

Alfa Romeo

*OWNERS
OF
SOUTHERN CALIFORNIA
(AROSC)*

COMPETITION CODE

January 1, 2004

www.arosc.org



Competition Code

1.0 Competition Categories

The Alfa Romeo Owners Club of Southern California (AROSC) operates a competition program. Competition is supported in the following categories or types of competition event:

- 1) Time Trials
- 2) Racing (including Enduro)
- 3) Concours
- 4) Rally
- 5) Autocross

2.0 Competition Organization

The AROSC Board of Directors selects one of its members to act as the AROSC Competition Director. The Competition Director selects the Competition Board. A current listing of the AROSC Board is available in the club newsletter, *Alfacionada*, and at the club website at www.arosc.org. The AROSC Competition Board and other competition contact information can be found at the website and on Time Trial mailers. A recent Time Trial entry form is also available at the website.

2.1 Competition Director

The Competition Director shall have these responsibilities:

- 1) Appoint the Competition Board of Directors, including a Director for each category of Competition listed in Section 1.0.
- 2) Maintain standings for each category of competition, and provide year-end awards to Class and Overall winners as detailed in Appendix B.
- 3) Chair the annual Competition Board meeting. Make agenda, arrange venue, announce meetings (public announcement in *Alfacionada*), chair the meeting, and publish the minutes.
- 4) Maintain the Competition Code and publish updates at regular intervals.
- 5) Handle disputes on and off the track.

2.2 Time Trial Director

- 1) Time Trial Directors. The Time Trial Director shall designate the following positions for each year (others may be added as needed). The Time Trial Director has the power of approval over any appointments made by other Directors, and the Competition Director has power of approval over all appointments.
 - a) Director of Registration
 - b) Treasurer
 - c) Director of Mailers
 - d) Director of Safety and Technical Inspection

- e) Director of Accommodations
 - f) Director of Instruction
 - g) Director of Intro Group
 - h) Director of Timing and Scoring
 - i) Director of Classification (Alfas)
 - j) Director of Classification (non-Alfas)
 - k) Director of Licensing
 - l) Director of Special Events
 - m) Director of Workers
 - n) Director at Large
 - o) Race Director (may be combined with Time Trial Director)
- 2) Time Trial Executive Committee. The following Time Trial Directors shall be members of an Executive Committee to rule on matters such as driver infractions and license revocation:
- a) Competition Director
 - b) Time Trial Director
 - c) Director of Instruction
 - d) Director of Safety and Technical Inspection

2.2.1 Time Trial Event Master Responsibilities

The Time Trial Director or his delegate will be the Event Master for each event. The Event Master has the following responsibilities and authority:

- 1) Supervise the safety of the event. Ensure that all event safety requirements are met.
- 2) Hold a Drivers' Meeting before the beginning of the event, during which he/she shall cover safety rules, flags, and other relevant issues.
- 3) Sole discretion over any driver's access to the track.
- 4) Authority to suspend any driver's Time Trial License until the case is reviewed by the Time Trial Executive Committee (defined in Section 2.2-2) at a time after the event, but before the next scheduled Time Trial.

2.2.2 Director of Safety Responsibilities

The Director of Safety and Technical Inspection shall perform these functions:

- 1) Designate and maintain a list of shops and individuals qualified to perform Safety Inspections for AROSC.
- 2) Provide Tech Inspection forms to these shops.
- 3) Provide inspection services at the track for each event.

2.2.3 Director of Instruction Responsibilities

In addition to the duties listed in the next section under Driving Schools, the Director of Instruction or his delegate shall:

- 1) Teach novice class during Time Trials
- 2) Supervise unlicensed drivers at the track

2.3 Driving School Event Master

Each school shall have a School Master, either the Director of Instruction or his delegate. The School Master shall:

- 1) Arrange for instructors
- 2) Arrange for a track and safety equipment
- 3) Arrange for insurance
- 4) Perform registration duties and turn in a detailed financial accounting
- 5) Make and manage a schedule of events for the two-day school

2.4 Race Director Responsibilities

The position of Race Director is distinct from that of Time Trial Director, but may be held by the same person.

- 1) The Time Trial Event Master shall be responsible for running both the Time Trial and the Race.
- 2) The Race Director, or his delegate, has the following responsibilities:
 - a) Determine eligibility and approve all drivers entering each race.
 - b) Determine grid order.
 - c) Approve Race Licenses (list to be maintained by Director of Licensing).

2.5 Concours Director Responsibilities

The Concours Director responsibilities include:

- 1) Schedule and announce at least two (preferably three) Concours per year.
- 2) Select a panel of qualified judges for each Concours
- 3) Procure awards
- 4) Publish results of each Concours

2.6 Rally Master Responsibilities

A Rally Master shall be appointed for each Rally. Duties of the Rally Master shall include:

- 1) Find a venue and publish a rally map.
- 2) Appoint personnel and set up start-finish and checkpoints as necessary.
- 3) Publish rules.
- 4) Determine and publish scores and places for all entrants.

2.7 Autocross Event Master Responsibilities

An Event Master shall be appointed by the Autocross Director for each Autocross. Duties of the Autocross Event Master shall include:

- 1) Arrange for venues.
- 2) Arrange for any necessary insurance and permits.
- 3) Perform a safety check to make sure all cars and drivers meet applicable requirements.
- 4) Set out cones or other means for demarking the course.
- 5) Arrange for timing and scoring.
- 6) Determine and publish scorings and placing for all entrants.

3.0 Time Trials

3.1 Minimum Event Safety Requirements

- 1) In order for a Time Trial to proceed, the following conditions shall be met:
 - a) Paramedics or Emergency Medical Technicians must be present.
 - b) An emergency vehicle must be present, equipped to fight fires and assist cars disabled on the track. It must be manned at all times and properly positioned for immediate access to the track.
 - c) Appropriate liability insurance must be in force.
 - d) When the course is not visible in its entirety from a central point where event officials are located, a reliable communications system linking the flagging stations with the officials at a central point must exist and be used.
 - e) Before any cars are allowed on the track, course workers will be properly oriented for safety and flagging procedures.
- 2) It is each driver's responsibility to note any drug sensitivities at Registration.

3.2 Minimum Vehicle and Driver Safety Requirements for Time Trials and Driving Schools (Includes Intro and Street Performance, except as noted)

- 1) Roll Over Bars: Required for all open cars and Recommended for all Time Trial cars. For minimum Roll Bar specifications see Appendix A.
 - a) "Targa" style cars may Time Trial with the roof removed provided the top of the driver's helmet is two inches (2") below the roofline when the driver is seated in his/her proper driving position.
 - b) Open cars in Street Performance can have a "street" roll bar without a diagonal brace.
 - c) Intro Group cars need not have a roll bar, even for open cars.
- 2) Driver restraint system. All harness must be attached to a frame member, a roll bar, or a body panel that has been adequately reinforced with a spreader plate. No harness shall be attached to the car seats. The driver restraint system shall be composed of:
 - a) Three-inch competition lap belts.
 - b) Three-inch competition shoulder harness that is mounted on the roll bar or other area having adequate structural bracing. The belt should travel from the driver's shoulders as close to horizontal as possible, in order to prevent spinal compression in an accident. Shoulder belts must be independently mounted; Y-belts are not permitted.

- c) An antisubmarine belt is required (2 inch OK). Can be directly mounted to floor or a Y-belt looped under the seat to the lap belt attachments (known as 6-point harness).
- 3) Additional rules regarding driver restraints:
 - a) Sternum Straps will not be allowed.
 - b) Any belts in a car subject to the stress of a severe impact or deterioration because of age may be destroyed at the track by the Director of Safety & Technical Inspection or the Event Master.
 - c) All Safety harness webbing must be no more than five (5) years old. (It is recommended that belts be no more than two (2) years old).
- 4) For Street Performance cars, street (3-point) seatbelts in good condition are sufficient.
- 5) In Intro Group, any stock seatbelts in good condition are sufficient.
- 6) Cockpit mounted 2.5 lb. automotive BC fire extinguisher (easily accessible) and properly charged (Not needed for Intro Group or Street Performance).
- 7) Clothing that extends to ankles, wrists, and neck, and is made of a non-synthetic material. Cotton Levis and a cotton long-sleeved shirt will satisfy the minimum requirements, however, Nomex® material is recommended. Non-perforated gloves of leather or fireproof material are required (same requirement for Intro and Street Performance).
- 8) Helmet with a 1995 SNELL sticker or later.
 - a) Starting in the year 2005 we will require SNELL 2000 or later helmets. Every five years the helmet-rating requirement will move forward by five years. It is highly recommended that helmets over five years old not be used due to shell deterioration.
 - b) In Intro and Street Performance Groups Snell helmets one generation older are acceptable.
 - c) Any helmet subject to a severe impact must have evidence in writing that the manufacturer has certified the helmet is safe, before it may be used again.
 - d) It is highly recommended that helmets with an “SA” Snell rating be used.
- 9) Some form of shatter resistant eye cover in a closed car and a full shield in an open car.
- 10) Scatter shields are advised, and required when modified flywheels are used. Lightened iron flywheels are not recommended.
- 11) Windshields must be safety glass or Lexan® (polycarbonate) or equivalent.
- 12) Wire wheels are in general not allowed. See the Director of Safety and Technical Inspection.
- 13) Drain plugs and oil filters are recommended to be safety wired.

3.3 Safety Inspection of Vehicles

- 1) The results of the safety inspection must be recorded on a form and filed with the Director of Registration before the car will be allowed on the course.
- 2) The inspection must consider these basic points: accelerator linkage, exhaust mounting, fluid leakage, steering, front and rear suspension, brakes, brake lights, battery mounting, seat mount, tires, minimum safety requirements for cars and drivers.
- 3) It is recommended the car be raised on a jack to “unload” the suspension parts during the inspection.
- 4) If, in the opinion of the Director of Safety and Tech Inspection, an entrant’s car does not pass the vehicle safety inspection, he/she will not be allowed to run the car in this event until the safety violation has been corrected and re-inspected. This action will be subject to the concurrence of the Time Trial Director or Event Master.

3.4 Driver Eligibility

In order to compete in AROSC time trial:

- 1) A driver must have:
 - a) A valid California Driver’s License or its equivalent, and
 - b) A current AROSC Time Trial License or be an applicant for the same.
- 2) The entrant must be 18 years of age or greater, unless written consent and permission is obtained from all parents of the entrant exercising custodial rights, or the entrant’s legally appointed guardian, at least one of which must be present at the time of the event.

3.5 Time Trial Licenses

- 1) Time Trial License:
 - a) The Time Trial License is the standard permit granted by the Director of Instruction to a driver who successfully passes his/her training event evaluations.
 - b) A driver qualifies for a Time Trial License by completion of three supervised AROSC Time Trials or the equivalent (one Time Trial can be replaced by an AROSC Time Trial Driving School).
 - c) Awarding of licenses, including any exceptions to Rule 3.5.1.b, is at the discretion of the Director of Licensing with concurrence of the Director of Instruction.
- 2) Novices:
 - a) All time trial drivers without AROSC licenses are considered Novices.
 - b) Novices must attend Novice classes to be held between their run groups. Novices must attend class in order to be allowed on the track.
 - c) Novices will be required to run with an “X” of contrasting color, at least eight inches in height, affixed to the rear of

their car.

- d) To gain credit for an event, the Novice must be observed by the Director of Instruction or his delegate, and record of such must be made by the Director of Instruction.

3.6 Passengers

Licensed time trial drivers can take passengers during practice sessions. This is for instructional purposes only, and the driver will be considered an instructor during this period. The passenger seat must meet the same safety requirements as the driver's seat (see Section 3.2). There will be no passengers in Race Group, during practice sessions or the actual race. The passenger must:

- 1) Sign AROSC's waiver
- 2) Be issued a wristband
- 3) Be over 18 years old (if under 18, a parent or guardian must be present and provide written consent)
- 4) Hold a valid California Driver's License or equivalent.

3.7 Run Groups

It is the responsibility of the Event Master (with help from the Director of Registration) to ensure that cars and drivers are separated into run groups roughly according to speed capability and experience, so that the fastest cars are in one run group, the slowest cars and/or least experienced drivers are in a separate run group, etc.

3.8 Intro Group

There shall be provision for an Intro Group to be run at each Time Trial under the following rules:

- 1) Intro Group will be run as a leader-follower session at lunchtime while no other cars are on the track. If there are a very few cars in Intro Group, the leader-follower format can be replaced with a "ride-along" format at the discretion of the Director of Intro Group.
- 2) If using a leader-follow format, the lead car(s) will be driven by the Director of Intro Group or his designate(s).
- 3) Intro Group drivers will be required to attend special classroom sessions.
- 4) Intro Group cars and drivers will be required to have certain safety equipment and pass a safety inspection, as detailed in Section 3.2.

3.9 Passing

In Time Trial run groups, passing will not be allowed in the corners and will only be allowed in safe passing zones designated by the Event Master. "Point-by" using hand signals is highly encouraged. At all times the safety of the pass is the responsibility of the overtaking driver. Passing shall always be on the left for time trialing.

3.10 Car Identification

It will be the responsibility for the entrant to have his/her car numbers firmly affixed to each side of his/her car. These numbers must be clearly visible (dark numerals on a light background or vice versa). The car will

not be allowed on the course without them. Numbers are not required for Intro Group or Driving Schools.

3.11 Time Trial Competition

- 1) Electrical timing with manual backup will be used. Should the electrical timing equipment fail, manual timing shall be considered the official time. If manual timing is used, lap records will not be considered.
- 2) Cars shall not be timed from a standing start, and must have at least one warm-up lap which continues on into the timed run.
- 3) The Director of Timing and Scoring shall maintain a list of track records and publish them in Alfacionada at reasonable intervals.

3.12 Event Awards

- 1) There shall be separate classification systems for Alfas (including Alfa-powered cars) (A through J, X and Z), and non-Alfas (K through Q), and event trophies shall be awarded in all classes.
- 2) Event trophies shall be awarded in each class as follows: 1 entrant – no award; 2 or 3 entrants - 1 award; 4 to 6 entrants - 2 awards; 7 or more entrants - 3 awards.
- 3) If a class has only one driver, he/she will be moved up to the next class for event trophy considerations. If there is no higher class with cars entered, the driver cannot move up and will not receive a trophy at that event. In any case, the driver will still be awarded year-end points in his original class.

There will be honorable mention, but no separate trophy or year-end points awarded, for Top Time of Day (T.T.O.D.).

3.13 Driving Infractions:

- 1) Driving infractions will be penalized by the Event Master, with no recourse at the track. AROSC has the right to bar any driver from the track and/or revoke licenses.
- 2) License Suspension and Revocation: A license may be suspended by the Event Master for a single event. The case must then be reviewed before the next event by the Executive Committee. The Executive Committee will choose a course of action to include the following options:
 - a) reinstate the license, or
 - b) continue suspension for a specific number of events, or
 - c) require attendance at an AROSC driving school before entering another time trial, or
 - d) revoke the permit for the entire calendar year.

The decision of the Executive Committee is final.

- 3) Car damage: All cases of car damage or car-to-car contact will be reviewed by the Event Master in a meeting with all involved drivers, in conjunction with the Director of Safety and Tech Inspection.
 - a) If one or more drivers are found to be overly aggressive and/or careless of damage to the cars, AROSC and its

Directors will impose sanctions on the driver or drivers from the list above as appropriate.

- b) AROSC and its Directors will not be involved in discussions of financial compensation, and strongly discourages competitors from seeking financial or other compensation for an on-the-track incident.

3.14 Protests

All Protests must be submitted in writing to the Event Master before the awards presentation for the event involved. The Event Master's decision will be final.

3.15 Year-End Awards

If AROSC holds two or more Time Trials in a year, Time Trials will be eligible for year-end awards (see Appendix B).

4.0 Driving Schools

AROSC will regularly hold driving schools (preferably two per year) under the organization and direction of the Director of Instruction.

4.1 Instructors

The Director of Instruction or his delegate shall maintain a list of instructors.

4.2 Safety

Refer to Sections 3.1 through 3.4, and 3.9 for Driving School safety rules. Driving School Race Group drivers shall comply with all additional Race safety rules in Section 5.1.

4.3 Run Groups

Driving schools shall have separate run groups for the following levels:

- 1) Street Performance
- 2) Time Trial
- 3) Advanced Time Trial
- 4) Race

Note: At the discretion of the School Master, two of these run groups can be combined.

4.4 No Competition in Schools

While there can be some mock competitions (practice races, etc), there is no formal competition at an AROSC Driving School.

5.0 Racing

AROSC will hold Races in conjunction with Time Trials. Rules for Races are similar to those for Time Trials with these exceptions:

5.1 Minimum Safety Requirements for Race Cars and Drivers

All Time Trial rules and regulations will be in effect for AROSC racing unless superseded or expanded by the following:

- 1) Roll bars with a diagonal cross brace are required for all cars. For minimum Roll Bar specifications see Appendix A. A full roll bar with

cross bracing must be added to “Targa” style cars with factory-supplied loops.

- 2) Shoulder harness: Same as Time Trial.
- 3) Helmet: Same as for Time Trial.
- 4) A multi layer Nomex® drivers suit is required, a one-piece suit is recommended.
 - a) A single layer Nomex® suit with Nomex® underwear will be considered the minimum standard, a triple layer suit is recommended.
 - b) Nomex® gloves (leather palms O.K.), Nomex® socks
 - c) Drivers with long hair or facial hair must wear a Nomex® head sock
 - d) Nomex® may be replaced by other SFI rated material, check with the Director of Safety and Technical Inspection.
- 5) Wire wheels are not allowed on Race cars.
- 6) Open Race cars must have arm restraints. Closed Race cars must have either a driver’s side window net or arm restraints.
- 7) Catch tanks on radiator and oil breather must be installed.
- 8) Wooden steering wheels must be covered with leather tape.

5.2 Additional Safety Equipment Recommended for Race

The following additional equipment, while not required, is recommended.

- 1) External electric system cutoff switch
- 2) Fuel cell
- 3) Proper racing seat
- 4) Helmet Support
- 5) Fire System
- 6) It is recommended that all drain plugs and oil filters be safety wired.

5.3 Racing Licenses and Entry Policy

- 1) The AROSC Racing License is the standard permit granted by the Director of Racing who successfully passes his/her training event(s) evaluation.
- 2) In order to enter an AROSC race a driver must first hold an AROSC Time Trial License and complete an AROSC Driving School (Race Group), or be approved by the Director of Racing.
- 3) An AROSC Racing License will not be provided until the applicant successfully completes one race without incident.
- 4) Novices (defined as first time or non-AROSC licensed drivers) will be required to run with an “X” of contrasting color, at least eight inches in height, affixed to the rear of their car.

5.4 Race Practice

Racers shall be provided a separate run group for practice sessions.

5.5 Passing

Passing will be allowed in practice sessions and the actual race. At all times the safety of the pass is the responsibility of the overtaking driver.

Clear hand signals are highly recommended. At all times it is required that drivers drive in a safe and courteous manner.

5.6 Race Starts

Races will use a rolling start. A pace car is recommended.

5.7 Driving Infractions

Driving infractions will be penalized by the Event Master, with no recourse at the track

- 1) AROSC has the right to bar any driver from the track and/or revoke licenses.
- 2) License Suspension and Revocation: A race license may be suspended by the Event Master for a single event. The case must then be reviewed before the next event by Committee consisting of the Race Director, the Competition Director, the Director of Tech and Safety, and the Director of Instruction. This group will choose a course of action to include the following options:
 - a) reinstate the license, or
 - b) continue suspension for a specific number of Races or Time Trials, or
 - c) require attendance at an AROSC driving school before entering another Race or Time Trial, or
 - d) revoke the permit for the entire calendar year.

The decision of the Committee is final.

- 3) Car damage: All cases of car damage or car-to-car contact will be reviewed by the Event Master in a meeting with all involved drivers, in conjunction with the Director of Safety and Tech Inspection.
 - a) If one or more drivers are found to be overly aggressive and/or careless of damage to the cars, AROSC and its Directors will impose sanctions on the driver or drivers from the list above as appropriate.
 - b) AROSC and its Directors will not be involved in discussions of financial compensation, and strongly discourages competitors from seeking financial or other compensation for an on-the-track incident.

5.8 Race Competition

- 1) There will generally be two races, a grid race on Saturday and a final event on Sunday.
- 2) If there are six or more Alfas entered in the Race, and if time permits, the Alfas shall be run separately in an Alfa-only "Alfa Cup" race.
- 3) Grid order is to be determined by the Race Director or his delegate.
- 4) Generally the starting order of the Final Race will be the finishing order of the Grid Race.

5.9 Race Event Awards

- 1) Race cars shall be classified according to the same rules as Time Trial cars, and event awards shall be awarded the same way as for Time Trial cars. If there are sufficient Alfas for a separate Alfa Cup

race, but for time reasons all cars are in the same race, Alfa racers shall still receive awards separate from non-Alfas according to the finishing order of Alfas in the race.

- 2) Overall winners of the Alfa Cup and non-Alfa races shall be awarded with a first-place trophy even if they are alone in their class.

6.0 Concours

AROSC will conduct concours; the type will be at the discretion of the Concours Director. The scoring system must be published in advance of the event.

6.1 Judging

- 1) The judging panel shall not have the authority to change the Code, but it does have the prerogative of requesting deviations in the interest of fairness to contestants.
- 2) In the event of a tie vote by the judges, the older car shall win

6.2 Dealer Displays

Dealers may display new cars as permitted by the management of the site being furnished for the event, but they will not be eligible to compete.

6.3 Categories

Typically cars will be grouped into the following categories:

- 1) Open
- 2) Closed
- 3) Competition Prepared
- 4) Classic, Rare and Special Bodied

If there are sufficient cars, some or all of the following categories can also be used:

- 5) Early 1900, 2000, and 2600 model Spiders
- 6) Early 1900, 2000, and 2600 model Coupes and Sedans
- 7) 750 and 101 series Spiders
- 8) 750 and 101 series Coupes and Sedans
- 9) 105 and 115 series Spiders
- 10) 105 and 115 series Coupes and Sedans.
- 11) 116 (Alfetta) series Coupes and Sedans
- 12) 119 GTV6 and Milano series.
- 13) 164 Sedans
- 14) Later cars

6.4 Scoring

Scoring sheets shall reflect the following maximum points for the following:

<u>Category</u>	<u>Maximum Points</u>
Engine and under hood	50
Paint and finish	50
Undercarriage	20
Coachwork and/or top	20
Seats and upholstery	25
Dashboard	10
Trunk area	10

Trim and glass	15
Age - ½ point per year	10

Functional extras (one point each for a max of 5 points) - Tool Kit, Fire Extinguisher, Emergency Flares, Rally equipment, and Competition equipment: roll bar or cage, competition safety harness(s), etc. Additional scoring guidelines may be provided by the Director of Concours.

6.5 Event Awards:

- 1) Event awards shall be awarded in each class as follows: 1 entrant – no trophy; 2 or 3 entrants - 1 award; 4 to 6 entrants - 2 trophies; 7 or more entrants - 3 trophies.
- 2) In addition, there will be one Best of Show Award and one People’s Choice Award, the latter to be decided by popular vote of attendees.
- 3) Any protests will be decided by the AROSC Concours Director; the decision will be final.

7.0 Rallies

7.1 Rally Format

The type of rallies will be at the discretion of the Rally Director. Options include: Gimmick, TSD, etc.

7.2 Classes

There can be one or more classes for Rallies, depending on the number of entrants. For example, separate classes for Novices, Experienced without special rally equipment, and Experienced with full equipment. Classification is at the discretion of the Rally Director

7.3 Event Awards

Awards shall be made at each event in each class as follows: 1 entrant – no award; 2 or 3 entrants - 1 award; 4 to 6 entrants - 2 awards; 7 or more entrants - 3 awards,

- 1) If a class has only one driver, he/she will be moved up to the next class for event trophy considerations. If there is no higher class with cars entered, the driver cannot move up and will not receive a trophy at that event. In any case, the driver will still be awarded year-end points in his original class.
- 2) Any protests will be decided by the AROSC Rally Director; the decision will be final.

8.0 Autocross

8.1 Minimum Safety Requirements for Cars and Drivers

Safety requirements for Autocross shall be the same as for Street Performance Group in Driving Schools (see Section 3.2).

8.2 Classes

Cars shall be classified the same way as for Time Trials.

8.3 Event Awards

Event awards shall be awarded in each class as follows: 1 entrant – no award; 2 or 3 entrants - 1 award; 4 to 6 entrants - 2 awards; 7 or more

entrants - 3 awards,

- 1) Any protests will be decided by the AROSC Autocross Director; the decision will be final.
- 2) If a class has only one driver, he/she will be moved up to the next class for event trophy considerations. If there is no higher class with cars entered, the driver cannot move up and will not receive a trophy at that event. In any case, the driver will still be awarded year-end points in his original class.
- 3) There will be honorable mention, but no additional trophy or year-end points awarded, for Top Time of Day (T.T.O.D.).



Appendix A

Roll Bar Specifications

A. Basic Specifications and Design Considerations:

1. The basic purpose of the roll bar is to protect the driver in case the vehicle rolls over. This purpose should not be forgotten.
2. In open cars, the driver's helmet must be a minimum of 2" below top of roll bar when seated correctly.
 - a. "Targa" style roll over bars will be evaluated on a per-make & model basis.
 - b. If approved for use "Targa" style cars may compete with the roof removed provided the top of the driver's helmet is two inches (2") below the roof line when the driver is seated in his/her proper driving position.
 - c. For racing purposes, an additional roll bar is required in "Targa" style cars.
3. Roll bars in closed cars must be above the driver's helmet.
4. Roll bars shall not be more than six inches behind the driver.
5. The two vertical members forming the sides of the hoop shall not be less than fifteen inches (15") apart, inside dimension, at their attachment points to the uppermost main chassis member.
6. An inspection hole of at least 3/16 inch diameter must be drilled in a non-critical area of a roll bar member to facilitate verification of wall thickness. This should be at least three inches from any weld or bend.

B. Material

1. The roll bar hoop and all braces must be of seamless, ERW or DOM mild steel tubing. Chrome alloy tubing, such as 4130, is not recommended since the strength of the area adjacent to the welds will be impaired if the structure is not normalized, and because of the difficulty in making satisfactory welds.
2. The size of the tubing to be used shall be determined based on the weight and speed potential of the car.
3. The following minimum sizes for roll bars are strongly recommended:

Car Weight (pounds)	Mild Steel O.D. x wall (inches)	Alloy Steel O.D. x wall (inches)
Under 1500	1.50 x 0.120	1.50 x 0.090
1500 to 2700	1.75 x 0.120	1.50 x 0.120
2700 and over	2.00 x 0.120	1.75 x 0.120

4. On cars utilizing a full roll cage, the main hoop and support braces should be of the same size.

Car Weight (pounds)	Mild Steel O.D. x wall (inches)	Alloy Steel O.D. x wall (inches)
Under 2700	1.50 x 0.120	1.50 x 0.120
2700 and over	1.75 x 0.120	1.50 x 0.120

C. Fabrication

1. One continuous length of tubing must be used for the hoop member with smooth continuous bends and no evidence of crimping or wall failure.
2. All welding must be of the highest possible quality with full penetration and will be subjected to very critical inspection. Arc welding, particularly heliarc, should be used wherever possible.

D. Bracing

1. It is recommended that braces be of the same size tubing as used for the roll bar itself.
2. All roll bars must be braced in a fore or aft direction with the brace attached within six inches of the top of the hoop, and at an angle of at least thirty (30) degrees from vertical.
3. It is required that a diagonal brace be used to triangulate the main hoop.
4. A head restraint is recommended.
5. Anchoring the shoulder harness to the roll bar is recommend.

E. Mounting plates

1. Roll bars and braces must be attached to the frame of the car wherever possible. Mounting plates must be used for this purpose.
2. In the case of cars with unitized or frameless construction, mounting plates must be used to secure the roll bar structure to the floor of the car. The important consideration is that the load be distributed over as large an area as possible. A backup plate of equal size and thickness must be used on the opposite side of the panel with the plates through-bolted together.

F. Removable Roll Bars

They and their braces must be very carefully designed and constructed to be at least as strong as a permanent installation. If one tube fits inside another to facilitate removal, the removable portion must bottom on the permanent mounting, and the mounting hardware used to secure each joint must be at least grade five (5) or better. It is recommended that the telescope section be at least eight inches in length.

G. Installations on Cars of Spaceframe or Frameless Design

1. It is important that the structures be attached to cars in such a way as to spread the loads over a wide area. It is not sufficient to simply attach the roll bar to a single tube or junction of tubes. The roll bar must be designed in such a way as to be an extension of the frame. Considerable care must be used to add as necessary to the frame structure itself in such a way as to properly distribute the loads. It is not true that a roll bar can only be as strong as any single tube of the frame.
2. On cars of frameless construction, consideration should be given to using a vertical roll bar hoop of 360 degrees completely around the inside of the car, and attached with suitable mounting plates. This type of roll bar then becomes a substitute for the frame.

H. Other Designs

Deviations from the above will be considered.

I. Important Note

New Competitors are encouraged to ask questions regarding the building and installation of safety equipment for their competition car by calling the Director of Safety & Technical Inspection (or any other Director). See the AROSC website, www.arosc.org, or ask any Director for a list of Director's phone numbers.



Appendix B

Year-End Awards

At the end of each calendar year Class and Overall Champions shall be named. It is the responsibility of the Competition Director to calculate and maintain overall standings in each competition category and arrange for all year-end awards, and publish point standings from time to time.

1.0 Class Champions

A Class Champion is named at the end of the year in each class of each competition type that meets the conditions listed below:

- 1) Eligible classes are: each class of Racing (Alfa and non-Alfa); each class of Time Trialing (Alfa and non-Alfa); each class of Concours; each class of Rally; and each class of Autocross.
- 2) Year-end trophies shall only be awarded for any competition type if more than one event of that competition type is held during the year.
- 3) Class Championships can be awarded for non-Alfa classes of competitions hosted by AROSC in which AROSC members participate.
- 4) Only AROSC members are eligible to receive year-end awards.
- 5) Points will be computed as the sum of points awarded for each event during the year, according to the following formulas:
 - a) For Time trialing, racing, and autocross: 1st - 9, 2nd - 6, 3rd - 4, 4th - 3, 5th - 2, 6th - 1.
 - b) For Concours, simply add up the points from each Concours
 - c) For Rallying the finishing order in each event will dictate the points given per event: 1st 20; 2nd 19; 3rd 18; 4th 17, etc. The driver and the navigator will be awarded separate points for each event.
 - d) A special case of racing is Enduro. One point will be awarded to each driver participating in an Enduro race, in the class of the car entered.
- 6) The number of year-end trophies shall be awarded as follows in each class: First place prize only for up to 3 competitors in class; first and second place prizes for 4 to 8 competitors in class; and first, second and third place prizes for 9 or more competitors in class.
 - a) Only AROSC members count toward these totals.
 - b) Only AROSC members are eligible to receive year-end awards. Example: If there are 9 entrants in Class M Time Trialing, and AROSC members place 2nd, 3rd, 5th and 7th, up to

two prizes can be given (four AROSC competitors in the class). If the 1st place winner is not an AROSC member, there would be no first-place trophy and the AROSC member in 2nd place would receive a 2nd place trophy.

- c) If there is a tie, the entrant with the greatest number of entries will be the winner. If still a tie, the entrant with the greatest number of first place finishes wins, etc.
 - d) In Rallying, if the tie is because Driver and Navigator received identical points, they shall share the award.
- 7) Entrants with two or more cars in one event may use only the points awarded for one car per event (by entrant's choice) to apply towards year-end Championships.
 - 8) No entrant shall win year-end awards for more than one Class of any Competition Type.

2.0 Overall Year-End Championship

An Overall AROSC Competition Champion is named at the end of the year.

- 1) The Champion must be an AROSC member, and must compete in more than one type of competition. For the purposes of the Overall Championship, Race and Time Trial do not count as separate types of competition. Thus, to win, a competitor must compete in two or more of the following: Time Trial/Race; Concours; Rally; Autocross.
- 2) A competition category shall only count toward year-end overall championship points if two or more events of that category were held during the year.
- 3) Overall championship points are only available for Alfa Romeos or Alfa powered vehicles. Winners must get all their points in Alfas or Alfa-powered cars.
- 4) Overall championship points will be calculated as: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, for the first through tenth highest points standings. Example: If you don't compete in Rallies, but get the third highest number of points in Time Trials and first in Concours, you would score $8 + 10 = 18$ points toward the overall championship.
- 5) Only AROSC members are eligible for year-end trophies, and only AROSC members will be counted in the standings. Example: If AROSC members driving Alfas place first, third and fourth overall in Racing/Time Trialing, they will receive 10, 8 and 7 points respectively toward the Overall Championship.
- 6) First and second place Overall trophies may be awarded.

Appendix C

Alfa Time Trial and Race Classification

It is the responsibility of all drivers to have their cars classified. All drivers must have their classification form on file and up to date with the Director of Alfa Classification in order to be scored. Contact the Director of Alfa Classification for any updates and a current classification form.

Classification is based on a point system. Each Alfa model in its stock configuration has a point value (Base Model Points). The Base Model Points are adjusted by adding points for performance modifications (Modification Points). In some cases, points are subtracted for non-performance options, i.e., an automatic transmission. If a model, modification and/or cam(s) is not covered in the following tables, submit details to the Director of Alfa Classification for a points assessment. In general, a point is worth about 2-3 bhp or around 20 pounds. Four points is worth about a second off a lap time at Willow Springs.

Class Points = Base Model Points + Modification Points

Class	Point Range	Class	Point Range
A	246 and up	G	150 to 160
B	226 to 245	H	140 to 149
C	201 to 225	I	130 to 139
D	186 to 200	J	129 or less
E	171 to 185	X	Formula or S/R under 1300cc
F	161 to 170	Z	Formula or S/R over 1300cc



1. Base Model Points

Models are as sold in the USA unless “(Euro)” is indicated. Stock cam points, rim and tire profiles are provided because their Modification Points are based on changes from stock.

Model	Base Model Points	Stock Cam Points	Stock Rim	Stock Tire Series
<u>Sedans</u>				
164 Q	189	6	15x6	65
164 LS	185	6	15x6	65
164 S	180	8	15x6	65
164 L	173	6	15x6	65
Milano Verde	179	6	15x6	55
Milano Platinum	172	6	15x6	55
Milano Silver or Gold	161	6	14x5.5	70
2000 Alfetta Sedan ('77-'79)	150	5	14x5.5	70
2000 Alfetta Sedan ('75-'76, 4-2-1 exhaust manifold)	147	5	14x5.5	70
2000 Berlina ('72-'74, 4-into-1 exhaust manifold)	140	5	14x5.5	80
1750 Berlina	130	6	14x5.5	80
1600 TI. Super (Euro)	152	10	15x4.5	80
1600 Giulia Super	129	6	15x4.5	80
1600 Giulia TI.	121	3	15x4.5	80
1300 Giulietta TI. (Euro)	104	0	15x4.5	80
<u>Coupes</u>				
2600 Montreal (Euro)	185	0	14x5.5	70
GTV6 2.5 (3.42 Differential, '82-'83)	170	6	15x6	60
GTV6 2.5	173	6	15x6	60
2000 Alfetta GT ('77-'79, 4-2-1 exhaust manifold)	155	5	14x5.5	70
2000 Alfetta GT ('75-'76, 4-into-1 exhaust manifold)	152	5	14x5.5	70
2000 GTV ('72-'74)	162	5	14x5.5	78
1750 GTV	154	6	14x5.5	78
1600 Sprint GT/GTV	146	6	15x4.5	80
1600 Sprint Veloce & Speciale	149	10	15x4.5	80
1600 GTZ (Stradale)	182	10	15x4.5	80
1600 GTA (Stradale)	171	6	15x4.5	80
1300 GTA (Euro) (Stradale)	165	6	14x5.5	80
1300 Sprint Speciale	138	9	15x4.5	80
1600 Junior Zagato (Euro)	144	6	14x5.5	80
1300 Junior Zagato (Euro)	138	6	14x5.5	80

1300 Sprint Zagato (Euro)	137	9	15x4.5	80
1600 Sprint (101 Chassis)	137	3	15x4.5	80
1300 GT Jr. (Euro)	141	6	15x4.5	80
1300 Sprint Veloce	135	9	15x4.5	80
1300 Sprint (101 Chassis)	114	0	15x4.5	80

Spiders

2000 Spider Quadrifoglio	153	5	15x6	60
2000 Spider ('91 & up Motronic)	153	5	15x6	60
2000 Spider ('82 - '91, Single butterfly SPICA, 4.10 rear, 4 into 1 manifold)	153	5	14x6	70
2000 Spider ('80 - '81, Single butterfly SPICA, 4.10 rear, 4 into 1 manifold, air pump)	147	5	14x5.5	78
2000 Spider ('77 - '79, 4-2-1 manifold, 4.56 diff)	156	5	14x5.5	78
2000 Spider ('75 - '76, 4 into 1 manifold, 4.56 diff)	153	5	14x5.5	78
2000 Spider ('72 - '74, 4-2-1 manifold, 4.56 diff)	160	5	14x5.5	78
1750 Spider	152	6	14x5.5	80
1600 Spider Duetto	144	6	15x4.5	80
1600 Giulia GS4R Zagato	129	6	15x4.5	80
1600 Spider Veloce	147	10	15x4.5	80
1600 Spider (101 Chassis)	135	3	15x4.5	80
1300 Duetto Jr. (Euro)	139	6	15x4.5	80
1300 Spider Veloce	133	9	15x4.5	80
1300 Spider (101 Chassis)	112	0	15x4.5	80

Older Vehicles

2600 Saloon	128	0	16	80
2600 Sprint	130	0	16	80
2600 Spider	128	0	16	80
1900 Saloon (1950)	130	0	16	80
1900 C (1951)	131	0	16	80



2. Modification Points

MODIFICATION	POINTS
<u>ENGINE</u>	
Dual carbs or stock Alfa fuel injection in place of single carburetor	5
Dual Weber 40 carbs in place of fuel injection	0
Larger than stock carburetor(s) (e.g. Weber 45s in place of 40s)	2
Multi-butterfly fuel injection replaces Single butterfly fuel injection	2
Modified or replaced fuel injection (altered Spica pump, Bosch in place of Spica, etc.)	2
Modified ECU (altered inputs, programmable, chipped, etc.)	2
Modified AFM	1
Velocity stacks	1
Cams (cam points = current cam points minus stock cam points, see table below)	*
Radiator fan removed or altered	1
Total Loss electrical system	1
Head Milled .025" - .080"	2
Head Milled .081" or more	4
Intake manifold ported and/or polished	1
Head air passages ported and/or polished	5
Oversized Intake Valves	3
Oversized Exhaust Valves	1
60-degree valve-angle head	10
4-valve 60-degree head	20
Conversion to 24-Valve 3-L V6 from 12-Valve 3-liter V6 (164LS model, but without tubular headers; additional points for tubular headers and 164 Q intake runners, see notes below)	5
164 Q intake runners in place of 164 LS or 12V intake	4
Euro 2-L twin spark replaces classic 2-L (see notes below) (see notes below)	7
Supercharging/Turbocharging (less points for mild boost at discretion of Classification Director)	25
Nitrous Oxide (N ₂ O) injection	8
Non-stock production type pistons up to 10.5 CR (e.g Motronic or higher than stock CR Borgo pistons)	2
Racing pistons including all pistons over 10.5 CR	5
Increased displacement, per 100 cc increment	2
Tubular headers replace cast iron headers	5
Ported, Polished and/or matched port cast iron manifold	1
4-2-1 cast iron manifold replaces 4-into-1 cast manifold	3
Catalytic converter removed	2
Air pump removed	2

Non-stock exhaust ahead of rear axle (including side exit with stock number of expansion chambers)	2
Open exhaust	6
Non-stock flywheel	1
Working air conditioning on cars that did not have it standard	-2

DRIVETRAIN

Non-stock gearbox ratios or gears added	3
5 th gear ratio altered	1
Limited slip added or differential locked	5
Non-stock ring and pinion ratios	3
Track more than 2" over stock	3
Wider than stock wheel rims, per ½"	1
Non-stock wheel diameter	2
Automatic transmission (except modern paddleshift "Selespeed" type)	-6
75 or higher series tires (tire series points = current series points minus stock series points)	0
65 or 70 series	4
55 or 60 series	7
45 or 50 series	10
Vintage racing tires, any profile	5
Street tires with wear rating ≥ 100	0
DOT rated track tires with wear rating < 100 (Example: DOT track tires of 60 series in place of 80 series, is 10 plus 7, or 17 points total)	10
Racing tires (non-street legal tires)	16

SUSPENSION

Non-stock type brake calipers, per end (e.g., 4-pot in place of 2-pot; no points for Ate in place of Dunlop)	1
Non-stock type brake rotors, per end (e.g., vented rotors in place of solid; no points for cross drilled or slotted stock type rotors)	1
Non-stock springs, per end	4
Cut stock springs, per end	2
Non-stock front torsion bars	2
Coil overs added, per end	2
Externally adjustable front shock absorbers (adjustable while mounted to the car; no points for Konis that must be removed for adjusting)	2
Externally adjustable rear shock absorbers (see above)	1
Negative camber (>0.5 deg from stock)	2
Sliding block, Panhard rod, or Watts linkage added	4
Modified front anti-sway bar, bushings and/or mounts	2
Modified or added rear anti-sway bar, bushings and/or mounts	2
Non-stock suspension bushings, per end	1
Non-stock lightweight suspension components (e.g. aluminum T-bar)	1

BODY AND INTERIOR

Windshield removed or altered (Note: Only Lexan® allowed as replacement for glass)	2
Bumper removed, per end	1
Impact bumper replaced by non-Impact Alfa bumper, each	1
Impact bumper removed, each	2
Car lowered >2" from stock	4
Lightened interior, up to 20 lbs	0
Lightened interior, 20 up to 60 lbs	2
Gutted interior, 60 or more lbs	4
Aerodynamic device, each	2
Lightweight body panels, each (fenders and doors per pair)	1
Plastic or removed windows, each (side windows per pair)	1



Cam Points Table

Cam Type	Lift (mm)	Deg @ 0.050"	Shankle Rating	Part Number	Points
<u>4-cylinder cams</u>					
1300 Normale	8.6	217	1	101000320000	0
1600 Normale, 1600 early 105	9.1	219	2	105020320000	3
2000 USA	9.6	222	3	105200320000	5
2000 USA Variable	9.6	222	3	105200320000	6
1600 late 105, 1300 105, 1750 early Euro	9.5	226	4	105020320001	6
1750 Spica					
1750 late Euro, 2000 Euro	10.1	230	5	105480320001 Shankle AL 6205	8
1300 Veloce	9.0	245	6	101060320000	9
1600 Veloce	9.5	245	7	101210320000	10
“Street Spica”, “Street VCT”, “Street Bosch”	10.7, 10.9	240, 245	7L	Shankle AL 5417/ 5417A, AL 5419/5419A AL 5404	10
“Fuel Injection Performance”	11.0	240-252	8L	115010320032 Shankle AL 5418A, Colombo & Bariani CB 47, Alfa Group 1	12
“Carbureted Performance”	11.0	252	8	IAP Catalog; 100 deg overlap	13
“Street Bosch”	11.7	252	8	Shankle AL 5442	14
12 mm “TT”	12.0	254	9	Shankle AL5408A	14
10.6 “Racing”	10.5 to 10.6	265	10	101210320001 Shankle AL5410/A15410A	15
12 mm “hot street”	12.0	264	10	Shankle AL 5406, Kent JK 303	15
12 mm “hot street”	12.0	274	11	Kent ZL-1	15
11 mm “racing”	11.0 to 11.3	280	12	Colombo & Bariani CB54, Profilo 11C3, Colombo & Bariani 11.3A, Alquati A35-1	17
12.5 mm “racing”	12.5	268	13L/13	Shankle AL 5413,	19

<u>V-6 cams</u>					
Stock V-6 (GTV6, Milano, 164L)	9.1	228	4	60523305/306	6
164S	10.1	235	4	60534721/722	8
		(intake)			
“Time Trial”	9.5	245	7	Shankle AL 6216	10
		(intake)			
“Street/Time Trial”	10.5	242	7L	Shankle AL 5402	12
		(intake)			
“Race”	11.5	284	13	Shankle AL 5403	19
		(intake)			
<u>Twin Spark cams</u>					
“Stock Twin Spark”	11.5/9.8	252/246*	na	na	8
“Hot Street”	12.1/9.5	280/270	na	C & B ARTS	10
				121.280 S	
“11.4 Race”	11.4	294	na	C & B ARTS	14
				114.294 C	
“11.5 Race”	11.5	302	na	C & B ARTS	16
				115.302 C	

* Duration is at 1 mm; other durations in table are based on seat timing.

Notes:

1. Twin spark (TS) conversion: Take the recipient car’s base points minus its stock cam points, then add 7 points for the TS conversion plus points for the cams installed in the TS engine. Starting with a 1974 GTV, this would be $162 - 5 + 7 + 8 = 172$ assuming the stock TS cams. Other modification points would be added as usual.
2. Conversion from stock 2.5-liter GTV6 or Milano engine to stock 3-liter Milano Verde engine is 10 points for the 500 cc displacement increase. Conversion from a Milano Verde 3-liter engine to a 164S 3-liter engine adds 4 points, 2 for the high compression pistons and 2 for the 8 point cams in place of the 6 point cams.
3. Conversion of a 164S V6 (3-liters, 12-valves) engine to a 164 LS V6 (3-liters, 24-valves) engine, but maintaining cast iron headers and 6-point cams, is 5 points. Adding tubular headers would add 5 points, and 164Q intake runners, 4 more points. The total conversion from 164S engine to 164Q engine, including tubular headers and 164Q intake runners, is 14 points.

Appendix D

Non-Alfa Classification

The Director of non-Alfa classification is responsible for classifying all non-Alfas entered in Time Trials and Races. To do this he uses information provided on entry forms along with personal observation at the track. The classifications are based on weight-to-power ratio with corrections for tires and suspension modifications. The steps are as follows:

- 1) Calculate the raw weight-to-power ratio in pounds per horsepower (lbs/hp) using:
 - a) Estimate the hp at the flywheel
 - i) Use no values less than entrant has previously stated
 - ii) Use no values less than known stock hp
 - b) Estimate the vehicle weight less driver/fuel
 - i) Use no values greater than entrant has previously stated
 - ii) Use no values greater than known stock weight
- 2) Adjust this number as follows for tire selection:
 - a) Subtract 1.0 lb/hp for slicks
 - b) No adjustment for race DOT tires (most competitors are using these)
 - c) Add 2.0 lbs/hp for street tires
- 3) Adjust the above number as follows for suspension modifications from stock:
 - a) No adjustment for stock suspension (OEM w/o modification)
 - b) Subtract 0.5lbs/hp for modified suspension (non-OEM shocks, springs, bushings, bars, and/or camber/caster plates)
 - c) Subtract 1.0 lbs/hp for major suspension modifications (modified suspension geometry)
- 4) Subtract 2.0 lbs/hp for purpose-built race cars.
- 5) Add 1.0 lb/hp for automatic transmission (except for paddle shift)
- 6) Class structure is based on lbs/hp after the above adjustments:

<u>Class</u>	<u>Adjusted Weight/Power and Description</u>
K	Less than 8.0 lbs/hp and less than 3.0 Liters (183 cu in) engine displacement
L	Less than 8.0 lbs/hp and over 3.0 Liters engine displacement
M	8.0 to 10.0 lbs/hp
N	10.01 to 12.0 lbs/hp
O	12.01 to 13.99 lbs/hp
P	14 to 19.99 lbs/hp
Q	20 or more lbs/hp



Appendix E

Flags Definition and Action

YELLOW, STATIONARY	CAUTION: Proceed with caution. NO PASSING.
YELLOW, WAVING	EXTREME CAUTION: NO PASSING , Be prepared to stop.
YELLOW/RED STRIPED	SURFACE CONDITION: Track may be slippery ahead, often from oil spilled. (May be displayed only two laps per incident.)
BLUE/YELLOW DIAGONAL	PASSING: Be aware that a car may be passing you. In practice sessions, be courteous and give them a point-by.
WHITE	Slow moving or emergency vehicle on course. Pass it very carefully. This may also be used during the first two laps of practice to designate flag stations.
GREEN	START: Used to start race or session. Go, the track is clear.
CHECKERED	End of event or session, come in at the end of the lap.
BLACK, FURLED	Attention! You drove unsafely or broke a rule. Don't come in.
BLACK, OPEN	Infraction. You are wanted in the pits. Return to the pits at the end of the lap. You may have driven unsafely or broken a rule. Come in to BLACK FLAG STATION or talk to official at Start/Finish.
BLACK, WAVING	See RED FLAG

BLACK/ORANGE BALL

MECHANICAL: Reduce speed, get off the racing line and return to the pits. You may have a mechanical problem with your car. Talk to official at Start/Finish.

RED

EMERGENCY STOP, safely and immediately at Start/Finish! Pull over and wait for further instructions. A **WAVING BLACK** flag will be displayed at all corners to identify this condition.

Disregarding these flags may cause revocation of your license and/or barring from future events.



NOTES AND REVISIONS

