



Road Rally Rules

Revised Jan 2019

Welcome to the Cascade Sports Car Club's Road Rally program (aka Geargrinders). If you are new to the sport or the area, feel free to contact a Geargrinders road rally official for information or advice.

CSCC's time-speed-distance road rallies are conducted in accordance with these Road Rally Rules. These rules may be modified by supplemental rules specific to the event.

The object of a time-speed-distance road rally is to complete the rally route on course and as close to on time as possible. Being on course refers to arriving at official checkpoints having followed the route intended by the rallymaster. Being on time refers to arriving at official checkpoints having taken the amount of time intended by the rallymaster.

Official time – intended or allowed time – is the amount of time it takes to drive the intended route at the average speeds specified in the route instructions. The rally route is measured in thousandths of a mile from speed change to speed change. Allowed time is computed to the nearest hundredth of a minute.

Each hundredth of a minute that you arrive early or late on each leg is worth one penalty point. A perfect leg score is zero, arriving exactly on time. The maximum number of penalty points for any one leg is 300. If you are three or more minutes early or late on any leg, your score for that leg is 300.

To learn more about Cascade Sports Car Club's road rally program visit: www.cascadegeargrinders.org or contact rally@cascadesportscarclub.org

1. Procedures

1.1 Registration and Starting

Locate the registrar. Get a registration packet and complete the registration process.

- The driver must have a valid driver's license and carry minimum insurance coverage(s) as required in the state where the vehicle is registered.
- The driver must read and complete the vehicle self-inspection portion of the registration form in its entirety and sign where indicated.
- Return the completed form and entry fee to the registrar. The registrar or Geargrinders Chair may ask for current evidence of CSCC membership to grant member pricing.
- All participants (drivers, navigators, and passengers) must sign the ICSCC Insurance Liability Waiver form available at registration. Participants under the age of 18 must present a parent or legal guardian to the Geargrinders Chair who will witness the signing of the minor release form.
- Failure to follow these mandatory registration guidelines can severely compromise our sport. This may lead to disqualification and/or exclusion from any and all Cascade Sports Car Club events.

The registrar will give you a car number, a score card, and route instructions.

Note the appearance of the official checkpoint, route control, or course marker signs displayed near the registrar.

Set your timepiece(s) to official time at the official time station located near the registrar. Start times are in one-minute increments based on car number.

Attend the informational meeting approximately fifteen minutes before the first car is due out.

No later than your assigned start time, leave the out marker at the starting point by following the route instructions.

1.2 Odometer Calibration

Each event includes after its start a clearly defined odometer calibration zone for the purpose of allowing each contestant's odometer to be compared to the official odometer. The odometer calibration zone is at least ten (10) miles long and contains intermediate mileage reference points. The odometer calibration zone is free of checkpoints and route controls.

1.3 Checkpoints

Stop at each checkpoint you encounter, as identified by an official checkpoint sign at the right side of the road on which you are traveling.

- Pull up to the control station beyond the checkpoint sign. Do not get out of line and do not leave your vehicle unless requested to do so by a rally official.
- Give your scorecard and time declarations, if any, to the control station.
- The control station will return your scorecard and time declarations, if any, indicating your End leg time (in time) and Start leg time (out time). You may receive supplemental instructions.
- After receiving all information, proceed out to the out marker and time yourself out by your own timepiece.

1.4 Route Controls

Stop at each route control you encounter, as identified by an official route control sign on the right side of the road on which you are traveling.

- Pull up to the control station beyond the route control sign. Do not get out of line and do not leave your vehicle unless requested to do so by a rally official.
- Give your scorecard to the control station.
- The control station will return your scorecard. You will receive a PAUSE for the time spent stopping at the control and you may receive supplemental instructions which must be executed prior to resuming the numbered route instructions.

1.5 Blocking a Control

Safety at rally control locations is of utmost importance. When identifying and approaching a control, you may not block the entrance of the control by stopping in the roadway, unless you are legally obligated to do so. If a contestant is observed stopping in front of the control they are entering, they will be assessed a maximum leg score (300) and must immediately proceed to the control station.

1.6 Drive Safely

Contestants must obey all traffic laws and drive in a safe manner throughout the event. Contestants observed driving recklessly or in a manner which may imperil the safety of occupants of their own vehicle, other participants, or the public will be subject to disqualification from the event in progress and may be refused entry to subsequent event(s). Any contestant cited by a recognized law enforcement agency for a moving violation during the event will be automatically disqualified.

1.7 Time Declarations

To avoid speeding to make up lost time, contestants may make a declaration of time loss. A time declaration must be requested on the half-minute and cannot be claimed in even minutes (e.g., 0.50, 1.50, 2.50, etc.). Only one time declaration may be claimed for each leg. The time declaration must be submitted in writing at the next manned checkpoint prior to receipt of perfect leg time. Combined time declarations may not exceed a total of 19.50 minutes per event. The Geargrinders Chair has final authority on acceptance of submitted time declarations.

1.8 Scorecard

At the finish, turn in your completed scorecard. The Geargrinders Chair has final authority on all decisions affecting how the event is scored. If the Geargrinders Chair is a competitor, then the Rallymaster Liaison shall arbitrate scoring decisions.

2. Rally Route

2.1 Rally Route

To follow the intended rally route, proceed by taking the following actions in the order listed:

- Execute emergency directions provided by a rally official.
- Execute a supplemental route instruction provided at a control.
- Execute a note route instruction.
- Execute a numbered route instruction.
- Follow the main road.

2.2 Rally Roads

A rally road is a public through road. Unless otherwise directed, a rally road may be paved or unpaved. Unless specifically described in the route instruction (i.e., you may use this dead end road), do not consider the following as valid rally roads.

- Roads marked “PRIVATE”, “KEEP OUT”, “NO OUTLET”, “DEAD END”, “ROAD CLOSED”, “NO THROUGH TRAFFIC”, etc.
- Roads that are visibly barricaded or impassable.
- Cul-de-sacs that visibly dead-end.
- Roads that visibly dead-end.
- Roads having illegal entry.
- Roads requiring an illegal turn to enter.

2.3 Intersections

An intersection is any joining of rally roads from which the contestant could legally proceed in more than one direction without U-Turning.

A roundabout is a joining of rally roads where traffic travels counterclockwise around a central island. Traffic enters the roundabout without deviation. Once in the roundabout, the main road continues around the roundabout by PROTECTION since all deviations from the circular route are protected by yield signs. If placed ONTO a road by name or number or TOWARD a landmark, the main road is the road exiting the roundabout as so identified by a sign. Exiting a roundabout on the same road where the roundabout was entered is a legal deviation and is not considered a u-turn.

2.4 U-turns

No uninstructed U-turn(s) will be necessary to follow the rally route.

2.5 Course Markers

The club initials “CSCC” identify all course markers.

- On-course markers are bright green.
- Off-course markers are bright orange.
- Course correction markers are on-course markers upon which a route instruction number is written; execute that numbered route instruction at that location and continue in numerical order from that point on.
- Roads posted with an off-course marker upon which “DNE” is written; do not consider such a road as a valid rally road.

3. Main Road Determinants (MRDs)

A main road exists at every intersection and is identified by applying the MRDs below. For an MRD to apply, it must identify a single road leaving the intersection other than the one upon which the intersection was approached. To determine that single road leaving the intersection, apply the MRDs in the order listed below. If attempting to apply an MRD results in no choice or more than one choice, go on to the next MRD.

3.1 ONTO

The main road is the road that the execution of a route instruction has directed the contestant to travel upon by use of: (1) the terms ONTO or FOLLOW and (2) the designation (name, number, or letter(s)) of the road as identified by a sign. The designated road is the main road at each intersection where this MRD applies until a deviation not labeled MBCU (requiring the contestant to leave the main road) is executed.

In the absence of the term “consider yourself”, a route instruction directing the contestant to travel upon a designated road can only be executed when the instruction places the contestant upon the designated road.

3.2 TOWARD

The main road is the road that the execution of a route instruction has directed the contestant to travel in the direction of a landmark by use of

(1) the term TOWARD and (2) the designation (name, number, or letter(s)) of the landmark. Follow signs in the direction of the landmark at each intersection where this MRD applies until a deviation not labeled MBCU (requiring the contestant to leave the main road) is executed.

In the absence of the term "consider yourself", a route instruction directing the contestant to travel in the direction of a landmark can only be executed when the route instruction places the contestant upon a route in the direction of the landmark as indicated by a sign.

3.3 PROTECTION

The main road is the single road which leaves the intersection without a back-facing stop or yield sign on it at the intersection.

3.4 SURFACE

The main road is the obvious continuation beyond an intersection of the road with the same type of surface as that which you approached the intersection on. Only a paved versus unpaved distinction will be made.

3.5 STRAIGHT AS POSSIBLE

The main road is that single road which continues through the intersection in the straightest route. If the routes appear to be equally straight, or no route requires less than a 45 degree course change, this MRD does not apply.

3.6 LEFTMOST

The main road is the leftmost road leaving the intersection.

4. Route Instructions

4.1 Types of Route Instructions

There are three types of route instructions:

- Numbered – Complete the Numbered Route Instructions (NRIs) in ascending numerical order. An NRI is active (available to be initiated) when all parts of the preceding NRI have been completed. Initiate (begin) an NRI when you reach its first reference point.

- Note – Notes are unnumbered route instructions. A note is active from its introduction until cancelled. A note may be executed once, more than once, or never. Action must be taken as directed each time the appropriate action point is encountered. Notes supersede but do not cancel NRIs. Notes are independent of and may overlap NRIs. Canceling a note does not cancel its associated speed.
- Supplemental – Supplemental route instructions are usually provided at checkpoints and route controls. Complete all the supplemental route instructions in the order presented (usually alphanumerically) before resuming the NRIs.

When a route instruction consists of multiple actions, each action is to be executed in the order given, at the first opportunity. A route instruction is complete when all parts of the instruction have been completed. Route instructions can refer to other route instructions, reference points, or action points.

4.2 Action Points

An action point is the location where a route instruction is executed. An action point can be any of the following:

- An intersection where the route instruction directs you off the main road.
- An intersection where a route instruction with official mileage directs you to follow the main road.
- An intersection where a route instruction labeled MBCU directs you to follow the main road.
- The indicated point, distance, or duration where no change of direction is specified in the route instruction.

4.3 Reference Points

A reference point is accompanied by an official mileage, has an identifying sign, or is defined in the glossary of these Road Rally Rules or the glossary of the event's supplemental rules. A reference point marking the beginning of a route instruction will occur at a mileage greater than the mileage of the action point marking the end of the previous route instruction. Route instructions labeled API may reference the action point of a previous instruction.

4.4 Landmarks

A Landmark is a physical object identified by a sign. A landmark is identified in route instructions in upper case (all capital letters) not in quotation marks ("") and is not a term defined in the Glossary.

4.5 Deviations

A deviation is a change in course off the main road. L, LEFT, R, RIGHT, S, STRAIGHT, and TURN are deviations. Route instructions may contain more than one deviation.

4.6 Official Mileage (OM)

Route instructions that are accompanied by OM must be executed at that mileage provided that:

- The reference is correct and
- An appropriate action point exists

Deviations referenced by an OM may be executed to follow the main road. Contestants will not be required to determine OM to greater precision than 0.1 (one-tenth) mile in order to determine the rally route.

4.7 Alpines

An alpine is a diagram drawn to represent an intersection or group of intersections as closely as possible. The dot in the alpine represents the road on which the contestant enters the intersection(s) and an arrowhead indicates the road on which the contestant leaves. If more than one legal route exists, take the shortest legal route through the intersection(s). A speed change associated with an alpine instruction is executed as you enter the first intersection in the diagram. Alpines are not subject to the MRDs (see Section 3).

Example: NRI 23  CAST 34

4.8 Speed Changes

Speed changes that occur at an intersection are executed as you enter the intersection. Speed changes that occur at a reference are executed as you pass by and are even with the reference. When a speed change is to be done for a specified time or distance, you revert to the previous speed after the specified time or distance.

4.9 Comments

Text within parentheses (()) is to be considered clarifying comments. Any action suggested within parentheses, while probably helpful, is not mandatory.

Example: 25. L at STOP. (Use caution, traffic does not stop.)

5. Signs

5.1

A sign is any object on which is written, printed, painted, embossed, inscribed, or otherwise marked words, letters, numbers, and/or symbols. House numbers, utility pole identification letters and/or numbers, mail boxes and newspaper boxes, graffiti and signs of a temporary nature such as political posters, and signs on vehicles will not be used.

5.2

A sign is identified in route instructions in upper case (all capital letters), numbers or symbols enclosed in quotation marks (""). When quoted, a sign will be exact with respect to spelling, punctuation, detail, and shape of symbols as close as graphically reasonable.

5.3

All or any prominent part of a sign may be quoted; however, no intervening words, letters, or numerals or symbols will be skipped, split, combined, or reordered. Hyphens and dashes are considered integral parts of words, letters, and numerals. A sign is read from left to right, top to bottom, or in the sequence presented on the sign.

5.4

A sign used as a reference may be on the left, right, or overhead, approximately parallel to your line of travel, approximately facing you, or at any angle in between.

5.5

A speed control sign will be used only when the sign controls the legal speed limit of the road you are currently travelling upon.

6. Glossary

The words and abbreviations listed below when used in route instructions have only the following definitions when they appear in upper case (all capital letters) and not in quotation marks (""). All words in route instructions appearing in lower case are understood to mean the common dictionary definition.

6.1 AFTER

The first intersection beyond the referenced sign or landmark at which the instruction could be executed.

6.2 API

After previous NRI; at the indicated point beyond completion of the previous NRI.

6.3 BEFORE

The last intersection prior to and in sight of the referenced sign or landmark at which the instruction could be executed.

6.4 BLINKER

An intersection controlled by a conventional traffic caution or stop blinker(s), capable of operating as blinker(s) only. May be off.

6.5 CAST

Change average speed to.

6.6 CROSSROAD

A crossing of two legal rally roads. A CROSSROAD is an intersection and the roads may cross at any angle.

6.7 CSD

Change average speed down by the amount indicated.

6.8 CSU

Change average speed up by the amount indicated.

6.9 DIYC

Do It Yourself Checkpoint. Upon encountering the DIYC reference, record your exact arrival time to the hundredth of a minute as your End Leg time on your scorecard. (Use the seconds to hundredths conversion table in appendix 7.5.) Record your next Start Leg time as exactly two (2.00) minutes after your End leg time. Use your timepiece to time yourself out from the DIYC checkpoint.

6.10 FOLLOW

See Section 3.1.

6.11 GAIN

To make up a specified time during a specified or implied distance. The distance over which a GAIN is operative is free of checkpoints and route controls. The GAIN time is subtracted in the leg time calculations.

6.12 ITIS

If there is such. Execute an ITIS instruction only if you encounter its action point before you come to the action point of the next (by number) NRI. Otherwise, skip the ITIS instruction and consider it completed.

6.13 L, LEFT

Leftmost deviation of any angle off the main road.

6.14 MBCU

May be considered unnecessary. A deviation labeled MBCU may be executed to follow the main road.

6.15 OBSERVE

To visually note and pass a sign or landmark.

6.16 ONTO

See Section 3.1.

6.17 OPP

Opportunity. A possible deviation in the direction indicated, that is paved and/or is named or numbered as indicated by sign(s) at the intersection.

6.18 OR

Complete an OR instruction by executing one-half of the given instruction, but not both, separated by the term OR. The reference point of the two possibilities which is located first determines which half of the OR instruction is to be executed. If both possibilities of an OR instruction have the same reference point, execution is determined by the action point which is located first.

6.19 PAUSE

To pause for a specified time. The PAUSE time is added in the leg time calculations.

6.20 R, RIGHT

Rightmost deviation of any angle off the main road.

6.21 S, STRAIGHT

The straightest deviation off the main road within 45 degrees of straight ahead.

6.22 SIDEROAD

An intersection at which the contestant can TURN in only one direction.

6.23 SIGNAL

An intersection controlled by multi-light traffic signal(s) which may be operating as blinker(s) or may be off.

6.24 SOL

Sign must be on left. May not always be given.

6.25 STOP

An intersection with an official highway stop sign at which the contestant is legally required to stop.

6.26 T

An intersection having the shape of the letter T as approached from the base. It is not possible to execute the instruction S or the instruction STRAIGHT at a T.

6.27 TOWARD

See Section 3.2.

6.28 TRANSIT

A part of the rally in which no checkpoints or route controls are located and for which there is no stated average speed. Route instructions apply, but you may leave the route for rest or refueling stops. The TRANSIT time is added in the leg time calculations.

6.29 TURN

A deviation from the main road in the only direction possible. A TURN instruction cannot be executed if an instruction to go straight (S, STRAIGHT) would take the contestant on the same route.

6.30 Y

An intersection having the shape of the letter Y as approached from the base. It is not possible to execute either the instruction S or the instruction STRAIGHT at a Y.

6.31 YIELD

An intersection with an official highway yield sign at which the contestant is legally required to yield.

7. Appendix

7.1 Competition Classes

Competitive classes are divided into two categories, defined by the type of equipment allowed:

7.1.1 Unequipped

Only pen, paper, timepiece(s) and stock odometer permitted. No calculation equipment allowed (including average mph display). Two classes compete in this category:

Novice – This class is intended for beginners only

SOP (Seat of Pants)

7.1.2 Equipped

Navigational and calculation equipment is permitted as described below in the two classes that compete in this category:

GPS – All distance measurement is provided by a GPS source. The GPS source may connect to a calculation device.

Unlimited – This class is not limited in any way. Any contestant may compete in this class, regardless of equipment in use.

7.2 Championship Points Policy

7.2.1 Saturday Road Rally Series Trophies

Series trophies for First, Second, and Third Place are awarded to the drivers and navigators who accumulate the most points during the Saturday Road Rally Series within their category of competition:

- **Novice**
- **Unequipped** (SOP only)
- **Equipped**

Points are awarded at each Saturday Road Rally based on a competitor's overall placement within their category of competition. Competitors earn 10 points for finishing first, 9 for second, 8 for third, etc., with each competitor receiving at least 1 point. For competitors who run all events in the series, only their best finishes count, less one (e.g., 7 of 8). Ties shall not be broken; duplicate place trophies will be awarded. A competitor may receive the First Place Novice trophy only once.

Road Rally Series Champions

	Unequipped		Equipped	
Year	Driver	Navigator	Driver	Navigator
2018*	Sean Andersen	Fran Hanchek	Kevin Poirier	Chris Hale
2017	Larry Anson	Fran Hanchek	Kevin Poirier	Chris Hale
2016	Steven Smith	John Masterman	Kevin Poirier	Chris Hale
2015	John Lehman	Mitchell Mlinar	Kevin Poirier	Chris Hale
2014	Blake Harer	Brandon Harer	Kevin Poirier	Chris Hale
2013	Tracy Ringering	Simon Levear	Kevin Poirier	Chris Hale
2012	Larry Anson	Fran Hanchek	Brandon Harer	Chris Hale
2011	Brandon Harer	Marcus Gattman	April Song	Marcus Song
2010	Larry LeFebvre	Tie: Rick Vonk / Jill Zurschmeide	Kevin Poirier	Chris Hale
2009	Steven Smith	John Masterman	April Smith	Marcus Song
2008	Jeff Zurschmeide	Jill Zurschmeide	April Smith	Marcus Song
2007	Matt Tabor	Marcus Gattman	April Smith	Marcus Song
2006	Jeff Zurschmeide	Jill Zurschmeide	Monte Saager	Victoria Saager
2005	Jeff Zurschmeide	Jill Zurschmeide	Brandon Harer	Marcus Song
2004	Jill Zurschmeide	Jeff Zurschmeide	April Smith	Ben Bradley
2003	Matt Tabor	Marcus Gattman	Monte Saager	Victoria Saager
2002	John Tabor	Darlene Tabor	Monte Saager	Victoria Saager
2001	Brandon Harer	Jennifer McGrew	Russ Kraushaar	Katy Wood

*Changed from Friday Night Series to Saturday Rally Series

7.2.2 CSCC Championship Trophies

Season trophies for First Place are awarded to the drivers and navigators who meet the eligibility requirements described below.

Award is based on the points standings described above, as follows:

- **Unequipped (SOP)**
- **Equipped**

To be eligible, the competitor must be a Cascade member at the time of the event for which championship points are earned. In addition, the competitor must accumulate at least 10 CSCC worker points (20 volunteer hours) or served as a rallymaster during the season. Contact the Geargrinders Chair or CSCC Pointskeeper for more information about worker points.

7.3 Time-Speed-Distance Formulas

7.3.1 Odometer Correction Factor

Odometer correction factor = Your odometer Miles / Official miles

Corrected Speed = CAST X Odometer correction factor

If your odometer miles are less than Official miles, you must drive slower. If your odo is greater than Official, you must drive faster to stay on time.

7.3.2 TSD Timekeeping

Use the following formula to calculate precisely how long it should take to travel a specific distance at a specific average speed.

$$\mathbf{Time} = (60 \times \mathbf{Distance}) / \mathbf{Speed}$$

Example: **CAST** 30 next 2 miles

$$\mathbf{Time} = (60 \times 2) / 30 = 4 \text{ minutes}$$

7.3.3 Gaining Time

Use the following formula to calculate what your average speed should be to complete a GAIN.

$$\mathbf{Speed} = 60 / ((\mathbf{Time} \text{ at stated CAST} - \mathbf{GAIN} \text{ time}) / \mathbf{Distance})$$

Example: **CAST** 30, then **GAIN** 1 minute next 2 miles

$$\mathbf{Speed} = 60 / ((4 - 1) / 2) = 40 \text{ mph}$$

7.4 Seconds to Hundredths Conversion

Seconds to Hundredths	Seconds to Hundredths	Seconds to Hundredths
:01 = 0.01	:21 = 0.35	:41 = 0.68
:02 = 0.03	:22 = 0.36	:42 = 0.70
:03 = 0.05	:23 = 0.38	:43 = 0.71
:04 = 0.06	:24 = 0.40	:44 = 0.73
:05 = 0.08	:25 = 0.41	:45 = 0.75
:06 = 0.10	:26 = 0.43	:46 = 0.76
:07 = 0.11	:27 = 0.45	:47 = 0.78
:08 = 0.13	:28 = 0.46	:48 = 0.80
:09 = 0.15	:29 = 0.48	:49 = 0.81
:10 = 0.16	:30 = 0.50	:50 = 0.83
:11 = 0.18	:31 = 0.51	:51 = 0.85
:12 = 0.20	:32 = 0.53	:52 = 0.86
:13 = 0.21	:33 = 0.55	:53 = 0.88
:14 = 0.23	:34 = 0.56	:54 = 0.90
:15 = 0.25	:35 = 0.58	:55 = 0.91
:16 = 0.26	:36 = 0.60	:56 = 0.93
:17 = 0.28	:37 = 0.61	:57 = 0.95
:18 = 0.30	:38 = 0.63	:58 = 0.96
:19 = 0.31	:39 = 0.65	:59 = 0.98
:20 = 0.33	:40 = 0.66	:60 = 1.00