

# NORTHWEST REGION SCCA

## 2010 Time Trials

### Supplementary Regulations

These events are conducted under the current SCCA Time Trials Rules (TTR), SCCA General Competition Rules (GCR), and SCCA Solo Rules and are insured under the SCCA Master Plan. It is the responsibility of each driver to review these Supplemental Regulations prior to entering an event. This edition supersedes all previous editions.

All participants are expected to adhere to these regulations and all appropriate sections of the SCCA Time Trials, SCCA GCR and SCCA Solo Rules as amended by these regulations.

Any item or situation that is not specifically addressed by the SCCA Time Trials Rules, SCCA GCR, SCCA Solo Rules or these Supplementary Regulations will be dealt with by the Time Trials Divisional Steward, if present, and/or the Event Chair, or designee, at the event that the situation occurred.

The Time Trials Administrative Council (TTAC) has final authority for the content of these rules. Effective date of these Time Trials Supplemental Regulations is February 8, 2010.

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Revised April 15, 2010

## 1. TRACKS, SCHEDULE AND FEES

### A. Tracks

**Bremerton Motorsports Park**, A temporary track on a closed runway with a lap length of approximately 1.1 miles. Traffic cones, jersey barriers, traffic barrels and earthmover tires define the course. The track is located at 7500 SW Old Clifton Road. Port Orchard WA 98367 (This is NOT a mailing address)

**Oregon Raceway Park** information will be covered is event specific supps as final plans are made.

### B. Schedule

Date	Track	Event	Discount
March 27 <sup>th</sup> , 2010	Bremerton	PDX**, Club Trials, & Track Trials	Mar 19 <sup>th</sup>
May 2 <sup>nd</sup> , 2010	Bremerton	PDX**, Club Trials, & Track Trials	April 23 <sup>rd</sup>
Aug 27 <sup>th</sup> , 2010	Bremerton	Club Trials*	Aug 20 <sup>th</sup>
Aug 28 <sup>th</sup> & 29 <sup>th</sup> 2010	Bremerton	Double Track Trials*	Aug 20 <sup>th</sup>
Sep 12 <sup>th</sup> 2010	Bremerton	PDX**, Club Trials, & Track Trials	Sept 3 <sup>rd</sup>
Oct 23 <sup>rd</sup> – 24 <sup>th</sup> 2010	Oregon Raceway Pk	Double Track Trials*	Oct 9 <sup>th</sup>

\*All events are held with Club Racing

\*\* PDX class size will be limited

Northwest Region reserves the right to cancel an event at anytime.

**All Track Trials cars are required to have a functioning AMB transponder (transX 260) to participate in events held with Club Racing.**

### C. Fees

<b>TRACK TRIALS - DOUBLE</b>	<b>\$235.00</b> \$265.00	<b>Postmarked or Received by discount deadline</b> At Track / After early discount deadline
<b>TRACK TRIALS - SINGLE</b>	<b>\$180.00</b> \$210.00	<b>Postmarked or Received by discount deadline</b> At Track / After early discount deadline
<b>CLUB TRIALS - MEMBER</b>	<b>\$110.00</b> \$140.00	Received before Pre-Registration closes At Track
<b>Non-MEMBER</b>	<b>\$125.00</b> \$155.00	Received before Pre-Registration closes At Track
<b>Performance Driving Experience</b>	<b>\$110.00</b> <b>\$125.00</b>	<b>Member</b> – (Received before Pre-Registration closes) <b>Non Member</b> (Received before Pre-Registration closes)

**NOTE: Per National SCCA requirement, compliance fees will be charged where applicable for each race.**

Fees are payable to **Northwest Region SCCA** in U.S. funds

## 2. EVENT DETAILS

A. <u>Mail entries to:</u> Jay Bratton 11125 NE 123 <sup>rd</sup> Ln Apt D-108 Kirkland, WA 98034 425-822-0568 E-mail <a href="mailto:jaybratton@comcast.net">jaybratton@comcast.net</a>	<u>FAX entries to:</u> Jay Bratton 425-822-8346	<u>Online Registration:</u> <a href="http://www.motorsportreg.com">www.motorsportreg.com</a>	<u>Checks in U.S. funds to:</u> Northwest Region SCCA
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B. Registration hours:		
Mar / May / Sept – Bremerton	Saturday, March 27	7:00 am – 10:00 am
	Sunday, May 2	7:00 am – 10:00 am
	Sunday Sept 12	7:00 am – 10:00 am
August – Bremerton	Thursday, August 26	5:00 pm – 7:00 pm
	Friday, August 27	7:00 am – 10:00 am
		5:00 pm – 7:00 pm
	Saturday, August 28	7:00 am – 1:00 pm
	Sunday, August 29	7:00 am – 1:00 pm

**Notes:** These registration hours will allow ample time to get drivers, crew, and officials checked in. if we are still busy at closing time, we will stay open.

C. Entry refunds will be made automatically within 30 days after the event if a car is not recorded through Registration. A full refund will be given for entries cancelled prior to the event. No-shows will be charged a service fee of \$10.00 for entries paid by cash or check and \$20.00 for entries paid by credit card. Drivers going through Registration must submit a request in writing or e-mail to the Registrar within five days following the event. Refunds will be subject to a \$10.00 handling fee plus a charge for the value of each pass issued. To withdraw at the track from one race at a double event weekend, the entrant must so notify Driver Services, in writing on a form designated for this purpose, prior to the first on-track session scheduled uniquely for that race. Withdrawal from the second event of a two race weekend will not be assessed a service charge.

D. Any payment to the Region, which is refused for any reason, will be charged an additional \$30 handling fee

### 3. LICENSES

All drivers must be SCCA members to participate. All drivers must have either a valid state driver's license or approved experience. The Chief Driving Instructor must approve the experience if a driver holds only a state driver's permit. Weekend SCCA memberships will be issued to all non-members at \$15 each.

#### A. Track Trials

Drivers that hold a current SCCA Track Trials Competition License or higher are required to present their license at registration. Novice Track Trial permits are available.

Competition licenses, other than those issued by SCCA, that are recognized by the TTR will meet the requirements for competition including the NASA Time Trials license (Must be a full TT License). The SCCA Club Racing Competition Manager must approve any other licenses (per SCCA Time Trials Rules).

1). If a driver's competition license is in transit or in process, it will be the responsibility of the driver to call the Chief Registrar by the Tuesday before the event to request verification. A \$5.00 fee will be charged for all such requests. If a driver's competition license is not in his or her possession and has not been verified by the Region's Registrar, the driver will post a \$100 bond at Registration. Final acceptance is at the sole discretion of the Chief Steward. All drivers who are driving on a non-SCCA per GCR license must have an SCCA crew license in order to be allowed in hot areas.

#### B. Club Trials

A Time Trials Participation Log to be able to participate in the event. The Participation Log will be returned signed by the Chief Driving Instructor with any notations at the end of the event. For first-time entrants, the Participation Logs will be available at registration.

**Per the GCR, all competitors, entrants and hot pit crewmembers must be SCCA members.**

### 4. CAR NUMBERS, LOGOS & OTHER IDENTIFICATION

A. Annual reserved numbers are available (NWR and Dual Region members of NWR) through the Registrar and will be guaranteed up to the entry deadline. Then they become available to anyone for the event (once registration opens at the track). Unreserved numbers will be assigned in order of receipt of entry.

- B The car number assigned by the Registrar must be on the car prior to technical inspection. Car number changes may be made only through the Registrar. Three-digit numbers will be allowed at BMP in Vintage classes only.
- C. Track Trials Car numbers must meet the requirements of the GCR for legibility. Track Trials participants must also display a Northwest Region logo on both sides of the car. Track Trials Novice drivers shall also clearly display the letter "N" on each side of the car and clearly visible bright orange panels at least 5"x7" on the front and rear of the car. Club Trials car may use tape or chalk on windows of cars but it must be legible and large enough to be clearly seen.

## 5. TRACK TRIALS LOGBOOKS

Vehicle logbooks are required for Track Trials events. Those vehicles that are not currently issued a logbook will be required to obtain a logbook. A logbook may be obtained from Tech for the region's issue price. Cars that have a current logbook are not required to obtain a new logbook.

## 6. COMPETITION RULES

- A. A driver's meeting is required each day of the event (per the TTR) and will cover mandatory procedures for each day of the event. Attendance will be mandatory.
- B. Practice/Qualifying & Actual Timed Runs.
  - 1) Time allotment for the practice, qualifying and timed run sessions may change due to unforeseen circumstances.
  - 2) Drivers may be placed in run groups for practice sessions.
  - 3) All drivers will receive a minimum of one 15-minute practice/qualifying session.
- C. Practice/Qualifying Sessions
  - 1) There shall be a minimum of one session. They may be timed and used to place cars within a specified run group for the timed run sessions. Practice is open to all cars participating in the Time Trials event.
  - 2) Should the event not be completed, qualifying times may be used to determine trophies and class placement for points.
  - 3) Event Chief Steward or designee shall group drivers who do not participate in these sessions for the timed run sessions.
  - 4) Passing (if used for the event) will be permissible in clearly defined and marked zone(s) on straight(s) following the "exit" area from a corner and preceding the "braking" area for the following corner. The driver being overtaken must give a hand signal by pointing to the left and move off the racing line. The left side is the only side the overtaking driver may pass on. Good judgment by the driver being overtaken is required so that a passing flag should not be required for the overtaking driver to be allowed to pass. Passing flags shall be obeyed. Drivers failing to obey the passing flag may be black flagged by event officials.
    - (a) For Club Trials passing zones are on the front straight after turn six and prior to turn one.
    - (b) For Track Trials passing zones are on the front straight after turn six and prior to turn one and after turn two and before turn three.
  - 5) Passing on other areas of the course shall be prohibited unless the vehicle being overtaken is obviously disabled and the driver of the vehicle has clearly indicated a problem exists (i.e. -hand signal) and has moved to the right side of the track to allow the overtaking vehicle to pass. Passing on the right is only allowed as an evasive maneuver to avoid involvement in an on track incident. Observation reports from course workers shall be used for verification should this occur.
  - 6) Passing occurring under any circumstances, other than those stated in 4) and 5) above, shall be penalized by immediately bringing the vehicle doing the overtaking and passing off the course (i.e. -black flagged).

The driver of that vehicle shall then be disqualified from further participation in the session and possibly the associated competition event.

- 7) Repeated or flagrant violations of illegal passing as defined in 4) and 5) above may result in suspension from future events and/or revocation of the driver's competition license. Neither penalty shall exceed 1 year in duration.

#### D. Timed Run Sessions

- 1) Each contestant will receive a minimum of two timed runs per the TTR. A timed run is defined as one full lap of the course being completed (i.e. – 'hot lap') following an initial warm up lap.
- 2) Drivers will be gridded by their practice/qualifying time.
- 3) Two-driver cars will be gridded by the Chief Steward, or designee.
- 4) Should time allow more than one run for some drivers, but not for all, only the first time shall be used to determine the trophy and points distributed for that class.
- 5) Passing procedures used in Timed Run Sessions are the same as outlined in C.4–7 above. Passing in previously designated passing zones (if used for the event) during timed run sessions may be prohibited at the discretion of the event organizers and/or stewards.

- E. If for any reason a driver is forced to stop their car on the course during the event at any time, the driver shall place their car as far to the right as possible and in such a manner as to not cause any danger or obstruction to the other competitors.

### 7. FACILITY RULES:

- A. In general, if you bring it to the track, you must take it with you when you leave, or you will be held financially responsible. All competitors are responsible for removing all used lubricants, fluids, tires and any other materials requiring hazardous waste disposal.
- B. Drivers may be held financially responsible for any damage to the racing facilities due to off course excursions, oil spills, paddock damage, or paddock cleanup. Rest assured, if the Region is charged, we will pass the expenses along to the responsible party.
- C. Open campfires are **NOT** allowed at any facility.

### 8. PADDOCK RULES

- A. Drivers and crewmembers must wear eye protection when driving open-cockpit vehicles in the paddock and pre-grid areas.
- B. Paddock spaces are available on a first-come, first-served basis.
- C. **There is a 5-MPH speed limit at all times, for all vehicles in the paddock and pre-grid areas**
- D. **The use of wheeled conveyances, including bicycles, in the paddock is a privilege and may be withdrawn at the discretion of the Chief Steward. Drivers are responsible for the conduct of minor-age members of their crews. No one under the age of 16 may operate any wheeled conveyance in the pits or paddock. No roller skates, rollerblades, skateboards or motorized skateboards are allowed.**
- E. An adult must supervise children less than 12 years of age at all times. Pets must either be caged or on a leash and scoop laws will be enforced.
- F. Driver Services will be located in the paddock and shall be the sole location for filing protests and receiving schedules, qualifying times, race results, trophies, etc.
- G. Fuel, air, and water may or may not be available at the track.

- H. Due to the various licenses and permits required at some events, personal alcoholic beverages may not be permitted on some premises. Event provided alcoholic beverages must remain at, and be consumed in, the designated areas.
- I. At Bremerton Motorsports Park, NWR recognizes the need to be considerate of the surrounding residential neighborhood, and therefore, the hours of each event shall be first vehicle on course not before 9 a.m. for those without "street mufflers" and last engine noise at dusk. **Test and tune is not allowed anywhere at Bremerton Motorsports Park except on the road course during designated times.**

## 9. RADIO/SCANNER REGULATIONS

Northwest Region SCCA reserves the right to request discontinuation of radio/scanner use by competitors, crews and officials if such use interferes with the operation of an event.

## 10. COURSE CLOSURE

At Bremerton Motorsports Park the race course is closed to non-official motorized vehicles after the last checkered flag of the day.

## 11. CAR CLASSIFICATIONS AND VEHICLE REQUIREMENTS

### A. Track Trials

There will be four categories of car preparation: Stock, NorPac Time Trials Production Classes, Race Prepared and Vintage. These four categories will place cars that are prepared to SCCA, WWSCC, ICSCC, and CACC rules. Cars running in the NWR Track Trials Series may choose one standard set of rules of one of the above-listed organizations to prepare their competition vehicle. Drivers must be in possession of the rulebook that they used to prepare their cars should there be a question of allowed modifications. Failure to have this documentation may result in an unfavorable decision by a protest committee. Preparation allowances between the different sanctioning bodies may not be combined. Regardless of preparation rules used, SCCA Safety Requirements will be strictly adhered to. NWR SCCA Time Trials event officials may, in the best interest of a balanced competition, reclassify some cars.

**NOTE:** This document constitutes the official class structure and allowances for this series. Information acquired from the Internet and Web sites is for information only and does not constitute official rules and regulations.

**Note: Drivers that intend to participate in the NorPac Divisional Time Trials Championship event should run in their NorPac Time Trials Production Class. See Enclosure 1 for details.**

#### 1). Stock Classes

Cars in Stock classes will be prepared to SCCA GCR Showroom Stock Rules, SCCA Solo Stock Rules, WSCC Stock Rules, and CACC Rules. All forced air inducted automobiles, powered by a gasoline engine, will be classed by doubling their displacement.

- SS – All cars with a displacement over 4.5 liters.
- SA – All cars with a displacement from 3.0 liters to 4.5 liters.
- SB – All cars with a displacement from 2.1 liters to 2.9 liters.
- SC – All cars with a displacement of 2.0 liters or less.

#### 2). Race Prepared Classes

SCCA GCR class structure will be used to place any automobile competing on racing slicks in the appropriate class. Cars prepared to GCR Club Racing rules should run in their GCR class.

##### (a) Production Based Race Cars

SCCA Race GCR Classes are: GT1, GT2, GT3, GTL, EP, FP, GP, HP, ITA, ITB, ITC, ITD, ITE, ITR and ITS.

There are three additional NWR Track Trials production-based classes for cars that do not conform to SCCA Production or GT Rules:

SPO (5.0 liters and over)  
SPM (2.3 to 5.0 liters)  
SPU (under 2.3 liters).

All forced air inducted automobiles in these SP classes, powered by a gasoline engine, will be classed by doubling their displacement.

(b) Purpose Built Race Cars (All Open Cockpit)

Formula cars and Sports Racing cars shall use SCCA GCR classes.

(i) Formula Car classes are: Formula S, Formula Atlantic, Formula 1000 (FB), Formula Mazda, Formula First (FST), Club Ford, Formula Ford, Formula Vee, Formula 500.

Formula S is for all GCR-legal Formula cars that do not conform to SCCA Formula Classes listed. Solo 'Solo Atlantic' cars will compete in Formula S. All Solo 'A' Modified cars and 'Specials' that wish to participate must be in compliance with SCCA Formula S specifications and compete in that class.

(ii) Sports Racing Car Classes are: ASR, CSR, DSR, SS2, S2, and SRF. ASR is for all GCR-legal Sports Racers that do not conform to the SCCA Sports Racing Classes listed. Solo 'B' Modified Sports Racers will compete in ASR. Solo 'B' Modified Sports Racers will compete in ASR.

(iii) Spec. Car Classes are: Spec Miata, Cars will be prepared to SCCA GCR rules.

3). Vintage

All cars competing in vintage classes shall be in accordance with the 2010 NWR Vintage Supplemental Rules.

VP1 – Production cars up to 1900cc

VP2 – Production cars 1901cc up to 3200cc

VP3 – Production cars over 3200cc

VFSR – All Formula and Sports Racers (no displacement split)

B. Club Trials

There will be three basic categories of car classification: NorPac Time Trials Production, Solo and Race Prepared. These three categories will place cars that are prepared to SCCA, WWSCC, ICSCC, or CACC rules. Cars running in NWR Club Trials events may choose one standard set of rules of one of the above-listed organizations to prepare their competition vehicle. Drivers must be in possession of the rulebook that they used to prepare their cars should there be a question of classification and/or allowed modifications. Failure to have this documentation may result in an unfavorable decision by a protest committee. Preparation allowances between the different sanctioning bodies may not be combined. Regardless of preparation rules used, SCCA Safety Requirements will be strictly adhered to. Club Trials event officials in the interest of a balanced competition may class some cars.

C. NorPac Time Trials Production

The purpose of the Time Trials Production (TT) classes is to provide a formulaic method for classifying cars for **Club** and **Track Trials** competition. These classes are intended for, but not limited to, vehicles that are normally classed in the Street Prepared, Street Touring, and Street Modified Solo classes.

It is assumed that cars competing in the Time Trials Production classes are prepared beyond the Showroom Stock classes, but not to the specifications of the Club Racing classes defined in the GCR. It is also assumed that Time Trials classed cars will have similarly prepared suspension and brakes, making considerations for such modifications unnecessary for classification purposes. Finally, it is understood that these classifications are new and based on limited data and experience, and will therefore be inappropriate in some cases. In such cases, the event officials are given the authority to make changes with regards to an individual's car classification in the interest of balanced competition. Any changes to an individual's car classification will be documented by the event officials with the reasons for the change and sent to the Time Trials Divisional Program Manager and the SCCA Time Trials Administrative Council for review.

**See Enclosure 1 for car classification, eligibility, and weight & displacement modifiers**

## **12. SPECIFIC SAFETY REGULATIONS**

- A. Nitrous and other fuel enhancement injection systems are not allowed. Cars equipped with such systems must remove the bottles used by the system prior to being allowed on the race track.
- B. TRACK TRIALS
- 1) The SCCA Time Trials Rules allow for the use of Driver Restraint Systems that are up to five (5) years in age. It is recommended that the age requirements for driver restraint systems as set forth in the SCCA GCR be followed.
- C. CLUB TRIALS
- 1) Vehicle safety requirements for cars classified under Solo rules are those used in SCCA Solo competition. Minimum apparel shall be long pants, long sleeved shirts, it is highly recommended that both of at least 100% cotton material and shoes that fully cover the foot at least to the ankle. Additionally, helmets that meet Snell M-95 requirements or better are required. These helmets may be open or full-face style.
- 2) Roll bars or cages will NOT be required in those cars prepared to Stock, Street Prepared, Street Touring or Street Mod specifications as found in the Solo rules, except for Convertibles and Targa top automobiles. These cars must have either a roll bar meeting Section 11 of the TTR or a factory hard top using the factory mounting hardware and mounting points.

## **13. CHAMPIONSHIP/EVENT POINTS AND AWARDS**

The season championship will be decided by the total points earned from the events assigned to the program. These events may include Track Trials events outside of the Northwest Region SCCA.

A. Points:	<u>Place</u>	<u>Points</u>
	1	10
	2	8
	3	6
	4	5
	5	4
	6	3
	7	2
	8	1

### **B. Championship Awards**

#### **1) Track Trials**

- (a) Drivers who earn the most points in their class and who have attended the minimum number of events will receive a Class Championship Award.
- (b) Drivers must be members of Northwest Region during the racing season and prior to accruing points (dual membership satisfies this requirement) and drivers must compete in five (5) of seven (7) NWR Time Trial events conducted in the same class. All NWR Track Trials races will be used for the championship. Northwest Region decals must be displayed on each side of the car as directed by Tech. The driver choosing to use non-NWR events (maximum of 2) must submit a copy of the results for each event no later than 30 days post the event entered.
- (c) Should any NWR Track Trials event be cancelled, those entrants who pre-registered for the event will have that event counted as an attended event for series points. No points will be awarded for an event that has been cancelled.

#### **2) Club Trials**

- (a) Drivers who earn the most points in their class and who have attended the minimum number of events will receive a Class Championship Award.

- (b) Drivers must compete in a minimum of three (3) of four (4) Northwest Region events to qualify for Class Championship Awards.
- (c) Should any NWR Club Trials event be cancelled, those entrants who pre-registered for the event will have that event counted as an attended event for series points. No points will be awarded for an event that has been cancelled.

C. Restricted/Limited Entry Events – Club Trials, PDX

When the total number of allowed entries for the event has been reached, all other entries shall be placed on a waiting list. The priority of the waiting list will be based on the receipt date of the entry and total number of previous events entered.

D. Event Awards

- 1) Class awards will be based on best times from each event.
- 2) Awards will be given to all class winners.
- 3) Awards will be distributed based on class participation.

1 driver	1 award
2 drivers	1 award
3 drivers	2 awards
4 or more drivers	3 awards

**Enclosure 1**  
**NORPAC Division**  
**Time Trials Production Classes**

Cars Eligible: Commonly available production automobiles intended for street use, modified for Club Trials or Time Trials competition (original frame or unibody), and on DOT approved tires (street or R-compound). It is recommended that cars eligible for Showroom Stock participate in their stock class. Likewise cars prepared for SCCA Club Racing should participate in their GCR defined class. However, all production based cars are eligible for Time Trials Production classification.

Classification: Cars will be classed by their equivalent engine displacement (liters) and shall compete in their applicable Time Trials Production class listed below. A vehicle's equivalent displacement is determined by the current (factory or modified) displacement multiplied by 1 + the sum of the appropriate modifiers (listed below), and rounded to the nearest 0.1 liter to determine the final classification. Please note that more than one modifier can apply to one car, but each modifier can be applied only once.

Time Trials Production Classes		
Class	Minimum Displacement (liters)	Maximum Displacement (liters)
TT-1	8.0	Unlimited
TT-2	5.7	7.9
TT-3	4.8	5.6
TT-4	4.0	4.7
TT-5	3.2	3.9
TT-6	0.0	3.1

Weight Modifier Calculations: For use with the weight modifiers, the car must be weighed in race trim, with driver. Cars will have their weight signed off in their logbook by an SCCA tech inspector, in order to prevent having to reweigh the vehicle at every event. It is the driver's responsibility to maintain the weight of the vehicle at the signed off weight (+/- 50 lbs), or have the vehicle reweighed and signed off if the weight is changed. If scales aren't available at an event for classification use, the factory specified curb weight of the vehicle without the driver will be used for classification. As an alternative, a certified public scales weighing of the car and designated driver will be accepted until weighing at an event is available. The certified public scales weight certificate shall remain with the logbook until event scales are available and an SCCA tech inspector signs off the race trim weight.

Displacement Modifier Chart		
Modifier	Name	Notes
0.25	Diesel	Applied to any vehicle that runs on diesel fuel.
2.00	Rotary	Applied to any vehicle powered by a rotary motor.
0.80	Forced Induction	Applied to any turbocharged or supercharged vehicle.
0.40	Altered Boost	Applied to any vehicle running non-factory levels of boost (via boost controllers, wastegate modification, ECU reprogramming, other electronic engine management, blow off/pop off valve changes, pulleys, and/or porting/polishing of forced induction components). "Non-factory" boost is defined not only as peak boost changes, but boost curve changes as well. This includes normally aspirated cars that have added forced induction. Changes in boost levels as a result of modification to systems not directly related to boost control (i.e. changes to exhaust systems, intercoolers/after coolers, intake, etc.) are permitted without requiring the application of this multiplier.
0.25		Applied to any vehicle with three or more valves per cylinder.
0.25		Applied to any vehicle with two or more camshafts.
0.50		Applied to any vehicle with variable valve timing (including but not limited to
Variable		Honda VTEC, Toyota VVTi, Subaru AVCS, BMW Vanos, etc.)
Variable		Applied to any vehicle weighing (with driver) or with a factory specified curb weight (without driver) less than 2700 lbs. Modifier is 0.001 for every pound less than 2700.

### Time Trials Production Class Worksheet

It's like doing your taxes!

Online version at <http://www.renoscca.org/ttclass.php>

Officially weigh your car:		
	Trials Weight (lbs), actual weight including driver (if scales are not available, use factory specified curb weight without driver)	Line 1

If your Trials Weight (line 1) is less than 2700 lbs:		
<b>2700</b>	lbs	Line 2
-	Trials Weight (from Line 1)	Line 3
=	<b>Applicable Weight</b>	Line 4
* <b>0.001</b>	Per Applicable Pound Modifier	Line 5
=	<b>Lightweight Modifier</b>	Line 6

If your Trials Weight (line 1) is greater than 3200 lbs:		
	Trials Weight (from Line 1)	Line 7
- <b>3200</b>	lbs	Line 8
=	<b>Applicable Weight</b>	Line 9
* <b>-0.001</b>	Per Applicable Pound Modifier	Line 10
=	<b>Heavy Weight Modifier</b> (a negative number)	Line 11

Calculate your displacement modifier		
<b>1.0</b>	Base Modifier	Line 12
+	Diesel? (-0.25)	Line 13
+	Rotary? (2.00)	Line 14
+	Forced Induction? (0.80)	Line 15
+	Altered Boost? (0.40)	Line 16
+	Multi-Valve? (0.25)	Line 17
+	Multi Cam? (0.25)	Line 18
+	Variable Valve Timing? (0.50)	Line 19
+	Weight Modifier? (from Line 6 or Line 11 if applicable)	Line 20
=	<b>Displacement Modifier</b>	Line 21

Calculate your classification displacement and class		
	Actual Engine Displacement (Liters)	Line 22
*	Displacement Modifier (from line 21)	Line 23
=	<b>Equivalent Displacement (Liters)</b>	Line 24
	Round to the nearest 0.1 Liter	Line 25
=	<b>Classification Displacement (Liters)</b>	Line 26
	Lookup in Displacement Table	Line 27
=	<b>Time Trials Class</b>	Line 28

### Time Trials Classification Examples

Car	Notes	Weight (lbs)	Base (L)	Diesel -0.25	Rotary 2.00	Turbo 0.80	Boost 0.40	Valves 0.25	Cams 0.25	Timing 0.50	Weight Mod	Total (L)	Class
77 Datsun 240Z	Chevy 350 swap	2100	5.7								0.60	9.1	TT1
96 Porsche 911 Turbo		3290	3.6			x		x	x		-0.09	8.0	TT1
04 Subaru Sti	Boosted	3263	2.5			x	x	x	x	x	-0.06	7.8	TT2
03 Ford Mustang Cobra		3665	4.6			x			x		-0.47	7.3	TT2
05 Subaru Sti		3263	2.5			x		x	x	x	-0.06	6.8	TT2
02 Subaru WRX	2.5L, Boosted	3080	2.5			x	x	x	x		0.00	6.8	TT2
82 Mazda RX-7	Chevy 350 swap	2640	5.7								0.06	6.0	TT2
00 Chevy Mallett Corvette 435		3238	6.1								-0.04	5.9	TT2
05 BMW M3		3415	3.2					x	x	x	-0.22	5.7	TT2
03 Chevy Corvette Z06		3118	5.7								0.00	5.7	TT2
89 Chevy Corvette		3238	5.7								-0.04	5.5	TT3
03 Subaru WRX	Boosted	3080	2.0			x	x	x	x		0.00	5.4	TT3
94 Ford Mustang GT		3077	5.0								0.00	5.0	TT3
95 Mazda RX-7		2800	1.3		x	x					0.00	4.9	TT3
99 BMW M3		3175	3.2					x	x		0.00	4.8	TT3
02 Subaru WRX		3080	2.0			x		x	x		0.00	4.6	TT4
05 Mazdaspeed Miata		2529	1.8			x		x	x		0.17	4.4	TT4
73 BMW 2002 Turbo		2282	2.0			x					0.42	4.4	TT4
03 Mini Cooper-S	Boosted	2680	1.6			x	x	x	x		0.02	4.4	TT4
77 Porsche 911		2630	2.7					x	x		0.07	4.2	TT4
04 Toyota Celica GTS		2425	1.8					x	x	x	0.28	4.1	TT4
89 Civic CRX	Type-R Motor	2160	1.6					x	x	x	0.54	4.1	TT4
89 Toyota MR2 SC		2475	1.6			x		x	x		0.23	4.0	TT4
67 Ford Mustang		3400	5.0								-0.20	4.0	TT4
99 Honda S2000		2800	2.0					x	x	x	0.00	4.0	TT4
00 Toyota Echo		2078	1.5					x	x	x	0.62	3.9	TT5
90 Mazda RX-7		2800	1.3		x						0.00	3.9	TT5
03 Mini Cooper-S		2680	1.6			x		x	x		0.02	3.7	TT5
99 Mazda Miata		2300	1.8					x	x		0.40	3.4	TT5
95 Ford Thunderbird		3460	4.6								-0.26	3.4	TT5
70 TVR Vixen S3	Cosworth motor	1600	1.6								1.10	3.4	TT5
90 Mazda Miata		2105	1.6					x	x		0.60	3.4	TT5
90 Toyota Celica GTS		2804	2.2					x	x		0.00	3.3	TT5
89 Civic CRX		2160	1.6					x	x		0.54	3.3	TT5
72 Datsun 240Z		2355	2.4								0.35	3.2	TT5
02 Suzuki Aerio		2670	2.0					x	x		0.03	3.1	TT6
86 Toyota Corolla GTS		2300	1.6					x	x		0.40	3.0	TT6
04 Kia Rio		2458	1.6					x	x		0.24	2.8	TT6
89 Toyota MR2		2475	1.6					x	x		0.23	2.8	TT6
95 Ford Escort		2300	1.9								0.40	2.7	TT6
98 VW Jetta TDI		2730	1.9	x		x					0.00	2.5	TT6
74 Volvo 343		2079	1.3								0.62	2.1	TT6