

Appendix E – Autocross Rules



The Vintage Triumph Register Autocross Rules

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I. Purpose

The purpose of these rules is to standardize the classing and safety considerations of VTR autocross events held nationally and regionally. It is this intent which drives the creation and maintenance of this document. If there is a question over the rationale behind a particular rule, it can generally be explained by looking at it from a safety point of view.

II. Format

These rules are divided up into a number of sections, starting with eligibility and safety, course rules, timing and scoring, protest guidelines, class definitions, and finally the class layout.

III. Changes

If there are to be changes to these rules for a regional event, the competitors should be notified at registration. For National events, the competitors should be notified at least 90 days before the event begins unless safety is at stake and a copy of these Rules and changes distributed with the registration packet.

IV. Vehicle Eligibility

The event shall be open to all vehicles that can pass the safety inspection and can meet the rules set out herein. Cars need not be licensed or eligible for licensing as long as they otherwise conform to these Rules.

A. Vehicle Safety

a. Driver Restraint

Seat lap belts are the minimum acceptable driver restraint. Open top cars without roll bars shall not have two strap (4 point) shoulder harnesses. Belts must be fixed to the body at a minimum.

b. Roll Bars

Functional roll bars are recommended for those who are going to be serious about competition events.

c. Safety Inspection

All vehicles must pass a safety inspection before being allowed to compete. It is not up to the safety inspector to classify the car. It is recommended that the successful completion of the safety inspection be indicated by a small decal or sticker applied to the windshield or roll bar of the vehicle.

d. Loose Items

All loose items inside and outside the car shall be removed or secured. This shall include floor mats, passenger seat backs, tools, spare tires, etc.

e. Trim rings

Trim rings, snap on hubcaps, and detachable fender skirts must be removed.

f. Suspension and Steering

Wheels shall be safely attached. All lugs and studs shall be present and functional. There shall be no missing or broken spokes on wire wheels. One loose spoke per wheel is permitted. There shall be no cracks in disc or cast wheels. Wheel bearings, shocks, steering, and suspension shall be in good operating condition without excessive play. Tires shall have no cord showing at any time. Cars with cord showing will not be permitted to continue.

g. Engine and Drivetrain

There shall be no visible fluid leaks when the car is running. Throttle return action shall be safe and positive. Fluid catch tanks shall be securely fastened and free of leaks. Drive belts must be properly tensioned so they do not fall off.

h. Brake System

There shall be no visible leaks of brake fluid at any point in the system. Brakes should have adequate pedal height and firmness. Sufficient fluid shall be in the brake master cylinder.

i. Battery

The battery shall be securely fastened using solid metal fixtures.

j. Tonneau Covers and Convertible tops.

Tonneau covers must be removed. Convertible tops may be erect or collapsed but must be secured to the vehicle in either position.. This is for safety reasons.

k. Fluids

Any fluid line must be in good operating condition without significant damage or excessive age.

l. Fuel

The fuel system shall be free from leaks. A tank cap shall have a positive closure. Tank overflows must exit outside the body work and frame.

B. Identification

Cars shall be identified via markings on both sides of the vehicle. Markings must include the car # and may include class, in a form legible while the car is running on course. The addition of sponsorship 'advertisements' is permitted.

C. Mufflers

Adequate mufflers are required. 'Adequate' is defined by sound level, not the construction. Any vehicle deemed too loud by the Event Chairman for the event may be required to add muffling or prohibited from competition. Remember, we are trying to be friendly to the neighbors.

D. Recording Devices

Any recording device must be securely mounted to the vehicle, either exterior or interior.

E. Driver Safety

The primary purpose is to assure a safe event. With this in mind, we require the following driver safety precautions.

a. Helmets

Helmets complying with, at a minimum, DOT rating shall be worn while on the course. Loaner helmets should be available for drivers not having their own.

b. Seat Belts

Driver restraints as previously specified shall be worn while on course.

c. Eye Protection

A face shield, goggles, or similar face protection shall be worn by persons competing in any car with other than a stock windshield.

d. Clothing

Closed footwear (no sandals) shall be worn. Clothing of natural fiber is preferred.

e. Access to site

Only authorized personnel who have signed the required waivers or insurance release forms will be allowed on the course or hazardous areas during competition.

f. Safety Instructions

Anyone not following instructions by autocross workers in regard to safety will be disqualified and/or evicted from the site.

V. Event Management

A. Car and Driver Limits

A driver may enter the event only once in a given car. A given car may be entered more than once in a class, however the identification should clearly denote different drivers and which is currently competing.

Passengers are allowed during any timed runs used as consideration for trophies. Competitors are not allowed as passengers until they have completed all their timed runs.

If a driver desires to enter the event in more than one car the driver will only be considered for trophy competition in one vehicle, this must be the vehicle driven first, and must complete all competition runs in this car before driving any other vehicle on course. This may mean running the nontrophy car after all others have completed their runs.

B. Ladies Classes

Ladies classes will be divided the same as open classes. The ladies shall have the option of running in the open classes. Timing and scoring shall be notified before the first run is taken and the identification of class on the car shall reflect the appropriate open class.

C. Conflict of Interest

No person may compete who has run through any part of the course in or on any wheeled vehicle. Event officials, competing or not, should use caution to avoid conflict of interest situations during the event. If in doubt, the official should disqualify himself from any decision to be made and have an unbiased substitute appointed by the Event Master.

The Event Master may allow a parade lap, allowing all competitors to preview the course if necessary.

D. Course

The course should be designed to be competitive to all classes of cars, safe, and enjoyable. Particular attention should be paid to the needs of older fragile British cars.

a) Map

A map of the course should be posted in an accessible location.

b) Order of Running.

All cars should take their first run, then all cars shall take their second run, etc, within reason. There shall be a minimum of 2 runs. The event may however, be split into multiple heats to allow competitors to participate in other events. In this case heats may be treated as separate as far as run order is concerned. See the 'how to run the event' document which should accompany these rules for clarification on how to make it all work.

c) Reruns

Reruns shall be given due to timing failure, objects on course, or pylons downed by previous competitors at the discretion of the chief of Timing and Scoring. Reruns are not granted for mechanical failure of the car. Pylon penalties are not carried over, and DNFs on a run for which a rerun would have been granted shall stand and no rerun shall be granted.

d) Penalties

Penalties shall be assessed at the rate of 2 sec per downed pylon. A pylon is considered down if it is knocked over or if it is knocked out of a box marked around its base. If any part of a still standing pylon is on or inside the marked box, the pylon is considered to be good and no penalty is assessed.

A 'DNF' is scored if there is an uncorrected deviation from the course. A course deviation shall not be charged if the vehicle knocks down a marker defining the limits of the course.

E. Recommended Officials

It is recommended that the following officials be selected well in advance of the event. Folks who do this on a regular basis are recommended and except for the Event Master(EM) and Chief of Tech(CT) need not be VTR members.

Event master: It is the responsibility of the EM to oversee the Timing and Scoring, Technical Inspection, Safety, Protests, and course design. Ideally the Event Master will be a VTR member familiar with the sport of autocrossing. The EM shall have final authority to make a ruling based on their judgment. The EM, or their representative, may also deviate from these rules if the situation calls for it.

Course Designer: Should ideally be someone who is not competing in the event. This individual should however be conversant with the foibles of Triumph motorcars.

Chief of Tech: Responsible for setting up technical inspection procedures and that all vehicles meet eligibility and safety regulations. He shall be a VTR member with a good knowledge of the Triumph cars expected at the event.

Chief of Timing and Scoring: Responsible for accurately taking, reading, and recording times, and posting them in a timely and conspicuous manner during the event. Responsible for the preparation of the official results.

F. Timing and Scoring.

Shall be taken to the highest accuracy available.

Reruns due to timer failure are at the discretion of the Chief of Timing & Scoring.

Times shall be posted in an accessible place in a timely manner. Ideally before the next run takes place.

In the case of a tie, the next fastest runs shall be compared. If a tie still remains, the run which was completed first shall be promoted.

Preparation of the official results shall include car#, class, driver's name, times, and other information considered relevant. The official National convention autocross results shall be mailed to the VTR newsletter editor by a date not to exceed 2 weeks after the event.

G. Protests

Hopefully, you as a good sportsperson will not feel the need to file a protest at any time. Please keep in mind that this event is organized and managed by amateurs who cheerfully give their time and do their best but can be expected to make a few mistakes. Make a good effort to work problems out through informal channels before engaging in official protests. A quick friendly talk can accomplish much that official shouting and rule quoting cannot. But if it should become necessary, the procedure shall be as follows:

a) Step 1

Calmly and rationally consider the issues. Will this protest materially affect the outcome of the competition? Is the protest well founded? A protest that is well founded is reasonable, logical, and based on sound evidence. A well founded protest may further be defined as one on which reasonable humans may differ. A protest therefore may be denied but still be well founded. A protest that is not judged to be well founded will be denied. If the Protest Committee determines the protestor has acted in a vexatious manner or in bad faith, they may penalize them.

b) Step 2

Approach the parties in question. Try to settle the problem out in a calm, rational, and reasonable manner. If this fails:

c) Step 3

Talk over the problem with the Event Master. If he, you, and the parties in question cannot come to a reasonable agreement, move on to:

d) Step 4

File a written protest with the EM. You should be as descriptive as possible of your reasons for protest. Cite specific rules if possible. The written protest is then to be considered by the protest committee. This shall consist of the EM, CTI, and CTS. They may in addition consult

with any available "experts" on the vehicle type in question. If there is any conflict of interest, the EM shall appoint another unbiased party to the position on the committee. The result of the committee's decision shall be made to all affected parties as soon as possible. These decisions are final.

VI. Modification Criteria

Cars shall be classed so that cars of similar capabilities shall compete against one another. There is a spreadsheet that will calculate a classing score for your car based on the following criteria. You must select the appropriate level of component modification for your car.

Engine: You must select the base engine block which is used in your car. Blocks are defined by their original displacement. The Displacement of a drivers individual engine is not important unless it has been increased beyond factory supplied oversize pistons (eg >.040 oversize).

Fuel Delivery: Select your current method of fuel delivery. If your method is not listed consult the event chairman for guidance.

Camshaft: A camshaft may be considered stock if the grind used was offered in the engine block being used. Eg: Any TR6 cam in any 2498CC Block is allowed, a GT6 cam in a 2498CC block is not stock.

Compression Ratio: Stock shall be defined as the highest available for the block model. Eg: An F class motor may use up to 9:1 compression and check the lowest level modification box.

Cylinder Head/manifold: If any work has been done to install larger valves, improve port flow, enlarge ports, improve manifold flow, this system has been modified.

Exhaust: If any portion of the exhaust AFTER the manifold has been exchanged for non like pieces, it is considered modified. (change in pipe size, removal of muffler/resonator, use of free flow systems). A change to the manifold: conversion to UK spec, use of headers, ect requires that you check the 'header' option.

Emissions: A car may be altered to match any production year of that model emission spec and remain OEM. (A 1976 TR6 may have pieces removed to match a 1969 TR6, a 1980 spitfire 1500 may be made equivalent to a 1975 1500.) This rule only applies to emissions equipment (catalytic converters, vacuum retard, EGR valves, air injection equipment), this does not supersede other requirements in these rules. Changes beyond this are considered modified, this includes vacuum advance conversions.

Engine Components Lightened: If any moving components have been exchanged, removed, or modified for lightness compared to factory versions of parts. This includes rods, pistons, crank, flywheel, engine fan, ect.

Differential: If the ratio has been changed from factory delivered then it is considered "modified". If the unit has been exchanged for one not manufactured by triumph or the internals have been modified either by installing a Limited slip/locking unit or welding of gears, then the "limited slip/locked" option should be checked.

Sway Bar: If a car model was fitted with a sway bar at the factory then it shall be considered stock. Any change in size of factory bars or addition of non factory installed bars shall be considered modified. (TR2/3/4/5/250s will be treated as not being fitted with sway bars at the factory, as they were not normally installed to the majority of production.)

Ignition system: The system shall be considered modified when the unit has been significantly changed from original. The use of non OEM dual point, programable curve, or altered curve distributors shall be considered modified. A curve is considered altered when it is not a curve that was delivered for the engine in use. The use of electronic points conversions alone shall not be considered modified.

Steering: The mechanism which accomplishes steering action must be of original design to remain unmodified. Any rack and pinion conversion, ratio change, steering wheel diameter change of more than .5" is considered modified.

Brakes: Any component which is different from factory type/dimensions for the body being used is considered modified. Including calipers, rotors, drums, pads/shoes, hydraulic cylinders, ect. Pad material is unregulated.

Rear Suspension: The driver must select the suspension architecture installed in their car.

Tires: Street tires must be fully treaded with at least three grooves which are continuous around the circumference of the tire. Street tires must also be within 10mm of the widest width provided by the factory, values are at the end of this document. Tire width is the first number in the tire size(155,175,205). If the tire is UTQG rated, it must be above 300 for street. If any tire is used that is more than 10mm wider than factory supplied, the driver must check the 'wider' selection. If the tire is UTQG rated, a tire must be rated higher than 150 to fall in the 'wider' category. All other tires will fit in the 'race' category.

Shocks: Any shock which has any adjustable feature is considered modified. Any substitution of shock design for position is considered modified (eg tube shock conversion on TR6).

Body: The diver should select the body design they are using. If modifications have been made which significantly impact the weight of the body then the appropriate selection must be made. Significant changes include the removal of seats, removal of any glass pieces, removal of interior fittings (no carpet, no panels), any changes to location of large pieces like fuel tanks and cooling systems. Batteries may be moved without penalty.

Wheels: A wheel is considered stock when it is within .5" of the largest delivered width and 1" of largest delivered diameter for the body being used. Offset may differ by no more than .25" (this explicitly allows any spitfire to have a 5" wheel and remain stock)

Ride Hight/Springs: If any devices or springs have been installed which alter the factory ride height or ride stiffness of the car then it is considered altered.

VII. Groups

Cars are grouped by engine type then classed by level of modification. A car may be slightly(S), moderately(M), or extremely(X) modified based on its score. Any car not listed should be grouped by engine design.

Cars in group

T	TR2/3/4/4a
S	TR-250, TR6, GT6, Vitesse, T2000/2500
M	TR7. Dolomite
V	TR8, Stag
F	Spitfire, Herald
H	Pre TR, TR10, Mayflower, Historic

Ladies Classes

Ladies will be given the same groups/classes as open. Simply add an “L” in front of the group (LTS, LSS, LMS)

Other Cars

Non-Triumph powered or bodied cars may be allowed to run at the discretion of the event chairman, his designee, or the VTR autocross coordinator. These cars will only be eligible for awards at the discretion of the event chairman or his designee.

Bumping Order

If there are less than 2 cars in a class, the classes may be combined upward within the group. If no other cars are entered within the group, the class shall be 1 car. Classes should not be combined in a manner which puts a singular faster car amongst a group of slower cars, i.e., a X car racing in the M class. One car classes will be awarded trophies at the discretion of the Event Chairman.

Tire/Wheel Sizes

TR2/3/4	4.5x15	165
TR250/6	5.5x15	185
TR7/8	5.5x13	185
Spitfire	5x13	155
Vitesse/GT6	4.5x13	155
Stag	5x15	185
Herald	5x13	155
Stag	5.5x14	185