing procedure will be per SAE J2825. The maximum permitted noise level from the exhaust shall be 92db (A scale) at idle. During a slow RPM increase to 3500 the limit is 96 db (A scale). The measurement will be taken at a

distance of 20 inches from the bike in an area 45 degrees either side from the centerline of the exhaust outlet.

2.5. Identification

Each motorcycle shall provide a 5" high by 8.5" wide space on each side of the motorcycle and 5" high by 6" wide on the front for identification numbers and event decals. NRS will provide numbers to be affixed to these spaces. Any other large numbers or markings for other sanctioning bodies on the bike must be covered neatly.

No indication of class is required.

2.6. Miscellaneous

1. A horn with a 90 Db minimum noise level is required.
2. A rear mirror is required.

2.7. Navigation

The following devices and items are allowed for use in navigating the course:

- a) The organizer-supplied 2.25" roll chart containing tulips.
- b) The organizer-supplied route book.
- c) The stock odometer.
- d) An auxiliary odometer with visual output may be added or may replace the stock odometer. It is allowable that this additional odometer can be calibrated.
- e) Paper maps.
- f) GPS devices.
- g) Smartphones or similar devices mounted to the motorcycle.
- h) The NASA Rally Sport Android app with the preloaded event route which can be downloaded within the app on race weekend.

Competitors are required to carry a waterproof storage method for the timecard. Sealable sandwich bags are suitable for this purpose.

2.8. Engine

The lower engine cases and crankshaft must be from a production engine. Preparation is free. Repairs during the race are free.

2.9. Frame

The materials for frame construction are free, with the exception of titanium being excluded. Titanium is allowed for the rear sub-frame and seat support if originally specified by the manufacturer.

2.10. Modifications

Modifications not restricted elsewhere are free.

3. Classes

Five classes exist for motorcycles:

Class	Displacement in cm3	Other requirements
Adventure	Above 750.1	Requires approval at some events
Medium	Between 450.1 and 750	
Dakar ¹	Between 385.1 and 450	21 inch front wheel
Lite	385 or less	
Exhibition	Unrestricted	Unscored

1) Dakar Class requires the use of a 21 inch front wheel. Using a different wheel size will result in the entrant moving out of Dakar class and into the Medium class.

Additional classes specific to regional championships may be specified in the championship regulations. Often these classes will be a collection containing multiple classes above.

3.1. Exhibition Class

Similar in nature to the exhibition class for automobiles, this is an unscored class for riders and machines who do not fit into the other classes or who wish to run the event unscored. Stage times will be published but no awards or season points will be issued. Event officials may choose to place a competitor into this class when deemed appropriate, or may move an exhibition class entry into another class for which the vehicle qualifies.

3.2. Minimum Pace for all classes

Competitors are reminded that all vehicles are subject to removal from competition if their pace is such that they are delaying the event significantly, subject to the GRR section 2 rules and discretion of the event Steward and Clerk of Course. For events run on soft or especially slick surfaces (such as sand or snow), novice competitors are encouraged to enter on a lighter, more offroad oriented machine to avoid being subject to removal.

Note: NRS never encourages competitors to ride above their personal comfort zone no matter how fast or slow that is. 'Ride your own ride' and we will do what we can to accommodate or put you in touch with folks who can help you grow your skills for your next event.

4. Safety Requirements

These are the MINIMUM requirements, anything that makes you safer is encouraged. ATGATT is thoroughly appreciated for the entire event weekend.

4.1. Road Worthiness

All competing vehicles must be roadworthy and, the following items in particular must be adequate and functioning properly:

- a) All brakes
- b) Horn
- c) Headlight and taillight
- d) Tires
- e) Exhaust system with silencer
- f) Front and rear indicators

As a clarification, the items in this section are required for all competing motorcycles regardless of whether the state where the motorcycle is registered requires them, or whether the state where the event is being conducted requires them.

4.2. Transporting Items

It is understood that within these rules, when referring to items, the word “carry” can mean any of the following:

- stowed within a compartment attached to the motorcycle
- attached to the motorcycle
- carried within the clothing worn by the rider
- carried within a pack worn by the rider

If the item is not to be stowed within a compartment or affixed to the motorcycle, the rider must present at scrutineering all clothing or packs to be used.

4.3. First Aid Kit

A comprehensive first aid kit shall be carried. The first aid kit at a minimum must include:

- a) Gauze pads or rolls
- b) Adhesive tape
- c) Elastic/Ace bandage
- d) Safety pins or elastic clips for ace bandage
- e) Scissors or knife
- f) one “space blanket”
- g) First aid manual.

4.4. Warning Devices

The rider must carry one standard, full-sized, warning triangle meeting Federal Motor Vehicle Safety Standard #125.

Each rider must carry a full color laminated 8.5”x11” ‘Green OK / Red Cross’ paper. Printing the following links and laminating them is sufficient.

<http://www.nasarallysport.com/organizer-resources/Route-Book-Red-Cross.pdf>
<http://www.nasarallysport.com/organizer-resources/Route-Book-Green-OK.pdf>

The rider must be able to remove the warning devices from their storage location in under 30 seconds when the rider is in full gear. Rally officials may request this to be demonstrated at any time during the event.

4.5. Auxiliary Fuel

It is not permitted to carry fuel either within a pack worn by the rider or within the rider's clothing. Any auxiliary fuel tank must be mounted to the motorcycle.

4.6. Helmets

In addition to race day, Helmets are required to be worn on public roads from the time that the competitor checks into registration until the end of the event.

All helmets must be full-face non-hinged helmets. Helmets must be in good condition and may be rejected for signs of excessive age or wear regardless of the certification markings. Certifications accepted are:

- a) USA SNELL M2015, M2020, M2025D, M2025R
- b) USA DOT FMVSS 218
- c) Europe ECE 22.05 or 22.06
- d) FIM FRHPhe-02
- e) SHARP 5 Star

4.7. Eye Protection

In addition to race day, appropriate eye protection is required to be worn on public roads from the time that the competitor checks into registration until the end of the event.

Eye protection may be separate from (such as motocross goggles) or attached to the helmet (such as a face shield), but must be of a type intended for motorcycle use. Competitors using a helmet mounted face shield are strongly encouraged to also wear safety glasses inside the helmet unless wearing prescription glasses. Gasketed glasses that are not a motocross style goggle do not meet this requirement unless worn under a standard face shield.

Tinted shields or glasses are not permitted when equipment for night stages is required. Amber color is acceptable at all times.

4.8. Body Protection

In addition to race day, upper body abrasion protection is required to be worn on public roads from the time that the competitor checks into registration until the end of the event.

Upper body protection is required and must consist of a full coverage layer intended to prevent abrasion injuries in addition to armor protection for a

minimum of back, shoulders, and elbows. Armor may be built into the abrasion layer or worn as a separate garment (such as a 'compression suit') underneath the abrasion layer. These items must be intended for motorcycle use.

The lower body must be fully covered. Competitors are strongly recommended to wear motorcycle specific abrasion resistant garments with armor on the hips and knees.

The wearing of neck protection is strongly recommended.

Specific garment ratings are not required. Competitors are encouraged to use minimum CE Level II impact protection. If interested, note that CE ratings also exist for abrasion resistance, look up EN 17092 standards.

There are no restrictions on additional types of safety gear that exceeds these standards. Competitors are encouraged to research and consider the latest safety technology.

For paved events, full leathers with armor are highly recommended. Standard nylon mesh pants are not permitted. The preferred materials if leather is not used are Cordura or Kevlar with a Denier measurement of 1000 or better. In all cases where the pants and jacket are two separate pieces the two pieces must attach to each other securely. Also permitted are:

- Kevlar race suits
- heavy duty (enduro) jacket
- motocross pants with armor

4.9. Gloves

Competitors are required to wear gloves for competition.

4.10. Boots

Motocross-style full height protective boots must be worn for competition. Construction boots, road boots, touring boots, road racing boots, or similar are not acceptable.

4.11. Equipment for Night Stages

In order to compete on a stage, when the rider's ideal start time is after 15 minutes before civil twilight the rider must have reflective material with at least 10 square inches on the front and rear (20 square inches total) of the torso or head. Additional material on the helmet and motorcycle is recommended. If the rider is carrying a backpack, none of the material covered by the backpack is counted toward the total. Example of acceptable material: 3M Scotchlite.

Each rider must have a pair of flashing lighting sources whose energy source is independent of the motorcycle to be affixed to the rider somewhere above the waist. Example: flashing bicycle lights or flashing head lamps.

Riders without this equipment will transit the stage and be assigned the time of the slowest competing motorcycle.

5. GRR Applicability

The entirety of the GRR, excluding Section 3 (the technical regulations for four wheeled automobiles), shall apply to RallyMoto(TM) competitors. While the GRR Sections 1 and 2 are written to be "vehicle-neutral" with respect to the wording of "car" versus "motorcycle" it is to be understood that the all GRRs concepts apply to motorcycle riders. It is to be understood that the single RallyMoto(TM) competitor is also the driver and the navigator, as applicable, and thus constitutes the Crew or Team, when considering Section 1 and Section 2.

Common sense exceptions:

2.17.7.1 – Warning Triangles. As the rider has only one triangle, the rider must place their only triangle 150' behind the bike.