

AROSC

(Alfa Romeo Owners of Southern California)

COMPETITION CODE

January 1, 2010



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Competition Code

1.0 Competition Categories and Eligibility

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
- 3) Concours
- 4) Rally
- 5) Autocross

In order to promote safe driving, driver training in the form of Driver Education and Track Introduction (Intro) run groups and Driving Schools will be held in addition to the competition activities.

Some basic eligibility rules:

- 1) AROSC events are open to anyone whether or not they are an AROSC member, and driving any type of car. There is one exception: in Concours AROSC members can enter non-Alfas into AROSC Concours, and non-AROSC members can enter Alfas, but non-members cannot enter non-Alfas.
- 2) AROSC members may be allowed a discount on entry fees.
- 3) AROSC competition events are open only to cars (i.e., no motorcycles or three-wheeled vehicles). For exceptions contact the Competition Director or Event Director for that event.

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 on the Time Trial, Race and Driving School mailers and at the website (www.aroschpd.org).

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) Adjudicate disputes on and off the track.

2.2 Time Trial and Race Activities

2.2.1 Time Trial Director

The Time Trial Director shall have the following responsibilities:

- 1) Select venues for time trials and races
- 2) Ensure all safety requirements are met
- 3) Appoint an Event Master for each time trial
- 4) Designate the following positions for each year (positions may be added or deleted as needed). The Time Trial Director has the power of approval over any appointments made by other Directors listed below, 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
 - j) Director of Licensing
 - k) Director of Special Events
 - l) Director of Workers
 - m) Director at Large
 - n) Race Director (may be combined with Time Trial Director)

2.2.2 Race Director

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

The Race Director, or his delegate, has the following responsibilities:

- 1) Determine eligibility and approve all drivers entering each race.
- 2) Determine grid order.
- 3) Approve Race Licenses (list to be maintained by Director of Licensing).

2.2.3 Director of Safety & Tech Inspection

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.

2.2.4 Director of Instruction

The Director of Instruction or his delegate shall:

- 1) Maintain a list of active instructors
- 2) Organize and direct AROSC driving schools
- 3) Teach novice class during Time Trials
- 4) Supervise unlicensed drivers at the track during Time Trials
- 5) Approve Time Trial licensing (list to be maintained by Director of Licensing)
- 6) Appoint an Event Master for each Driving School

- 7) Provide lists of entrants, with addresses and contact information, to the Director of Registration.

2.2.5 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:

- 1) Competition Director
- 2) Time Trial Director
- 3) Director of Instruction
- 4) Director of Safety and Technical Inspection
- 5) Race Director

2.3 Concours Director

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 and present awards
- 4) Publish results of each Concours
- 5) Provide Year End standings to the Competition Director

2.4 Rally Director

The Rally Director responsibilities include:

- 1) Schedule, determine venues, and announce Rallies
- 2) Appoint a Rally Master for each Rally
- 3) Procure and present awards
- 4) Publish results of each Rally
- 5) Provide Year End standings to the Competition Director

2.5 Autocross Director

The Autocross Director responsibilities include:

- 1) Schedule, determine venues, and announce Autocrosses
- 2) Appoint an Event Master for each Autocross
- 3) Procure and present awards
- 4) Publish results of each Autocross
- 5) Provide Year End standings to the Competition Director

3.0 Track Events

Track events include the following sub-events: Time Trials (TT), Race Group, Driver Education (DE), Intro Group and Driving Schools.

3.1 Event Master

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) at a time after the event, but before the next scheduled Time Trial.
- 5) The Event Master is responsible for the smooth execution of all parts of the event.

3.2 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 must be properly oriented for safety and flagging procedures.
 - f) If the event includes a race, an ambulance must also be present.
- 2) Minimum Vehicle and Personal safety equipment appropriate the each event shall be in effect.
- 3) It is each driver's responsibility to note any drug sensitivities at Registration.

3.4 Safety Inspection

See Section 3.4.

- 1) All vehicles must pass a safety inspection before being allowed on the track. The inspection must be performed by an AROSC certified inspector and it must include 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.
- 2) The results of the safety inspection must be recorded on Tech Inspection form and filed with the Director of Registration before the car will be allowed on the course.
- 3) If, in the opinion of the Director of Safety and Tech Inspection, an entrant's car does not pass the vehicle safety inspection when it arrives at an event, the car will not be allowed to run in the event until the safety deficiency has been corrected and the car re-inspected. This action will be subject to the concurrence of the Time Trial Director or Event Master.

3.5 Passengers

Passengers are allowed in limited situations. These are:

- 1) **Time Trials:** Licensed Time Trial drivers can take passengers on track during Time Trial practice sessions. This is for instructional purposes only; the driver will be considered an instructor during this period. The passenger safety equipment must meet the same safety requirements as the driver's safety equipment (see Section 3.9.2). The passenger must:
 - a) Sign AROSC's waiver
 - b) Be issued a wristband
 - c) Be over 18 years old (if under 18, a parent or guardian must be present and provide written consent)
 - d) Hold a valid California Driver's License or equivalent.
- 2) **DE:** DE instructor/Student combinations are allowed passenger situations in DE Group. No other combinations are allowed.
- 3) **Intro Group:** Instructor/Student combinations are allowed passenger situations in Intro Group. No other combinations are allowed.

- 4) **Race Group**: No passengers are allowed in Race Group, during any practice session or race of any type.

3.6 Driving Infractions

Automobile racing is a dangerous sport and accidents will occur. The AROSC maintains a high level of safety standards and sportsmanlike conduct. AROSC has adopted the industry-standard 13/13 Rule to set the tone for sportsmanship and camaraderie within our competition program and to minimize the danger and expense involved in club racing.

- 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) AROSC will employ a "Modified 13/13 Rule", meaning any driver involved in car-to-car contact will likely be placed on probation from anywhere between 4 races to 13 months. Should the driver be involved in another incident resulting in car-to-car contact during the probation, he or she will be suspended for 13 months and forfeit any points accumulated. Sanctions for drivers found to be at fault will be imposed by officials on a sliding scale subject to the discretion of the officials. Drivers in single car incidents will not be subject to sanction under the Modified 13/13 rule. The Modified 13/13 rule can also be applied to a driver whose on-track conduct causes damage to another driver's car even if there was no physical contact between the cars. The Modified 13/13 rule can be applied post event as it is not always possible to determine fault at the track in a timely manner. Penalty decisions will be heard by the Executive Committee. Regardless of the length of the penalty, no penalty is over until the driver participates in at least one AROSC event while subject to the penalty.
- 3) Any driver involved in an on track incident causing visible damage to their or another driver's car must report shall immediately exit the track during the session and report first to Start Finish, then to the Event Master with the car (if drivable). Any competitor, after having been in an incident, who fails to immediately exit the track and report to the Black Flag Station or leaves the event without talking to the Event Master, shall be presumed to be at fault and will be subject to a 6 to 13 month probation penalty in addition to any other penalty assessed as a result of the incident (thus, the total probation penalty could be as high as 26 months).
- 4) Non-13/13 penalties may be imposed for conduct not resulting in car damage. These penalties are intended to emphasize the driver's focus on safety and good sportsmanship which are the tenets of the AROSC Competition Program. Examples of such conduct include:
 - a) Passing under a yellow or red flag
 - b) Blocking in a race
 - c) Technical, Licensing, Competition or Event rules infraction
 - d) Unsportsmanlike conduct (on or off the track)
 - e) Reckless and dangerous driving or behavior

These penalties are at the discretion of the Event Master and may include finishing position reduction, overall time penalty, lap(s) penalty, starting grid position, disqualification, and refusal of further event participation.

- 5) Drivers are responsible for their guests and crew. Inappropriate actions by guests or crew can result in a penalty for the driver.
- 6) 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.

- 7) In DE, the options are as follows:
 - a) Reject the student's Solo Permit.
 - b) Cause the student to sit out a session.
 - c) Cause the student to sit out the rest of the day.
 - d) Cause the student to sit out the rest of the weekend.
 - e) Ask the student not to return to our events.
- 8) 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 13/13 sanctions on the driver or drivers as described above.
 - 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.
- 9) The decision of the Executive Committee is final.

3.7 Protests

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

3.8 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. Race group shall be its own run group and it shall include only those cars and entrants qualified for racing.

3.9 Time Trials (TT)

3.9.1 TT Driver Eligibility

In order to enter the TT Run Group a driver must have:

- 1) Have a valid California Driver's License or its equivalent,
- 2) Have or be an applicant for a current AROSC Time Trial License and,
- 3) 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 all times during the event.

3.9.2 TT Minimum Safety Requirements

- 1) **Vehicles** require the following as minimum safety equipment:
 - a) Driver restraint system with a current SFI 16.1 or SFI 16.5 certification or current FIA 8853/98 (C-xxx.T/98 or D-xxx.T/98) homologation number is required.
 - i) Tags showing this must be attached to the harnesses. All harness must be mounted according to manufacturer specifications. At a minimum this means it must be attached to a frame member, a roll bar, or a body panel that has been adequately reinforced with a spreader plate.
 - ii) No harness shall be attached to the car seats or seat rails.

- iii) Any straps which have been subject to the stress of a severe impact or which show deterioration because of age may be destroyed at the track by the Director of Safety & Technical Inspection or the Event Master.
- b) Roll Bars are required for all open cars and recommended for all Time Trial cars. For minimum Roll Bar specifications see Appendix 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
- c) Cockpit mounted 2.5 lb. automotive BC fire extinguisher, easily accessible to the driver and properly charged.
- d) Scatter shields are advised on all cars and required when modified flywheels are used. Lightened iron flywheels are not recommended.
- e) Windshields must be safety glass or polycarbonate (Lexan® or equivalent). If polycarbonate is used, it must be at least 0.125 inches thick and be attached with adequate support.
- 6) Wire wheels are in general not allowed. See the Director of Safety and Technical Inspection.
- f) Safety wiring drain plugs and oil filters is highly recommended.
- 2) **Drivers** require the following as minimum safety equipment:
 - a) Helmet with a SNELL 2000 or newer sticker (M or SA is acceptable).
 - i) Starting in the year 2010 we will require SNELL 2005 or newer 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.
 - ii) 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.
 - iii) It is highly recommended that helmets carry a SNELL SA rating.
 - iv) DOT rated helmets are not acceptable unless the helmet also carries the appropriate SNELL sticker as well.
 - b) Shatter resistant eye protection in a closed car and a full-face shield in an open car.
 - c) 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. Non-perforated gloves of leather or fireproof material are required. SFI or FIA rated clothing is recommended.

3.9.3 TT Safety Inspection

See Section 3.4.

3.9.4 TT Car Identification

Cars are identified in two ways:

- 1) An identification or car number (provided at the time of “at track” registration) shall be firmly affixed to each side of his/her car. These numbers must be clearly visible (dark numerals on a light background or vice versa). It is the responsibility of the entrant to have his/her car numbers properly and clearly displayed.
- 2) An AMB transponder is required for timed runs. A driver without a transponder will be allowed to “run for fun” but no time will be recorded for competition purposes.

3.9.5 TT Track Activity

- 1) Passing is only allowed in safe passing zones designated by the Event Master. These zones will be identified in the drivers meeting on the day of the event.
- 2) It is the responsibility of the overtaking driver to make a safe pass.
- 3) Passing shall always be on the left for time trialing.
- 4) Drivers are highly encouraged to give a "Point-by" using hand signals.
- 5) These rules apply during timed runs as well as during practice.

3.9.6 TT Competition

- 1) Transponder timing will be used when there is a detection loop present and accessible in the track at Start/Finish.
- 2) If there is no transponder detection loop or if the transponder timing equipment fails, manual backup will be used and taken as the official time. If manual timing is used, lap records will not be considered.

3.9.7 TT 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 is at the discretion of the Director of Licensing with concurrence of the Director of Instruction.
- 2) Novice Drivers/Entrants:
 - a) A Novice driver is any entrant who does not have an AROSC Time Trial License.
 - b) Novices must attend Novice classes which are 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.

3.9.8 TT Event Awards

- 1) There shall be separate classification systems for Alfas, including Alfa-powered cars (see Appendix C for classes), and non-Alfas (see Appendix D for 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.
- 4) There will be honorable mention, but no separate trophy or year-end points awarded, for Top Time of Day (T.T.O.D.) in the Time Trial.

3.10 Race

3.10.1 Race Driver Eligibility

Eligibility requirements are the same as for TT (see Section 3.9.1) plus the driver must meet one of the following conditions:

- 1) hold an AROSC Time Trial License and complete an AROSC Race School,
- 2) hold an AROSC Race License or,
- 3) be approved by the Director of Racing.

3.10.2 Race Minimum Safety Requirements

- 1) **Vehicle safety** items required for race cars include all those identified for Time Trial cars (Section 3.9.2) plus the following:
 - a) 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.
 - b) Open Race cars must have arm restraints. Closed Race cars must have either a driver’s side window net or arm restraints.
 - c) Catch tanks on radiator and oil breather must be installed.
 - d) Wire wheels are not allowed on Race cars.
- 2) **Driver safety** items required for race cars include all those identified for Time Trial cars (Section 3.9.2) plus the following:
 - a) The helmet must be a full coverage SNELL SA2000 (or newer) rated helmet.
 - i) Starting in the year 2010 we will require SNELL 2005 or newer 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.
 - ii) 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.
 - b) Clothing:
 - i) A driver is required to wear a suit that covers his or her entire body except for hands, feet, and head, plus gloves, shoes and a helmet.
 - ii) Driving suits shall carry an SFI 3.2A/3 rating or higher (3.2A/5, 3.2A/10, 3.2A/15, or 3.2A/20) or FIA 8856-2000 Alternatively, a suit carrying an SFI 3.2A/1 rating may be worn in conjunction with long underwear which carries an SFI 3.3 or FIA 8856-2000 approval rating. A one piece suit is very highly recommended.
 - iii) Drivers must wear gloves which carry an SFI 3.3/5 or higher rating.
 - iv) Drivers with long hair or facial hair must wear a head sock of made of Nomex® or equivalent fire retardant material.
- 3) Additional safety equipment, recommended but not required, includes:
 - a) External electric system cutoff switch
 - b) Fuel cell
 - c) Proper racing seat
 - d) Helmet Support
 - e) Fire System

3.10.3 Race Safety Inspection

See Section 3.4.

3.10.4 Race Car Identification

Car identification requirements are the same as for Time Trial (see Section 3.9.4).

3.10.5 Race Track Activity

- 1) Passing will be allowed in practice sessions and in the actual races. It is the responsibility of the overtaking driver to make a clean, safe pass.
- 2) Drivers must drive in a safe and courteous manner. Clear hand signals are highly recommended.
- 3) Overly aggressive driving will not be tolerated.
- 4) There will generally be two races, a grid race on Saturday and a final event on Sunday.
- 5) If there are six or more Alfas entered in the Race, and if time permits, the Alfas may be run separately in an Alfa-only "Alfa Cup" race.
- 6) Grid order is to be determined by the Race Director or his delegate.
- 7) Generally the starting order of the Final Race will be the finishing order of the Grid Race.
- 8) Races will use a rolling start. A pace car is recommended.

3.10.6 Racing Licenses

- 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) An AROSC Racing License will not be provided until the applicant successfully completes one race without incident.
- 3) Novices (defined as first time or non-AROSC Race 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.
- 4) Novices must be cleared by the Director of Racing before they may run in race group practices or actual races. Novices should contact the Director of Racing directly for clearance.

3.10.7 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) A car will be given a "Did Not Start" (DNS) if it does not cross the Start/Finish line to the start of the race. A DNS does not count toward nor is it eligible for event trophies. However, a DNS will count toward Year End Awards (Appendix B) if event count must be used to break a tie for position.
- 3) A car will be given a "Did Not Finish" (DNF) if it does not complete at least one half the number of race laps completed by the overall race winner. A DNF counts in determining the number of entries in a Class but it is not eligible for an event award. However, a DNF position will be assigned based on the time the car last crosses Start/Finish, and points will be awarded accordingly, towards Year End Awards (Appendix B).
- 4) Awards will be given according to the same rules as Time Trial cars.

3.11 Driver Education (DE) Group

Driver Education (DE) is a noncompetitive track activity designed to provide people unfamiliar with track driving with a track experience in a highly controlled environment. It is run at all track events when time is available. It is run under the following rules:

- 1) DE Group will be run in its own group.
- 2) DE Group drivers will be required to attend special classroom sessions prior to going on track.

3.11.1 DE Group Driver Eligibility

Same as for TT Group (see Section 3.9.1).

3.11.2 DE Group Minimum Safety Requirements

- 1) **Vehicle safety** requirements for DE Group are essentially limited having a safe street legal vehicle. This means:
 - a) DOT acceptable 3-point seatbelts are sufficient.
 - b) The car must have good/safe tires and be in sound condition.In addition, however,
 - c) Roll bars are required for open cars, and
 - d) Wire wheels are in general not allowed (contact the Director of Safety and Technical Inspection if there are questions).
- 2) **Driver safety** requirements are the same as for TT (see Section 3.9.2)

3.11.3 DE Group Safety Inspection

See Section 3.4.

3.11.4 DE Car Identification

Same as for TT Group (see Section 3.9.4), except that the Transponder is not required.

3.11.5 DE Group Track Activity

- 1) No passengers are allowed in DE Group other than Student/Instructor combinations.
- 2) Passing is allowed in DE Group in pre-specified locations on the track but only with a point-by from the driver being passed. The pre-specified locations will be identified in the Driver's Meeting. In all cases, the passing car must pass on to the left of the car being passed and a point-by must be issued by the driver being passed. Consistent failures to issue point-bys will result in disciplinary action.
- 3) No competition or timing is allowed in DE Group.

3.11.6 DE Solo Permits

Once a DE Driver satisfies his/her assigned Instructor that they are safe and capable on the track, they shall go to the tower where the Event Director will issue a Solo Permit to the Driver. The Driver will also be issued a windshield sticker which allows solo operation in the DE Run Group.

3.12 Intro Group

Intro Group is a noncompetitive track activity designed to provide people unfamiliar with track driving with a track experience in a highly controlled environment. It is run at track events when time is available.

3.12.1 Intro Group Driver Eligibility

Same as for TT Run Group (see Section 3.9.1), except drivers need not be an applicant for an AROSC Time Trial license.

3.12.2 Intro Group Minimum Safety Requirements

- 1) **Vehicle safety** requirements for participation in the Intro Group are the same as for the DE Run Group (see Section 3.11.2) except that roll bars are not needed in open cars.
- 2) **Driver safety** requirements are the same as for TT Group (see Section 3.11.2) except that a one stage older SNELL rated helmet (95 vs. 2000 at present) is acceptable.

3.12.3 Intro Group Safety Inspection

Same as for TT Group (see Section 3.9.3).

3.12.4 Intro Group Track Activity

Intro Group is run 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 prior to going on track.

4.0 Driving Schools

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

4.1 School 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

4.2 Run Groups/Classes

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

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

At the discretion of the School Master, two of these run groups may be combined.

4.3 Minimum Safety Requirements

- 1) Street Performance School safety requirements are the same as DE Run Group (see Section 3.11) with the following exception:
 - a) Open cars must have some form of rollover protection (roll bar). It can be a “street” roll bar without a diagonal brace or a factory-installed “pop-up” roll bar.
- 2) Novice and/or Advanced Time Trial School safety requirements are the same as for a regular Time Trial event (see Section 3.5).
- 3) Race School safety requirements are the same as for a regular Race event (see Section 3.10).

4.4 Driver Eligibility

- 1) For Street Performance and Novice Time Trial, same as for Time Trial (see Section 3.9.1).
- 2) For Advanced Time Trial, AROSC TT License or equivalent experience (check with School Master)
- 3) For Race, AROSC TT License and some TT Experience (check with School Master)

4.5 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 Concours

AROSC will conduct a series concours' during the calendar year. The type will be at the discretion of the Concours Director. The scoring system must be published in advance of the event if it differs from the one defined herein.

5.1 Judging

A Judging panel shall be appointed by the Concours Director. 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. Decisions concerning Code changes will be made by the AROSC Board of Directors in concurrence with the Competition Board and will be carried out by the Concours Director.

In the event of a tie vote by the judges, the older car shall win.

5.2 Categories

Typically cars will be grouped into the following categories:

- a) Closed (hard top)
- b) Open (convertible)
- c) Competition Prepared
- d) Daily Driver (should be a primary source of transportation or at least secondary)
- e) Classic, Rare and Special Bodied
- f) Non-Alfas

All categories are for Alfa Romeos only, unless otherwise noted. If there are sufficient cars additional categories (including non-Alfa categories), categories may be added at the discretion of the Concours Director.

5.3 Scoring

Scoring in each category shall be based on a 100 point system (see Appendix F) which incorporates four areas, each with a maximum point value. The Judges shall deduct points at their discretion.

5.4 Awards

Awards shall be given in each category as follows: 1 entrant – no award; 2 or 3 entrants - 1 award; 4 to 6 entrants - 2 awards; 7 or more entrants - 3 awards.

A People's Choice Award shall be made to the car selected by popular vote of attendees

Any protest must be submitted in writing to the Concours Director within one hour of the awards ceremony. Protests will be decided by the AROSC Concours Director; the decision will be final.

6.0 Rallies

6.1 Rally Format

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

6.2 Rally Master

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.

6.3 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

6.4 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.

7.0 Autocross

7.1 Event Master

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

- 1) Arrange for venue.
- 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.

7.2 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 4.3.1).

7.3 Classes

Cars shall be classified the same way as for Time Trials (see Appendix C and Appendix D).

7.4 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.
 - a. 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 recommended.

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 as 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) 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.
- 2) 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.
- 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 (including Enduros), and Autocross: 1st - 9, 2nd - 6, 3rd - 4, 4th - 3, 5th - 2, 6th - 1. Double points will be awarded for Enduros when more than one driver participates. These will be split evenly between the drivers.
 - 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.
- 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. 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.
- 9) An Entrant must compete in at least two events in a Class in order to receive an award in that Class.

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, and only if there were two or more entrants in that class (i.e. the sole entrant in a class cannot win the year-end championship).
- 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, 4-cylinder
F	161 to 170	Z	Formula or S/R over 4 cylinders

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
Sedans				
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	167	6	15x6	55
Milano Silver or Gold	162	6	14x6	60
2000 Alfetta Sedan ('77-'79 , 4-2-1 exhaust manifold)	150	5	14x5.5	70
2000 Alfetta Sedan ('75-'76 , 4-into-1 exhaust manifold)	147	5	14x5.5	70

2000 Berlina ('72-'74)	140	5	14x5.5	80
1750 Berlina	128	6	14x5.5	80
1600 TI. Super (Euro)	150	10	15x4.5	80
1600 Giulia Super	127	6	15x4.5	80
1600 Giulia TI	112	3	15x4.5	80
1300 Giulietta TI (Euro)	99	0	15x4.5	80
Coupes				
2600 Montreal (Euro)	185	0	14x5.5	70
GTV6 2.5 (3.42 Differential, '82-'83)	165	6	15x6	60
GTV6 2.5	168	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	152	6	14x5.5	78
1600 Junior Zagato (Euro)	140	6	14x5.5	80
1600 GTZ (Stradale)	180	10	15x4.5	80
1600 GTA (Stradale)	169	6	15x4.5	80
1600 Sprint Veloce & Speciale	149	10	15x4.5	80
1600 Sprint GT/GTV	144	6	15x4.5	80
1600 Sprint (101 Chassis)	135	3	15x4.5	80
1300 Junior Zagato (Euro)	131	6	14x5.5	80
1300 GT Jr. (Euro)	136	6	15x4.5	80
1300 GTA (Euro) (Stradale)	158	6	14x5.5	80
1300 Sprint Speciale	133	9	15x4.5	80
1300 Sprint Zagato (Euro)	132	9	15x4.5	80
1300 Sprint Veloce	130	9	15x4.5	80
1300 Sprint (101 Chassis)	109	0	15x4.5	80
Spiders				
2000 Spider Quadrifoglio	153	5	15x6	60
2000 Spider ('91 & up Motronic)	154	5	15x6	60
2000 Spider ('82 - '91, Single butterfly SPICA, 4.10 rear, 4 into 1 manifold)	154	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	150	6	14x5.5	80
1600 Spider Duetto	142	6	15x4.5	80
1600 Giulia GS4R Zagato	127	6	15x4.5	80
1600 Spider Veloce	145	10	15x4.5	80
1600 Spider (101 Chassis)	133	3	15x4.5	80
1300 Duetto Jr. (Euro)	134	6	15x4.5	80

1300 Spider Veloce	128	9	15x4.5	80
1300 Spider (101 Chassis)	107	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
Engine	
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 (see notes below)	4
Euro 2-L twin spark replaces classic 2-L (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 for an engine swap**	3
Increased displacement, per 100 cc increment with no engine swap	1
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
5th 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 1/2"	1
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
35 or 40 series	13
Vintage racing tires, any profile	5
Street tires with wear rating > 100	0
DOT "R-rated" track tires or tires with a 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
Non-stock shocks	-

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
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: Subtract stock cam points then add back in points from table below.

** Engine Swaps: An engine swap is assumed to be one involving no change in the number of cylinders. If the swap involves a change in the number of cylinders, contact the Alfa Classification Director for a modification points assessment.

Cam Points Table

Cam Type	Lift (mm)	Deg @ 0.050"	Shankle Rating	Part Number	Points
4-cylinder cams					
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	5
1600 late 105, 1300 105, 1750 early Euro 1750 Spica	9.5	226	4	105020320001	6
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/AI5410A	15
12 mm “hot street”	12.0	264	10	Shankle AL 5406, Kent JK 303	16
12 mm “hot street”	12.0	274	11	Kent ZL-1	17
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, AL 5414	19
V-6 cams					
Stock V-6 (GTV6, Milano, 164L)	9.1	228 (intake)	4	60523305/306	6
164S	10.1	235 (intake)	4	60534721/722	8
“Time Trial”	9.5	245 (intake)	7	Shankle AL 6216	10
“Street/Time Trial”	10.5	242 (intake)	7L	Shankle AL 5402	12
“Race”	11.5	284 (intake)	13	Shankle AL 5403	19
Twin Spark cams					
“Stock Twin Spark”	11.5/9.8	252/246*	na	na	8
“Hot Street”	12.1/9.5	280/270	na	C & B ARTS 121.280 S	10
“11.4 Race”	11.4	294	na	C & B ARTS 114.294 C	14
“11.5 Race”	11.5	302	na	C & B ARTS 115.302 C	16

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

Notes:

1. Engine swap points (3 per 100 cc's or part there of) include any changes which result from valve size, compression ratio and/or intake system (two 40mm Webers is equivalent to stock fuel injection), etc., of the stock replacement engine. Cams are treated separately.
2. 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.
3. Conversion from stock 2.5-liter GTV6 or Milano engine to stock 3-liter Milano Verde engine is 15 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.
4. 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 (lb/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 (lb) 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 or non-DOT rated race tire
 - b) No adjustment for DOT rated race tires (R/race-compound tires or tires not recommended for street use as per the manufacturer) or street tires with a treadware rating of less than 200.
 - c) Add 2.0 lb/hp for street tires (treadware rating of 200 or greater)
- 3) Adjust the above number as follows for suspension modifications from stock:
 - a) No adjustment for stock suspension (OEM w/o modification, adjustments within the manufacturer's limits are acceptable)
 - b) Subtract 0.5lb/hp for modified suspension (non-OEM shocks, springs, bushings, bars, and/or camber/caster plates)
 - c) Subtract 1.0 lb/hp for major suspension modifications (non-OEM lightweight parts, parts which modify suspension geometry or "off-the-shelf" OEM race parts as per the manufacturer's description)
- 4) Subtract 2.0 lb/hp for purpose-built race cars (tube frame cars or cars not originally manufactured and sold for street use, Ferrari Challenge cup cars for example.
- 5) Add 1.0 lb/hp for automatic transmission; subtract 0.5 lbs/hp for paddle shift (automated manual transmission).
- 6) Class structure is based on lbs/hp after the above adjustments:

Class	Points (lb/hp)	
	From	To
K*	0	<8
L*	0	<8
M	8	<10
N	10	<12
O	12	<14
P	14	<20
Q	20	>20

* Engine displacement < 3 Liters (183 cu in)

** Engine displacement >= 3 liters (183 cu in)

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 clear.

CHECKERED End of event or session.

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.

Appendix F

Concours Judging

(see following AROSC CONCOURS SCORING FORM)

AROSC CONCOURS SCORING FORM

Category _____ Date _____
 Exhibitor _____
 Make _____ Model _____
 Year _____ Color _____
 Judges _____

TOTAL	_____
Exterior	_____
Interior	_____
Eng./Drive Train	_____
Function	_____

EXTERIOR (40 pts max)

PAINT - 10 pts less deductions for: _____
 Scratches [], Chips [], Paint Touch Up [], Dirt [], Non Period Color []. _____

BODY PANELS - 10 pts less deductions for: _____
 Doors do not open and/or close properly [], Body panels not aligned [],
 Trunk does not open and/or close properly [], Dents and/or dings [],
 Hood does not open and/or close properly []. _____

TRIM - 10 pts less deductions for: _____
 Poor alignment [], Scratches [], Not period correct [], Dirt [],
 Missing badges and/or script []. _____

GLASS - 10 pts less deductions for: _____
 Scratches [], Chips [], Dirt []
 Open cars tops & rear windows functional and period correct [],
 tears [], dirt [], scratched or cloudy rear window []. _____

Exterior Total _____

INTERIOR (20 pts max)

DASH, CONSOLE, STEERING WHEEL – 5 pts less deductions for: _____
 Cracks [], Scuffs [], Dirt [], Not period correct [], Missing parts []. _____

CARPET, HEADLINER, SEATS – 5 pts less deductions for: _____
 Cracks [], Scuffs [], Dirt [], Not period correct [], Missing parts []. _____

DOOR PANELS, WINDOW TRIM, DOOR PULLS, RELATED HARDWARE – 5 pts less deductions for: _____
 Cracks [], Scuffs [], Dirt [], Period correct [], Missing parts []. _____

TRUNK INTERIOR, CARPET OR MATS, TOOLS, JACK, SPARE TIRE – 5 pts less deductions for: _____
 Clutter [], Stains [], Tears [], Missing items [], Not period correct []. _____

Interior Total _____

AROSC CONCOURS SCORING FORM

CAR _____ EXHIBITOR _____

ENGINE AND DRIVE TRAIN (20 pts max)

ENGINE BAY, RADIATOR, ELECTRIC COMPONENTS, PAINT – 5 pts less deductions for: _____
Dirt [], Paint color [], Paint chips [], Missing components [], Loose wires [],
Not period correct [].

ENGINE IS CORRECT, ORIGINAL INTAKE AND EXHAUST – 5 pts less deductions for: ---- _____
Dirt [], Fluid leaks [], Non-period modification and/or aftermarket parts [].

UNDERCARRIAGE – 5 pts less deductions for: ----- _____
Leaks, grease or oil splatter [], Non period correct modification and exhaust [].

WHEELS AND TIRES – 5 pts less deductions for: ----- _____
Wrong tire size [], Non-period correct wheels (including hub caps) [], Scrapes [],
Dirt [] (exception will be made for tire treads if concours is held on grass).

Engine & Drive Train Total _____

FUNCTION (20 pts max)

ENGINE STARTS EASILY AND IDLES CORRECTLY – 5 pts less deductions for: ----- _____
Hard starting [], Mechanical noises or rattling of loose components [].

LIGHTS, HORN AND TRIM – 10 pts less deductions for: ----- _____
Pitted, missing or broken trim [], Broken or cracked light lenses [],
Lights not operating: Front low beam [], Front high beam [], Parking [], Tail [], Brake [],
Right directional [], Left directional [], Reverse [], Non period correct [].

ROAD SAFETY EQUIPMENT – 5 pts less deductions for: ----- _____
Missing items: first aid kit [], Flares or reflectors [], Fire Extinguisher [], Original manuals [].

Function Total _____

COMMENTS: _____
