



## Competition Vehicle Class Structure and Requirements

*V1.2 Effective December 20th 2021. This version supersedes all previous published versions.*

**Primary Classes:** The primary numbered classes are eligible for season championship points.

### *UNLIMITED GROUP*

1. Insanity and Misfits Class

### *ALL-WHEEL DRIVE GROUP*

2. All-Wheel Drive Max
3. All-Wheel Drive Light

### *TWO-WHEEL DRIVE GROUP*

4. Two-Wheel Drive Max
5. Two-Wheel Drive Light

### *GROUP X*

6. Group X (UTV/Crosskart)

### *MOTO GROUP*

7. Moto Max (Open)
8. Moto Light

**Supplemental Awards -** These are eligible for single event awards but no season championship. Additional supplemental awards may be added to individual events by request and/or organizer discretion.

*[added GROUP A and adjusted language and number of awards.]*

- *GROUP H - Historic Class*
- *GROUP A - All-Wheel Drive overall winner*

- *GROUP R - Rear-Wheel Drive overall winner*
- *GROUP F - Front-Wheel Drive overall winner*
- *Rookie Group - Top two rookie finishers*
- *Grassroots Award - USRF Committee Choice*

## **Class Rules:**

*[clarified aero rules and limitations for all relevant groups]*

### **UNLIMITED GROUP**

#### **1. Insanity and Misfits Class (Unlimited)**

- 1.1. Class for vehicles in excess of other class rules, currently classed in FIA RC2 class, and extreme builds or other vehicles based on a production automobile chassis that don't legally fit into any of the standard classes. Want to chop your Volvo Wagon into a Ute and put an LS in it? Your car goes here too as long as it meets safety regulations and can legally transit on public roads (on rallies that apply). All vehicles not holding a current logbook from ARA, NASA RallySport, CARS, Rally America (Post-2006), or a USRF Technical Passport must be inspected and approved by USRF technical director no less than 45 days before any event. Pre-2006 RA or SCCA Pro Rally logbooks may be accepted if grandfathered - Please consult USRF technical director in advance.
- 1.2. Floor pan and firewall: Vehicle must have a firewall between engine and passenger compartment with no openings other than pass-through for wiring, steering column, etc. Vehicle must have a complete transmission tunnel and floor pan made of steel or aluminum. Floor pan, tunnel, and firewall do not need to resemble OEM components.
- 1.3. Engine manufacturer and model are open. Engine location is open but engines moved to non-original areas of the vehicle relative to driver must be approved by the USRF technical director no less than 30 days in advance of any competition to ensure general safety.
- 1.4. Internal combustion engine fuel must be Gasoline, Ethanol, or Diesel based.
- 1.5. Electric Vehicles must be approved by USRF technical director and the rally organizer based on local capabilities (rescue) no less than 30 days before an event. Charging infrastructure will not be provided at events. Chargers at public venues may not be utilized on transits or during competition. Teams may provide their own charging (via generator or other means) during service periods.

- 1.6. Hybrid-Electric powertrains must be approved by USRF technical director no less than 30 days before an event.
- 1.7. Suspension, brakes, transmission, drivetrain, and front and rear differential are open, and may be electronically-controlled.
- 1.8. Forced induction vehicles must use a restrictor of 36mm or smaller diameter before the inlet of the compressor/blower. All air entering the engine must pass through this restrictor.
- 1.9. Aerodynamics are unrestricted within a maximum width not to exceed 86 inches total (ex: if your car is 66 inches wide, you may add 10 inches of aero on each side). Aero extending forward, backward, or above car is unrestricted. All aero modifications must be securely attached to the vehicle and be designed to remain attached to the vehicle during normal competition driving. Aero should also comply with relevant vehicle laws on rallies with transits (so don't go too crazy). USRF will not be responsible for any police citations on transits due to excessive aero or bodywork, nor for damage to or caused by aero on public roads.

*[clarified aero rules]*

- 1.10. Body panels may be altered, modified, or constructed of alternate materials, but should retain the general appearance of the original vehicle panels.
- 1.11. Vehicle must have a full windshield and side/rear windows. Windows may use automotive glass (no plate glass) or comparable clear material (i.e. Lexan).
- 1.12. There is no minimum weight in this class.
- 1.13. Vehicles that make people say "wow, that's awesome!" are encouraged in this class.

*[clarification on what this class is REALLY about]*

## **ALL-WHEEL DRIVE GROUP**

### **2. AWD Max (Open)**

- 2.1. All-wheel drive vehicles with naturally aspirated or forced induction engines of any displacement.
- 2.2. Forced induction vehicles must use a restrictor of 36mm or smaller diameter before the inlet of the compressor/blower. All air entering the engine must pass through this restrictor.
- 2.3. Must be a production-based automotive chassis. No factory-prepared rally platforms such as RC2, WRC, Proto, or similar permitted.
- 2.4. Minimum weight is 2500lbs for all NA engines under 2.5L; 3000lbs for all other engine configurations.  
*[adjusted minimum weights]*
- 2.5. Must retain a factory firewall and floor pan must be OEM or made of equivalent material strength to OEM. Modifications to provide clearance for allowed components are permitted.
- 2.6. Engine may be moved but the OEM engine location (in front or behind) in relation to occupants must remain. Engine manufacturer, model, and chassis need not match.
- 2.7. Internal combustion engine fuel must be Gasoline, Ethanol, or Diesel based.
- 2.8. Electric Vehicles are not permitted at this time.
- 2.9. Hybrid-Electric powertrains must be approved by USRF technical director no less than 30 days before an event.
- 2.10. Suspension, brakes, front and rear differentials are open, and may be electronically controlled. Transmissions may not be sequential, but are otherwise unrestricted.
- 2.11. Turbochargers must only be driven by exhaust gasses only. No secondary injection of air, fuel, or otherwise except as allowed by a fresh air valve.
- 2.12. Aerodynamics may not be movable or powered and may not extend more than 12" beyond the maximum OEM length, width, and height of the vehicle body (including OEM bumpers but not including side mirrors)..Design of aerodynamic elements is otherwise unrestricted (i.e. multi-element wings are permitted). All aero modifications must be securely attached to the vehicle and be designed to remain attached to the vehicle during normal competition driving. Aero should

also comply with relevant vehicle laws on rallies with transits (so don't go too crazy). USRF will not be responsible for any police citations on transits due to excessive aero or bodywork, nor for damage to or caused by aero on public roads.

- 2.13. Body panels may be altered, modified, or constructed of alternate materials but must retain the recognizable shape of the original car.

### **3. AWD Light (Limited)**

- 3.1. All-wheel drive vehicles with naturally-aspirated engine displacement 2.5L or below. Rotary engines are restricted to twin rotors and mild porting. Forced induction is not permitted.
- 3.2. Minimum weight is 2400lbs.  
*[adjusted minimum weight]*
- 3.3. Must be a production-based automotive chassis. No factory-prepared rally platforms such as RC2, WRC, Proto, or similar permitted.
- 3.4. Must retain a factory firewall and floor pan must be OEM or made of equivalent material strength to OEM. Modifications to provide clearance for allowed components are permitted.
- 3.5. Engine may be moved but the OEM engine location (in front or behind) in relation to occupants must remain. Engine manufacturer, model, and chassis need not match, provided they meet the criteria in 3.1.
- 3.6. Internal combustion engine fuel must be Gasoline, Ethanol, or Diesel based.
- 3.7. No EV or hybrid-electric vehicles are permitted in Light classes.
- 3.8. OEM electronic controls (ABS, diff control, etc.) are permitted.
- 3.9. Suspension links and subframes may be replaced/reinforced but must retain stock geometry. Towers/shock mounts may be moved/redesigned for increased travel.
- 3.10. No aftermarket sequential transmissions or dog ring gear sets are permitted in this class.
- 3.11. Aerodynamics may not be movable or powered and may not extend over 12" from the body surface on which they are mounted (i.e. trunk spoilers may only extend 12" from trunk lid). All aero modifications must be securely attached to the vehicle and be designed to remain attached to the vehicle during normal

competition driving. Aero should also comply with relevant vehicle laws on rallies with transits (so don't go too crazy). USRF will not be responsible for any police citations on transits due to excessive aero or bodywork, nor for damage to or caused by aero on public roads.

- 3.12. Body panels may be altered, modified, or constructed of alternate materials but must retain the recognizable shape of the original car.

## TWO-WHEEL DRIVE GROUP

### **4. 2WD Max (Open)**

- 4.1. Two-wheel drive vehicles with naturally-aspirated engines, rotary engines with bridge or peripheral porting or more than two rotors, or forced induction of any displacement.
- 4.2. Must be a production-based automotive chassis. No factory-prepared rally platforms such as RC2, WRC, Proto, or similar permitted.
- 4.3. Minimum weight is 1800lbs for all NA engines under 2.5L; 2200lbs for all other engine configurations.  
*[adjusted minimums down to accommodate small-engined compact cars (especially older cars) as well as lightweight turbo and rotary cars]*
- 4.4. Must retain a factory firewall and floor pan must be OEM or made of equivalent material strength to OEM. Modifications to provide clearance for allowed components are permitted.
- 4.5. Engine may be moved but the OEM engine location (in front or behind) in relation to occupants must remain. Engine manufacturer, model, and chassis need not match.
- 4.6. Internal combustion engine fuel must be Gasoline, Ethanol, or Diesel based.
- 4.7. Electric Vehicles are not permitted at this time.
- 4.8. Hybrid-Electric powertrains must be approved by USRF technical director no less than 30 days before an event.
- 4.9. Suspension, brakes, transmission, and differential are open.  
*[removed limitations on sequentials for 2WD Max only]*
- 4.10. Turbochargers must only be driven by exhaust gasses only. No secondary injection of air, fuel, or otherwise except as allowed by a fresh air valve.
- 4.11. Aerodynamics may not be movable or powered and may not extend more than 12" beyond the maximum OEM length, width, and height of the vehicle body (including OEM bumpers but not including side mirrors)..Design of aerodynamic elements is otherwise unrestricted (i.e. multi-element wings, canards, etc. are permitted). All aero modifications must be securely attached to the vehicle and be designed to remain attached to the vehicle during normal competition driving. Aero should also comply with relevant vehicle laws on rallies with transits (so don't go too crazy). USRF will not be responsible for any police

citations on transits due to excessive aero or bodywork, nor for damage to or caused by aero on public roads.

4.12. Body panels may be altered, modified, or constructed of alternate materials but must retain the recognizable shape of the original car.

## 5. 2WD Light (Limited)

5.1. Two-wheel drive vehicles with naturally-aspirated engine displacement 2.5L or under Rotary engines are restricted to twin rotors and mild porting and have a displacement below of 1.4L. Forced-induction engines 1.6L or under are permitted, provided they use stock/OEM turbo systems in their entirety and stock boost levels. It is the competitor's responsibility to provide evidence to the chief of tech that the turbo equipment is the correct OEM version for the model and year of the car.

*[added permission and rules for stock turbo cars 1.6L and under] [spelled out rotary displacement so nobody has to do math]*

5.2. Minimum weight is 1800lbs.

*[adjusted minimum weight to accommodate some older low-displacement compact cars (Rabbit, Starlet, etc.) that would otherwise be legal for this class]*

5.3. Must be a production-based automotive chassis. No factory-prepared rally platforms such as RC2, WRC, Proto, or similar permitted.

5.4. Must retain a factory firewall and floor pan must be OEM or made of equivalent material strength to OEM. Modifications to provide clearance for allowed components are permitted.

5.5. Engine may be moved but the OEM engine location (in front or behind) in relation to occupants must remain. Engine manufacturer, model, and chassis need not match, provided they meet the criteria in 5.1.

5.6. Internal combustion engine fuel must be Gasoline, Ethanol, or Diesel based.

5.7. No EV or hybrid-electric vehicles are permitted in Light classes.

5.8. OEM electronic controls (ABS, diff control, etc.) are permitted.

5.9. Suspension links and subframes may be replaced/reinforced but must retain stock geometry. Suspension towers and shock mounts may be moved/redesigned for increased travel.

5.10. No aftermarket sequential transmissions or dog ring gear sets.

*[removed "close-ratio transmissions"]*



- 5.11. Aerodynamics may not be movable or powered and may not extend over 12” from the surface on which they are mounted. All aero modifications must be securely attached to the vehicle and be designed to remain attached to the vehicle during normal competition driving. Aero should also comply with relevant vehicle laws on rallies with transits (so don’t go too crazy). USRF will not be responsible for any police citations on transits due to excessive aero or bodywork, nor for damage to or caused by aero on public roads.
- 5.12. Body panels may be altered, modified, or constructed of alternate materials but must retain the recognizable shape of the original car.

## **GROUP X**

### **6. All SxS, Crosskarts, and Similar Small Vehicles**

- 6.1. Side-by-sides, crosskarts, buggies, and rails will be permitted with USRF technical director approval no less than 30 days before an event.
- 6.2. Class will be available at selected rallies dependent on street-legality for transits and other relevant restrictions, and events may have relevant supplemental rules for vehicles in this class.

## **MOTO GROUP**

### **7. Moto Max (Open)**

- 7.1. Street legal motorcycles (headlight, tail/brake lights, plates and insurance) with four stroke engines exceeding 702cc, two stroke engines, or forced induction.
- 7.2. Dualsports, adventure bikes, plated dirt bikes, supermotors, standards, and similar allowed- no sportbikes or sportbike derived motorcycles.
- 7.3. Internal combustion engine fuel must be Gasoline, Ethanol, or Diesel based.
- 7.4. Electric Vehicles are not permitted at this time.
- 7.5. Sidecars, reverse trikes, and other vehicles with more than two wheels are not permitted.

## **8. Moto Light**

- 8.1. Street legal motorcycles (headlight, tail/brake lights, plates and insurance) with four stroke engines 702cc or smaller. Forced induction and two strokes are not permitted.
- 8.2. Dualsports, adventure bikes, plated dirt bikes, supermotos, standards, and similar allowed- no sportbikes or sportbike derived motorcycles.
- 8.3. Internal combustion engine fuel must be Gasoline, Ethanol, or Diesel based.
- 8.4. Electric Vehicles are not permitted at this time.
- 8.5. Sidecars, reverse trikes, and other vehicles with more than two wheels are not permitted.

## **Supplemental Classes**

***All entries will be in a primary class above, but qualifying cars/teams will be eligible for the following supplemental awards in addition (eligible for all that apply). Vehicles in these award groups must ALSO meet the rules requirements of the primary class entered. These are single-event, and there are no season points or season championship for any of the below awards.***

### **9. “Group H” Historic Class – top three overall**

- 9.1. Any vehicle at least 25 years old (by model year date) is eligible (a 1997 model year vehicle is eligible for the 2022 season). A vehicle using a continuing chassis but less than 25 years old is NOT eligible (e.g. a 1999 BMW e36 is not eligible, but a 1997 is).
- 9.2. The engine/transmission (or transaxle) must have been available in utilized form at least 25 years before the season year. Manufacturer and model are open and need not match chassis. No update-backdate rules are valid pertaining to engines.
  - 9.2.1. “Related Models” of engines are not permitted newer than 25 year timespan. For example, a BMW M54 is not legal until 2025, even though it is a derivative of the M50 available in 1995.
  - 9.2.2. Engine must utilize period correct engine management - i.e a 1992 engine may not use a 2020 Haltech ECU. Basic tuner chips inside of ECU are permitted, provided the ECU is unaltered otherwise. Buy all the new carburetors you want, though.
  - 9.2.3. As this is not a primary class, USRF technical inspector will have discretion on drivetrain legality within the spirit of “historic class”.
- 9.3. Overall bodywork must generally resemble the original car, but original materials are not required. Basic, non-active aero is permitted within the footprint of the original bodywork, but organizers reserve the right to exclude cars within the age range that don't represent the spirit of a Historic class (e.g. an STi spoiler on an old Volvo).
- 9.4. Wheels, tires, brakes, and suspension must meet requirements of the primary classes.
- 9.5. Roll cage and driver/safety equipment must meet current USFR technical requirements and/or be grandfathered by USFR technical director in advance..

## **10. “Group A” - AWD Overall**

- 10.1. Supplemental award for top finishing overall AWD winner (max+light)
- 10.2. UNLIMITED Group cars are not eligible.
- 10.3. Group X vehicles are not eligible
- 10.4. There are no season points for this award.

## **11. “Group R” – Rear Wheel Drive Overall**

- 11.1. Supplemental for top finishing overall RWD winner (max+light)
- 11.2. UNLIMITED Group cars are not eligible.
- 11.3. Group X vehicles and Motos are not eligible
- 11.4. There are no season points for this award.

## **12. “Group F” – Front Wheel Drive**

- 12.1. Supplemental for top finishing front-wheel drive winner (max+light)
- 12.2. UNLIMITED Group cars are not eligible.
- 12.3. Group X vehicles are not eligible
- 12.4. There are no season points for this award.

## **13. Rookie Group – Fastest car rookie driver and co-driver, Group X, and Moto**

- 13.1. Any driver/codriver entering his or her first coefficient rally is eligible for this podium. Fastest qualifying and finishing rookie driver and codriver overall (may be in separate cars, or in same cars). One you've finished a rally, you're not a rookie any longer. So you only get to enter this class one time, ever.
- 13.2. Separate class for fastest rookie Group X driver, and fastest rookie Moto rider overall.

#### **14. Grassroots Award – top two teams in voting**

14.1. This podium is voted on by a quorum of the USRF Competitors Committee members present at the event, and is meant to award the best low-budget or “grassroots” team, regardless of finishing position. Any vehicle (car, moto, etc.) that STARTS the event is eligible, even if the team DNFs. This is an entirely subjective award, and is intended to recognize creative or unusual builds, grassroots team efforts, or other factors. Competitors Committee members are not eligible for this award.

#### **15. Tires (All Classes)**

15.1. Tires are unrestricted for gravel events.

15.2. Tarmac tires must have a molded tread pattern, no slicks allowed.

15.3. Snow/ice tires are unrestricted but studs may be allowed/disallowed/restricted for each event based on applicable state laws and/or organizer discretion.

## **16. Additional Rule Clarifications (All Classes)**

- 16.1. Vehicles in all classes must be registered and insured for all rally events with transits on public roads. **The liability limits for this coverage must be a minimum of \$100,000 per person, \$200,000 per accident, \$50,000 for property damage.**
- 16.2. For events with public-road transits vehicles in all car classes must be equipped with a functioning catalytic converter for the duration of the competition, unless the vehicle was manufactured before a catalytic converter was required in the USA. Motos and Group X are exempt from this rule.

## **17. Class change requests and annual classing review**

- 17.1. USRF is created for the competitor. As such, we will always seriously consider any concerns, comments, or suggestions any USRF competitor may have concerning classing rules and descriptions. competitors, volunteers, and organizers may contact the Competitors' Committee at any time via the USRF website contact form or [usrf.rally@gmail.com](mailto:usrf.rally@gmail.com) .
- 17.2. At the conclusion of every season, a full review of the classing structure and class rules will be undertaken by the Competitors' Committee in order to consider, address, and possibly implement suggestions by competitors, volunteers, and organizers on ways to improve things. We will also follow up with competitors to ensure the rule changes "do no harm." Class rule changes and updates will be published no later than January 1 preceding the season.