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**NASA Performance Touring (NASA PT)**

Official 2009 National Rules

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Version 4.3 January 1, 2009

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### **1 Definitions and Claims**

NASA Performance Touring (NASA PT) is an automobile competition series focused on road course competition, and shall function as an advertising and marketing tool for the series sponsors, the independent sponsors of each team, as well as the official sanctioning body of the series. The trade name, “NASA Performance Touring (NASA PT)”, and these rules are the property of the National Auto Sport Association, Incorporated<sup>®</sup>; located at P.O. Box 21555, Richmond, CA 94820; 510-232-NASA (6272).

### **2 Sanctioning Body**

The NASA PT series is sanctioned by the National Auto Sport Association (NASA). All events are governed by these rules, applicable addendums, prima facie rules, as well as those found in the latest version of the NASA *Club Codes and Regulations*<sup>©</sup> (CCR).

### **3 Intent**

The intent of these rules is to provide mandates to ensure that all vehicles are modified within clearly established limits, so as to ensure an even platform, in which a contest of driving skill may provide the most talented drivers with great rewards. These rules provide the NASA series administration a guideline to use when making decisions regarding NASA PT. The intent of the rules and safety considerations will be the overriding factors in making such decisions, as opposed to a constrained interpretation of the rules based on phraseology or verbiage. The rules shall be applied in a logical manner that seeks to provide competitors a safe and fair venue for competition.

If a modification is not specifically allowed by the rules, it is prohibited. A permitted item cannot be modified to perform either a prohibited function, or the function of an item that would otherwise be assessed points under the modification rules. Vehicle legality is the sole responsibility of the driver.

## 4 Purpose

NASA PT provides a venue for spirited on-track competition with a high degree of both safety and convenience. NASA PT, along with its sister series, NASA ST and SU provide a home for nearly every type of racecar to compete in a fair and logical competition environment.

## 5 The Classes

### 5.1 General Car Classification

#### 5.1.1 Base Classes and Modification Points

NASA PT consists of 6 competition classes, PTA, PTB, PTC, PTD, PTE, and PTF. In addition, there are two classes (G & H) that are listed for purposes of base classing only. There will be no competition in either of these classes in 2009. Stock (OEM) vehicles are defined for classification purposes in Section 5.2 as those equipped at their original year, make, model and equipment level specifications, without factory options. Unless otherwise specified in the base class listing, a vehicle's base trim package/model (U.S. Domestic Market), without factory upgrades or options, will be used for purposes of base classing and modification points assessment. The vehicles that are specifically listed and classed below that were never available for retail sale in the U.S.A. will use the base trim package of the vehicle in its primary domestic market. All other non-USDM models need to be assessed by the National PT Director for base classification. Stock (OEM) cars in Classes A to H, and "STSU" (Super Touring, Super Unlimited) are listed as follows below under their base classification in Section 5.2 (**\* denotes a seven (7) point initial assessment, and \*\* denotes a fourteen (14) point initial assessment that gets added to the total number of modification points for the purpose of upclassing**).

Cars may be upclassed as defined below in Section 5.3 based on vehicle modifications. **All factory options and other modifications by the factory that are not included in the basic trim package of a model** (or in the non-basic trim package specifically listed below in 5.2 to assign a PT base class), **must be assessed modification points as in Section 5.3**. OEM special edition cars that are not listed under the base classifications need to be verified with National PT Director to determine the correct base class, or whether they will simply be assessed modification points for all factory upgrades compared to their standard counterparts. New cars will be classified as they enter competition on a provisional basis. The National PT Director will determine the classifications, and they will be posted on the Performance Touring website <http://performancetouring.com> in the Rules section. Any changes to base classifications, rules revisions or additions, approved motor swaps, and Technical Bulletins will also be released on the Performance Touring website <http://performancetouring.com> in the Rules section, and will supercede these rules. Links to these sections will also be provided in the Performance Touring forum at [www.nasaforums.com](http://www.nasaforums.com).

Once a vehicle exceeds the limits of the PTA class (by initial base class, upclassing due to modification points, or "Adjusted" weight/horsepower ratio), it will be classed in either Super Touring 2 (ST2), Super Touring 1 (ST1), or Super Unlimited (SU) based on the criteria set forth in the NASA Super Touring and Super Unlimited Rules. The ST/SU rules define the term "Adjusted" Power/Weight Ratio, and the method of calculation (see Appendix A). **The minimum "adjusted" weight/power ratio for any car in PTA is 8.70:1, regardless of how many points it has, or which base class it begins in.**

Some NASA race classes and NASA guest classes for purpose-built racecars have been assigned a PT competition classification in 5.2.1. Provided that a vehicle complies with all of the rules for its race class, it is exempt from upclassing in Section 5.3. If the vehicle does not comply with all of the rules of its race class (including tires), then it will need to be re-classified by the National PT Director. Purpose built racecars and kit cars that do not have a base classification may run in the Super Unlimited class. However, some could possibly be classed into lower level classes on an individual basis as they present for competition. Competitors seeking base classification of their vehicle should contact the National PT Director by e-mail (greg@nasa-tt.com). New cars will be classified as they enter competition on a provisional basis.

All cars with engine swaps, aftermarket forced induction, an upgraded or modified turbocharger/supercharger, increased number of camshafts, non-OEM heads, **or a ported rotary engine**, need to be evaluated by the NASA National PT Director to determine the correct base class.

### 5.1.2 Minimum Adjusted Weight/Power Ratios for each Class

**Each class has been assigned a minimum “Adjusted” weight/power ratio. Regardless of how many points a car has, or which base class it begins in, it may not exceed the minimum “Adjusted” weight/power ratio for its competition class. Any vehicle found competing with an “Adjusted” weight/power ratio less than the minimum level assigned below will be disqualified, and additional penalties (Section 6.4) may be assessed.**

<b>PTA</b>	<b>8.70:1</b>
<b>PTB</b>	<b>10.25:1</b>
<b>PTC</b>	<b>12.00:1</b>
<b>PTD</b>	<b>14.25:1</b>
<b>PTE</b>	<b>16.50:1</b>
<b>PTF</b>	<b>19.50:1</b>

The “Adjusted” weight/power ratio is calculated using the actual chassis dynamometer maximum horsepower of the vehicle, the minimum competition weight (with driver), and other factors such as body type, transmission type, and tire type and size. The method used to calculate the “Adjusted” weight/power ratio is fully described in Appendix A (as well as in the Super Touring Rules). **These minimum “Adjusted” weight/power ratios are not a substitute for base classing followed by calculation of modification points** to determine the final competition class. They are an additional limitation placed on vehicles to help achieve a level platform for competition in each class.

Dynamometer testing procedures are outlined in 5.3.2. However, it is noteworthy that dynamometer tests must be conducted on a Dynojet Model 248 or 224 for front and rear wheel drive vehicles, and on a Dynojet, Mustang, Dyno Dynamics, or Dynapack for AWD cars, in a commercial facility that offers dynamometer testing as part of their business and is open to the public. **It is not a requirement for all drivers to submit Dyno testing results, or for that matter, to have their vehicles Dyno tested before competition.** However, each driver/owner is responsible for ensuring that the vehicle is compliant with the above “Adjusted” weight/power restrictions. If the driver/owner is unsure of the chassis dynamometer maximum horsepower of the vehicle, or if the car is close to the limit for its class, NASA recommends that the driver/owner do appropriate testing of the vehicle before competition.

## 5.2 Base Classifications

### 5.2.1 Approved NASA Racecar and Guest Racecar Competition PT Classes

These NASA racecar and guest racecar classifications are valid provided that the car meets all of the requirements and restrictions of its own class rules, including tire size and brand if applicable. **As well, specific restrictions and specifications that must be adhered to are listed for some of the below models in Appendix C (see Appendix C for details).**

<u>Race Class</u>	<u>PT Class</u>
Allison Legacy	PTC (see Appendix C)
Baby Grand	PTA
Factory Five Challenge	PTA
Legends (all)	PTC
Panoz '97-'99 GTRA	PTB (see Appendix C)
<b>Pro Challenge Road Race</b>	<b>PTA (see Appendix C)</b>
RSR	PTB
Spec Racer Ford	PTB
Thunder Roadster	PTA (see Appendix C)

### 5.2.2 Base Classification Table and Listed Base Weights

Any tube-frame, never street legal, monocoque purpose-built racecar, vehicle not approved by the DOT, TUV or Japanese government for street use, or production vehicle that does not retain the original front clip, floorpan, and sub-frame, or is converted (partially or wholly) to a tube-frame design, that is not otherwise classed below or in Appendix C, will default to the Super Unlimited class until evaluated by the National PT Director for possible homologation into another class. **Individual cars may be approved for classing or re-classing by the National PT Director using the vehicle's actual dynamometer measured maximum chassis horsepower and torque, and the minimum competition weight of the vehicle (with driver).**

Make	Model	Class	Weight	Make	Model	Class	Weight
Acura	CL 2.2L	PTG	3064	Austin	Mini Cooper 1071S	PTF	1512
Acura	CL V6	PTF*	3470	Austin	Mini Cooper 1275S	PTF**	1433
Acura	CL-S	PTE	3510	<b>BMW</b>	<b>135i Coupe ('08)</b>	<b>PTC*</b>	<b>3370</b>
Acura	CL-S (6 spd)	PTE	3446	BMW	2002 ('68-'74)	PTG**	2282
Acura	Integra 1.6L ('86-'89)	<b>PTF</b>	<b>2300</b>	BMW	2002 ('75-'76) (2403 lb)	PTG*	2403
Acura	Integra 1.8L (non-VTEC)	PTF*	2529	BMW	2002tii	PTE	2225
Acura	Integra GS-R	PTE	2667	BMW	318 1.8L (E30)(pre-'92)	PTF*	2657
Acura	Integra Type-R	PTD	2600	BMW	318 (E36)(('92-'98)(1.8L & 1.9L)	PTG**	2933
Acura	NSX 3.0L ('91-'96)	PTC**	3047	BMW	318 ti ('95-'99)	PTF*	2778
Acura	NSX	PTC**	3153	BMW	323 ('98-'00)(2.5L)	PTF*	3153
Acura	RL ('05-'07)	PTE	3984	BMW	325e (121 hp)	PTG**	2780
Acura	RL (pre'05)	PTG**	3920	BMW	325 (E30)(('87-'91)(168hp)	PTF**	2855
Acura	RSX	PTF**	2734	BMW	325ic ('92)(168 hp)	PTF*	2990
Acura	RSX-S	PTD	2770	BMW	325 ('92-'95)(189 hp)	PTF**	3087
Acura	TL ('04-'05)	PTF*	3465	BMW	325 ('01-'06)(2.5L184 hp)	PTF**	3197
Acura	TL 3.2L ('06-'07)	PTE	3580	BMW	325i ('06)(3.0L 215hp)	PTE	3285
Acura	TL 3.5L ('07)	PTE**	3559	BMW	328 2.8L ('96-'00)	PTF**	3197
Acura	TL (pre '04)	PTF*	3487	BMW	328 ('07-'08) (3.0L 230 hp)	PTE	3351
Acura	TL-S	PTE	3558	BMW	330 ('01-'06)(225hp)	PTE	3285
Acura	TSX ('04-'07)	PTF**	3257	BMW	330 ('06)(255hp)	PTE**	3417
Alfa Romeo	1600 Spider	PTF	2250	BMW	335 3.0L ('07-'08)	PTD**	3571
Alfa Romeo	2000 Spider	PTE	2288	BMW	5 series (<226hp)(RWD)(inc '07)	PTF**	3494
Alfa Romeo	2600 Spider	PTF**	2683	BMW	5 series (RWD)(('08)	PTE	3500
Alfa Romeo	Milano 2.5L ('87-'89)	PTF*	2907	BMW	540	PTE**	3803
Alfa Romeo	Milano 3.0L ('87-'89)	PTE	2907	BMW	M Coupe/Roadster (240hp)	PTD	3131
Audi	A3 2.0T (200 hp)(('06-'07)	PTF**	3263	BMW	M Coupe (315 hp)	<b>PTC**</b>	<b>3141</b>
Audi	A3 3.2 AWD (250 hp)(('06-'07)	PTE*	3660	BMW	M Roadster (315 hp)	<b>PTC**</b>	<b>3141</b>
Audi	A4 1.8T (150 hp)(('97-'00)	PTF	2992	BMW	M3 (E30)(pre-'89)	PTE**	2733
Audi	A4 1.8T (150 hp)(AWD)(('97-'99)	PTF	3241	BMW	M3 (E30)(('89-'91)	PTE*	2865
Audi	A4 1.8T (170 hp)	PTF	3252	BMW	M3 (E36)(('95-'99)	<b>PTD*</b>	<b>3175</b>
Audi	A4 2.0T (197 hp)(('05-'07)	PTF*	3428	BMW	M3 (E46)(('01-'06)	<b>PTC**</b>	<b>3415</b>
Audi	A4 2.0T AWD (200 hp)(('05-'07)	PTF**	3549	BMW	M5 E28,E34('85-'93)	PTD*	3788
Audi	A4 2.8L (190 hp)	PTF**	3263	BMW	M5 E39 ('00-'03)	PTC**	3792
Audi	A4 3.0L (220 hp)	PTF**	3462	BMW	M5 E60 ('06-'08)	PTA	4012
Audi	A4 3.2L (255 hp)(AWD)(('07)	PTE**	3671	BMW	M6	PTE*	3570
Audi	A6 2.7T (AWD)	PTE	3958	BMW	M6 ('06-'08)	PTA	3909
Audi	A6 4.2L ('00-'04)(AWD)	PTE*	4024	BMW	MINI Cooper ('01-'04)	PTF	2315
Audi	A6 4.2L ('05-'06)(AWD)	PTE**	4145	BMW	MINI Cooper ('05-'08)	PTG**	2546
Audi	A6 4.2L ('07)(AWD)	PTD	4222	BMW	MINI Cooper S ('02-'04)	<b>PTC**</b>	<b>2513</b>
Audi	A8 4.2L (AWD)(('97-'03)	PTE**	4068	BMW	MINI Cooper S ('05-'08)	<b>PTC**</b>	<b>2678</b>
Audi	A8 4.2L (AWD)(('03-'06)	PTE**	4288	BMW	MINI Cooper Works ('06-'07)	PTD*	2720
Audi	A8 4.2L (AWD)(('07)	PTD	4288	BMW	Z3 4-cyl	PTF*	2701
Audi	A8 6.0L (AWD)(('05-'07)	PTC	4729	BMW	Z3 6-cyl (2.5L)	PTE	2932
Audi	Coupe (110 hp)	PTG**	2507	BMW	Z3 6-cyl (2.8L)	PTE*	2943
Audi	Coupe (164 hp)	PTG**	3174	BMW	Z3 6-cyl (3.0L)	PTD	2943
Audi	RS 4 (4.2L) (AWD)(('07)	PTB*	3957	BMW	Z4 2.5L	PTE	2932
Audi	S4 ('03-'07)(AWD)	PTC	3869	BMW	Z4 3.0L ('03-'05)	PTD	3000
Audi	S4 (pre '03)(AWD)	PTD	3593	BMW	Z4 3.0L (215 hp)(('06-'08)	PTE*	3020
Audi	S8 ('01-'03)(AWD)	PTD**	4068	BMW	Z4 3.0L (255 hp)(('06-'08)	PTD*	3108
Audi	TT (180 hp)(('00-'06)	PTE	2822	BMW	Z4 M ('06-'08)	PTB	3197
Audi	TT (225 hp)(('02-'06)(AWD)	PTD	3220	BMW	Z8	PTB*	3500
Audi	TT (250 hp)(('04-'06)(AWD)	PTD	3351	Cadillac	Catera	PTG**	3762
Austin	Mini 1L (<40hp)	PTG	1358	Cadillac	CTS 2.8L ('05-'07)	PTF*	3509
Austin	Mini 1L, 1.1L (40 to 47hp)	PTG	1450	Cadillac	CTS 3.6L ('03-'07)	PTE*	3509
Austin	Mini Cooper (55hp)	PTG	1576	Cadillac	CTS-V ('04-'07)	PTC**	3847

Make	Model	Class	Weight	Make	Model	Class	Weight
Cadillac	STS (4.6 V8) AWD ('05)	PTD	4295	Chrysler	Conquest Tsi (turbo)	PTF**	3050
Cadillac	STS (V6)('05-'07)	PTF**	3858	Chrysler	Crossfire (215hp) ('04-'07)	PTE	3010
Cadillac	STS (V8)('05-'07)	PTE**	3940	Chrysler	Crossfire SRT6 ('05-'06)	PTC**	3240
Cadillac	STS-V ('06-'07)	PTC*	4233	Chrysler	PT Cruiser	PTG	3147
Cadillac	XLR ('04-'07)	PTD**	3647	Chrysler	PT Cruiser GT	PTF**	3364
Cadillac	XLR-V 4.4L V8 ('07)	PTB	3810	Datsun	510 (96 hp)	PTF*	2040
Caterham	Super 7 (240 hp)	STSU	1150	Datsun	510 (L20B swap)	PTF**	2150
Chevrolet	Aveo ('04-'07)	PTG*	2365	Datsun	1600 Roadster ('66-'70)(96hp)	PTF	2030
Chevrolet	Camaro 3.1L	PTG*	3105	DeTomaso	Pantera	PTC*	3300
Chevrolet	Camaro 3.4L	PTG*	3306	Diasio	D962R	PTR	1400
Chevrolet	Camaro 3.8L	PTF*	3307	Dodge	Caliber RT 2.4L AWD ('07-'08)	PTF	3308
Chevrolet	Camaro 5.0L carb (170 hp)('87)	PTF**	3250	Dodge	Caliber SRT4 2.4L Turbo ('07-'08)	PTD**	3200
Chevrolet	Camaro SS ('98-'02)	PTD**	3433	Dodge	Charger 3.5L ('06-'07)	PTF**	3800
Chevrolet	Camaro SS ('96-'97)	PTD*	3439	Dodge	Charger 5.7L ('06-'07)	PTD*	4031
Chevrolet	Camaro Z28 ('98-'02)	PTD*	3439	Dodge	Charger SRT8 ('06-'07)	PTC	4160
Chevrolet	Camaro Z28 (pre '98)	PTE**	3441	Dodge	Magnum RT	PTE*	4180
Chevrolet	Cavalier	PTF	2617	Dodge	Magnum RT AWD	PTE**	4393
Chevrolet	Cavalier Z24	PTF*	2611	Dodge	Magnum SRT8	PTC	4260
Chevrolet	Cobalt 2.2L ('05-'08)	PTG*	2991	Dodge	Neon DOHC Coupe	PTF	2625
Chevrolet	Cobalt 2.4L ('06-'08)	PTF	2991	Dodge	Neon DOHC Sedan	PTF	2625
Chevrolet	Cobalt SS 2.0L (S/C)('05-'07)	PTE*	2991	Dodge	Neon SOHC Coupe	PTF	2450
Chevrolet	Cobalt SS (turbo)('08)	PTC*	2975	Dodge	Neon SOHC Sedan (1st gen)	PTF	2450
Chevrolet	Corvair (140hp)	PTF**	2500	Dodge	Neon SOHC Sedan (2nd gen)	PTF	2525
Chevrolet	Corvair (95,100hp)	PTG	2500	Dodge	Neon SRT4 ('03-'05)	PTE*	2970
Chevrolet	Corvair Corsa Turbo	PTE*	2500	Dodge	Neon SRT4 ACR	PTE**	2900
Chevrolet	Corvair Monza GT Spyder	PTF**	2570	Dodge	Shelby Charger (110hp)	PTG**	2296
Chevrolet	Corvette '63-'82 (>200, <330 hp)	PTD	3200	Dodge	Shelby Charger (146hp)	PTF*	2500
Chevrolet	Corvette '63-'82 (>330,<425 hp)	PTC*	3200	Dodge	Shelby Charger GLHS (turbo)	PTE	2550
Chevrolet	Corvette '63-'82 (>425 hp)	PTB	3400	Dodge	Shelby Lancer	PTF	3000
Chevrolet	Corvette '63-'82 (200hp)	PTF**	3200	Dodge	Shelby Omni GLH (146 hp)	PTF*	2500
Chevrolet	Corvette C4 ('85-'91)	PTD**	3223	Dodge	Shelby Omni GLHS	PTE	2540
Chevrolet	Corvette C4 ('92-'96) (LT1)	PTC*	3203	Dodge	Stealth (DOHC)	PTE	3153
Chevrolet	Corvette C4 (LT4 option) (330 hp)	PTC**	3350	Dodge	Stealth (SOHC)	PTF	3086
Chevrolet	Corvette C5 (inc. FRC w/o Z51)	PTB*	3246	Dodge	Stealth Turbo ('91-'93)(AWD)	PTD	3803
Chevrolet	Corvette C5 (all w/ Z51)	PTA	3173	Dodge	Stealth Turbo ('94-'96)(AWD)	PTC	3671
Chevrolet	Corvette C6 ('05-'07)(Z51 ok)	PTA*	3179	Dodge	Stratus 4-cyl	PTG	3192
Chevrolet	Corvette C6 ('08)(LS3)	STSU	3217	Dodge	Stratus RT	PTF	3219
Chevrolet	Corvette GS	PTC**	3350	Dodge	Viper	STSU	3410
Chevrolet	Corvette Z06 ('01-'04)	PTA*	3118	Dodge	Viper ACR	STSU	3325
Chevrolet	Corvette Z06 ('06-'08)	STSU	3130	Dodge	Viper Comp. Coupe	STSU	2995
Chevrolet	Corvette ZR-1	PTB	3500	Eagle	Talon 2.0L (135-140hp)	PTG**	2739
Chevrolet	Impala SS ('04-'05)	PTF*	3606	Eagle	Talon Turbo ('90-'94)	PTE	2789
Chevrolet	Impala SS ('06-'08)	PTE*	3711	Eagle	Talon Turbo ('95-'98)	PTE*	2866
Chevrolet	Impala SS ('94-'96)	PTF*	4036	Eagle	Talon Turbo AWD ('90-'94)	PTE*	3108
Chevrolet	Monte Carlo 3.9L LTZ ('06)	PTF**	3501	Eagle	Talon Turbo AWD ('95-'98)	PTE*	3153
Chevrolet	Monte Carlo SS 3.8L ('04-'05)	PTE	3391	Ferrari	308	PTD	3159
Chevrolet	Monte Carlo SS 5.3L ('06-'07)	PTD	3490	Ferrari	328	PTC**	2803
Chevrolet	Monte Carlo SS (pre '04)	PTF	3333	Ferrari	355	PTA*	2975
Chevrolet	S10 Extreme (180hp)	PTF	3216	Ferrari	360	STSU	3064
Chrysler	300 (3.5L) ('05-'07)	PTF*	3650	Ferrari	430	STSU	3197
Chrysler	300C (5.7L)('05-'07)	PTE**	4066	Ferrari	550	STSU	3726
Chrysler	300C (5.7L) (AWD)('05-'07)	PTE**	4273	Ferrari	612	STSU	4056
Chrysler	300C SRT8 ('05-'07)	PTC	4160	Ferrari	348 (<305 hp)	PTC*	3233
Chrysler	Cirrus 4-cyl	PTG*	3141	Ferrari	348 (320 hp)	PTB	3071
Chrysler	Conquest (turbo)	PTF**	2900	Ferrari	360 Challenge	STSU	2822

Make	Model	Class	Weight	Make	Model	Class	Weight
Ferrari	456GT	PTA*	3726	Ford	Pinto 2.3L	PTG*	2250
Ferrari	575M	STSU	3815	Ford	Pinto 2.8L	PTG*	2570
Ferrari	Enzo	STSU	3009	Ford	Probe GT	PTF*	2815
Ferrari	F430	STSU	3197	Ford	Probe Turbo	PTF*	2730
Ferrari	Superamerica	STSU	3815	Ford	Sierra Cosworth 2.0L T (204 hp)	PTE**	2756
Ferrari	Testarossa	PTA	3660	Ford	Sierra Cosworth AWD (220 hp)	PTD*	2816
Fiat	124 Spider 1400	PTG**	2083	Ford	Shelby GT500 5.4L S/C ('07-'08)	PTA*	3920
Fiat	124 Spider 1600	PTF*	2116	Ford	Taurus GL	PTH**	3326
Fiat	124 Spider 1800	PTF**	2116	Ford	Taurus SHO	PTF**	3379
Fiat	124 Sport Spider 2000	PTG*	2359	Ford	Thunderbird Super Coupe/Turbo	PTF**	3536
Fiat	128 (55-60 hp)	PTG	1730	Ford	Thunderbird V6 (pre-'02)	PTH**	3536
Fiat	X1-9 1.3L	PTG*	1940	Ford	Thunderbird V8 ('02)	PTF**	3775
Fiat	X1-9 1.5L	PTG**	2030	Ford	Thunderbird V8 ('03+)	PTE	3775
Fiat	X1-9 2000	PTB*	1973	Ford	Thunderbird V8 ('90-'97)	PTF*	3536
Ford	Contour SVT	PTF**	3126	Geo	Metro 1.0L	PTH**	1804
Ford	Escort 1.9L	PTH*	2356	Geo	Metro 1.3L	PTH**	1940
Ford	Escort 2.0L	PTG*	2457	Geo	Prizm	PTF	2359
Ford	Escort GT (1.8L)	PTF	2375	Geo	Storm	PTG	2282
Ford	Escort ZX2	PTF	2400	Geo	Storm GSI	PTF*	2480
Ford	Escort ZX2 S/R	PTF	2450	Honda	Accord 2.0L (120hp)	PTG*	2670
Ford	EXP 1.6L ('82-'85)	PTG	2130	Honda	Accord 2.2L ('90-'97)(130hp)	PTG*	2800
Ford	F150 Lightning	PTE*	4670	Honda	Accord 2.3L	PTG**	2976
Ford	Festiva	PTH**	1797	Honda	Accord 2.4L ('03-'07)	PTF	3097
Ford	Focus (2.0L 16v) ('05-'08)	PTF	2580	Honda	Accord 2.7 V6 ('95-'97)	PTF	3219
Ford	Focus (2.0L 16v)('00-'04)	PTG**	2651	Honda	Accord 3.0 V6 ('03-'07)	PTE	3303
Ford	Focus (2.0L 8v)('00-'02)	PTG	2606	Honda	Accord 3.0 V6 ('98-'02)	PTF*	3197
Ford	Focus (2.3L 16v)('04)	PTF	2612	Honda	Civic 1.6L SOHC ('88-'91)	PTF	2291
Ford	Focus ST 2.3L 16v ('07)	PTF*	2636	Honda	Civic Base ('88-'91)	PTG	2127
Ford	Focus SVT (2.0L)('02-'04)	PTF**	2750	Honda	Civic Coupe 1.8L ('06-'08)	PTF*	2586
Ford	Focus ZX4 ST (2.3L)('05-'06)	PTF*	2636	Honda	Civic CX ('92-'95)	PTG	2094
Ford	GT	STSU	3485	Honda	Civic del Sol S (<107hp)	PTG**	2302
Ford	Mustang Cobra ('93-'95)	PTE*	3354	Honda	Civic del Sol Si (<128hp)	PTF*	2414
Ford	Mustang Cobra ('96-'98)	PTC	3393	Honda	Civic del Sol VTEC (DOHC 1.6L)	PTE	2522
Ford	Mustang Cobra ('99 & '01)	PTC*	3285	Honda	Civic DX 1.5L 16v ('88-'91)	PTG**	2165
Ford	Mustang Cobra R ('00)	PTB*	3590	Honda	Civic EX 1.6L ('96-'00)	PTF	2513
Ford	Mustang Cobra R ('93)	PTD*	3248	Honda	Civic EX 1.7L ('01-'05)	PTF	2597
Ford	Mustang Cobra R ('95)	PTC*	3325	Honda	Civic Non-VTEC (92hp)	PTF	1950
Ford	Mustang Cobra SVT ('02+)	PTB*	3665	Honda	Civic Si 1.6L ('92-'95)	PTF	2390
Ford	Mustang GT ('05-'06)	PTD**	3450	Honda	Civic Si 1.6L ('99-'00)	PTF**	2612
Ford	Mustang GT ('07-'08)	PTC	3356	Honda	Civic Si 2.0L ('01-'05)	PTF*	2782
Ford	Mustang I4	PTH**	2699	Honda	Civic Si 2.0L ('06-'08)	PTE*	2877
Ford	Mustang I4 turbo	PTG*	3065	Honda	Civic Type R ('07) (JDM)(225 hp)	PTC	2792
Ford	Mustang I6	PTG	2800	Honda	Civic VX	PTG**	2094
Ford	Mustang Mach 1	PTC	3420	Honda	CRX DX 1.5L 16v ('88-'91)	PTG**	2103
Ford	Mustang SVO ('84-'86)	PTE	3036	Honda	CRX DX 12v ('85-'87)	PTG**	1865
Ford	Mustang V6 ('99-'08)	PTF**	3351	Honda	CRX HF	PTG	1967
Ford	Mustang V6 (pre-'99)	PTG**	3065	Honda	CRX Si 1.5L ('85-'87)	PTF**	1978
Ford	Mustang V8 ('64-'68 <272 hp)	PTF*	2980	Honda	CRX Si ('88-'91)	PTF*	2174
Ford	Mustang V8 ('69-'70 <291 hp)	PTF*	3250	Honda	CRX 1.6L DOHC VTEC	PTE	2436
Ford	Mustang V8 ('71-'73 <286 hp)	PTF	3560	Honda	Fit ('07-'08)	PTG*	2432
Ford	Mustang V8 ('79-'93 <226 hp)	PTE	3075	Honda	Prelude S ('92-'96)	PTG**	2775
Ford	Mustang V8 ('94-'98 <226 hp)	PTE*	3075	Honda	Prelude Si ('92-'96)	PTF*	2866
Ford	Mustang V8 ('99-'04)	PTE**	3273	Honda	Prelude Si (pre-'92)	PTF	2639
Ford	Pinto 1.6L	PTG	2000	Honda	Prelude VTEC ('93-'01)	PTF**	2954
Ford	Pinto 2.0L ('71-'74)	PTG	2235	Honda	S2000 (2.0L)('00-'03)	PTD**	2850

Make	Model	Class	Weight	Make	Model	Class	Weight
Honda	S2000 (2.2L)('04-'08)	PTC	2850	Lexus	SC430 ('02-'08)	PTE*	3840
Honda	S2000 CR (2.2L)('08)	PTC**	2813	Lincoln	LS (V8) ('03-'06)	PTE	3772
Hyundai	Accent 1.5L (105hp)	PTF*	2149	Lotus	Elise ('05-'07)	PTC**	1975
Hyundai	Accent 1.6L ('01-'08)	PTG**	2366	Lotus	Esprit (V8) TT	PTA	2968
Hyundai	Elantra 1.6L	PTG**	2500	Lotus	Esprit 4 Turbo	PTB	2866
Hyundai	Elantra 1.8L	PTF	2453	Lotus	Exige ('06)	PTB*	2015
Hyundai	Elantra 2.0L ('00-'08)	PTF	2626	Lotus	Exige S ('07)	PTA*	2077
Hyundai	Genesis 3.8L ('09)	PTE*	3750	Lotus	Exige 240R	STSU	2050
Hyundai	Genesis 4.6L ('09)	PTD**	4000	Mazda	323 (pre'95--82hp)	PTG	2075
Hyundai	Tiburon 2.0L ('03-'07)	PTG	2940	Mazda	323 GTX (1.6L T)	PTF	2645
Hyundai	Tiburon 2.0L ('97-'01)	PTF	2633	Mazda	626 2.0L	PTG	2864
Hyundai	Tiburon V6 2.7L ('03-'07)	PTF*	2986	Mazda	626 2.5L V6	PTF	3023
Infiniti	G20 ('93-'02)	PTG	2877	Mazda	Mazda3 (2.0L)('04-'06)	PTF*	2696
Infiniti	G20 ('91-'92)	PTF	2535	Mazda	Mazda3 (2.0L)('07-'08)	PTF	2780
Infiniti	G35 (incl. 6MT) (pre-'05)	PTD	3435	Mazda	Mazda3 (2.3L)('04-'06)	PTF*	2762
Infiniti	G35 (incl. 6MT)('05-'06)	PTD	3524	Mazda	Mazda3 (2.3L)('07-'08)	PTF	2930
Infiniti	G35 Coupe 6MT ('07)	PTD	3524	Mazda	Mazda6 2.3L ('03-'06)	PTF	3042
Infiniti	G35 (306 hp)(incl. Sport)('07-'08)	PTD*	3532	Mazda	Mazda6 2.3L ('07-'08)	PTG**	3091
Infiniti	G35x (AWD)('07-'08)	PTD**	3650	Mazda	Mazda6 3.0L (V6) ('03-'05)	PTF**	3243
Infiniti	I30 ('00-'01)	PTF**	3342	Mazda	Mazda6 3.0L (V6) ('06-'08)	PTF*	3320
Infiniti	I30 ('96-'99)	PTF*	3090	Mazda	Mazdaspeed Protegé (Turbo)	PTF**	2843
Infiniti	I35	PTE*	3342	Mazda	Mazdaspeed3 (turbo)('07-'08)	PTD*	3153
Infiniti	Q45 ('02-'07)	PTF*	4153	Mazda	Mazdaspeed6 (AWD)('06-'07)	PTD*	3589
Infiniti	Q45 (pre-'02)	PTF**	3895	Mazda	Miata 1.6L	PTF**	2182
Jaguar	S-Type 3.0L (235 hp)	PTF**	3777	Mazda	Miata 1.8L ('94-'97)	PTE	2293
Jaguar	S-Type 4.0L, 4.2L	PTE**	3874	Mazda	Miata 1.8L ('99-'05)	PTE	2299
Jaguar	S-Type R 4.2L S/C ('03-'04)	PTD**	4046	Mazda	Miata MX-5 ('06-'08)	PTE*	2474
Jaguar	S-Type R 4.2L S/C ('05-'07)	PTC	4075	Mazda	Miata MX-5 turbo ('05)	PTE*	2529
Jaguar	XJ Vanden Plas (<301 hp)	PTE*	3819	Mazda	MX-3	PTG*	2443
Jaguar	XJ8 3.5L	PTE	3613	Mazda	MX-3 GS	PTF	2582
Jaguar	XJ8 4.2L	PTE**	3613	Mazda	MX-6 (2.2L)(110hp)	PTG*	2560
Jaguar	XJ8 S/C ('00-'07)	PTC	4001	Mazda	MX-6 GT (turbo)	PTF*	2729
Jaguar	XJR ('98-'07)	PTC	3958	Mazda	MX-6 V6 ('92-'97)	PTF*	2800
Jaguar	XKR-SC ('00-'06)	PTC*	3865	Mazda	Protegé 1.6L	PTG	2493
Jaguar	XKR-SC ('07)	PTC**	3781	Mazda	Protegé 1.8L	PTF	2385
Jaguar	XKE	PTD*	3100	Mazda	Protegé 2.0L	PTF	2634
Jaguar	X-Type ('02-'07) AWD	PTE	3538	Mazda	Protegé 5	PTG*	2716
Kia	Rio	PTG**	2365	Mazda	Protegé MP3	PTG**	2725
Kia	Sephia	PTF	2472	Mazda	RX-7 12A	PTG**	2345
Kia	Spectra	PTG*	2701	Mazda	RX-7 13B	PTE	2800
Lamborghini	Diablo VT	STSU	3582	Mazda	RX-7 13B GSL-SE (1st Gen)	PTF**	2512
Lexus	GS300 ('06)	PTE	3536	Mazda	RX-7 TT	PTC**	2826
Lexus	GS300 ('93-'05)	PTF*	3649	Mazda	RX-7 Turbo II	PTD	2775
Lexus	GS350 ('07-'08)	PTD	3704	Mazda	RX-8 ('04-'08)	PTD	3045
Lexus	GS400	PTE**	3693	Mazda	<b>RX-8 ('09)</b>	<b>PTD*</b>	<b>3045</b>
Lexus	GS430 ('01-'07)	PTE**	3745	Mazda	RX-8 (197 hp)(Auto)('04-'05)	PTE	3053
Lexus	GS460 ('08)	PTD	3945	Mazda	RX-8 (212 hp)(Auto)('06-'07)	PTF*	3075
Lexus	IS250 ('06-'08)(6sp man.)	PTF	3450	Mercedes	190E 2.3 (16v)	PTF**	3030
Lexus	IS250 (AWD)('06-'08)	PTF**	3650	Mercedes	190E 2.6L ('86-'93)	PTF**	2955
Lexus	IS300	PTF**	3255	Mercedes	C230 ('02-'05)	PTF**	3305
Lexus	LS400	PTE	3890	Mercedes	C230 ('06-'07)	PTF**	3405
Lexus	LS430	PTE	3990	Mercedes	C280 ('94-'00)	PTF**	3316
Lexus	LS460 ('07-'08)	PTD	4244	Mercedes	C280 ('06-'07)	PTE	3460
Lexus	SC300	PTF*	3560	Mercedes	C32 AMG ('02-'04)	PTC*	3540
Lexus	SC400	PTE*	3655	Mercedes	C320 ('01-'05)	PTE	3428

Make	Model	Class	Weight	Make	Model	Class	Weight
Mercedes	C55 AMG ('05-'06)	PTC**	3540	Mitsubishi	Lancer Evo X GSR ('08)(AWD)	PTB*	3500
Mercedes	CL65 AMG ('06)	PTA*	4654	Mitsubishi	Lancer Evo X MR ('08)(AWD)	PTB**	3500
Mercedes	CLK55 AMG ('04-'06)	PTC	3960	Mitsubishi	Mirage	PTG*	2183
Mercedes	CLK430 ('99-'01)	PTD*	3323	Mitsubishi	Mirage 1.8L	PTF	2293
Mercedes	CLK430 ('02-'03)	PTD	3485	Mitsubishi	Starion (turbo)	PTF**	2900
Mercedes	CLK500 ('03-'06)	PTD*	3585	Mitsubishi	Starion ESI-R (turbo)	PTF**	3050
Mercedes	CLK550 ('07)	PTC*	3965	Nissan	200SX 1.6L	PTF	2325
Mercedes	CLK63 AMG ('07)	PTA	3960	Nissan	200SX 2.0L ('80-'81)	PTG*	2500
Mercedes	E55 AMG ('03-'06)	PTB*	4087	Nissan	200SX 2.0L Turbo	PTE	2800
Mercedes	E55 AMG ('99-'02)	PTC*	3768	Nissan	200SX SE-R (2.0L)	PTF	2586
Mercedes	E63 AMG ('07)	PTA*	4035	Nissan	240SX	PTF**	2700
Mercedes	SL55 AMG ('03-'06)	PTB*	4280	Nissan	240SX (S14 220hp swap)	PTD*	2700
Mercedes	SL55 AMG ('07)	PTB*	4365	Nissan	240SX HICAS	PTE	2700
Mercedes	SL65 AMG ('07)	PTA*	4564	Nissan	240SX SOHC ('89-'90) (140hp)	PTF*	2684
Mercedes	SLK 320 ('01-'04)	PTE*	3120	Nissan	240Z	PTE	2425
Mercedes	SLK32 AMG ('02-'04)	PTB*	3220	Nissan	260Z	PTF**	2660
Mercedes	SLK55 AMG ('05-'07)	PTB	3420	Nissan	280Z	PTF**	2800
Mercury	Capri 1.6L (75hp)	PTG	2135	Nissan	280ZX	PTF**	2800
Mercury	Capri 2.0L ('71) (100hp)	PTF	2135	Nissan	280ZX Turbo	PTE	2800
Mercury	Capri 2.0L ('72-'74)	PTG*	2275	Nissan	300ZX all (Z31--'84-'88) NA	PTE	2668
Mercury	Capri 2.3L ('76-'77)	PTH**	2491	Nissan	300ZX Turbo (Z31--'84-'89)	PTE	3260
Mercury	Capri 2.6L, 2.8L ('72-'74)	PTF	2275	Nissan	300ZX NA (Z32) 2+2	PTE	3414
Mercury	Capri 2.8L ('76-'77)	PTH*	2800	Nissan	300ZX NA (Z32--'89-'96)	PTE*	3174
Mercury	Cougar 2.5L V6	PTF*	2892	Nissan	300ZX TT	PTD**	3480
Mercury	Marauder	PTE	4195	Nissan	350Z (287hp)('03-'05)(enth. ok)	PTC	3188
Merkur	XR4Ti	PTE	2920	Nissan	350Z (300hp)('06)(enth. ok)	PTC	3339
MG	Midget 1.1L, 1.3L, 1.5L	PTF	1515	Nissan	350Z (306hp)('07-'08)(enth. ok)	PTC*	3320
Mitsubishi	3000 VR-4 ('91-'93)(AWD)	PTD	3803	Nissan	350Z Nismo ('07-'08)	PTB	3350
Mitsubishi	3000 VR-4 ('94-'99)(AWD)	PTD**	3760	Nissan	350Z Roadster ('06)	PTD*	3602
Mitsubishi	3000GT (NA-DOHC)	PTE	3219	Nissan	350Z Track ('05-'06),35ann, GT	PTC*	3370
Mitsubishi	3000GT (NA-SOHC)	PTF	3131	Nissan	350Z Track Model ('03-'04)	PTC*	3225
Mitsubishi	Eclipse 2.4L (pre-'06)	PTG**	2965	Nissan	Altima 2.4L	PTF	2853
Mitsubishi	Eclipse 2.4L ('06-'08)	PTG*	3274	Nissan	Altima 2.5L ('02-'08)	PTF*	2992
Mitsubishi	Eclipse GT 3.8L ('06-'08)	PTE*	3472	Nissan	Altima 3.5L ('02-'06)	PTE*	3225
Mitsubishi	Eclipse GT 3.0L ('00-'05)	PTF**	3142	Nissan	Altima 3.5L ('07-'08)	PTE**	3268
Mitsubishi	Eclipse Turbo ('90-'94)	PTE	2778	Nissan	Altima 3.5L SE-R ('05-'06)	PTD	3279
Mitsubishi	Eclipse Turbo ('95-'98)	PTE*	2877	Nissan	GT-R ('09+)	STSU	?
Mitsubishi	Eclipse Turbo ('99)	PTE	2970	Nissan	Maxima 3.5L ('02-'03)	PTE*	3239
Mitsubishi	Eclipse Turbo AWD ('92-'94)	PTE*	3093	Nissan	Maxima 3.5L ('04-'06)	PTE*	3471
Mitsubishi	Eclipse Turbo AWD ('95-'98)	PTE*	3157	Nissan	Maxima 3.5L ('07-'08)	PTE	3591
Mitsubishi	Eclipse Turbo AWD ('99)	PTE*	3270	Nissan	NX2000	PTF	2461
Mitsubishi	Galant 2.4L ('94-'03)	PTG*	2835	Nissan	Pickup ('90-'97)(2WD)	PTG**	2800
Mitsubishi	Galant 2.4L ('04-'07)	PTG	3428	Nissan	Pulsar NX 1.8L	PTF	2566
Mitsubishi	Galant 3.0L V6 (195hp)	PTF	3252	Nissan	Sentra 1.6L	PTF	2299
Mitsubishi	Galant 3.8L (230 hp)('02-'07)	PTF*	3616	Nissan	Sentra 1.8L ('00-'06)	PTG*	2590
Mitsubishi	Galant 3.8L Ralliart ('07)	PTF*	3748	Nissan	Sentra 2.0L ('07-'08)	PTG**	2853
Mitsubishi	Galant VR4 (AWD) ('91-'92)	PTE	3275	Nissan	Sentra SE ('98-'01)	PTF	2617
Mitsubishi	Lancer 2.0L ('02-'07)	PTG	2745	Nissan	Sentra SE-R 2.0L ('91-'94)	PTF	2467
Mitsubishi	Lancer 2.0L DE, SE ('08)	PTG*	3000	Nissan	Sentra SE-R 2.5L ('02-'06)	PTF*	2730
Mitsubishi	Lancer 2.4L ('04-'07)	PTF*	2843	Nissan	Sentra SE-R 2.5L ('07-'08)	PTF	3102
Mitsubishi	Lancer Evo VIII ('03-'05)(AWD)	PTC**	3263	Nissan	Sentra Spec V ('02-'06)	PTF**	2710
Mitsubishi	Lancer Evo VIII MR ('05)(AWD)	PTB	3263	Nissan	Sentra Spec V ('07-'08)	PTF**	3078
Mitsubishi	Lancer Evo IX ('06)(AWD)	PTB	3263	Noble	M12 GTO-3R (352 hp 3.0L V6)	STSU	2380
Mitsubishi	Lancer Evo MR ('06)(AWD)	PTB*	3285	Noble	M400 (425 hp 3.0L V6)	STSU	2337
Mitsubishi	Lancer Evo RS ('06)(AWD)	PTB	3219	Oldsmobile	Cutlass Calais 2.3L Int. (150hp)	PTF	2700

Make	Model	Class	Weight	Make	Model	Class	Weight
Oldsmobile	Cutlass Calais 2.3L Int. (180hp)	PTF**	2730	Porsche	928 ('78-'82)(4.5L)	PTD	3200
Oldsmobile	Cutlass Calais 2.3L Quad442	PTF**	2730	Porsche	944 ('83-'87)	PTF**	2779
Oldsmobile	Cutlass Calais Quad442 W41	PTE*	2625	Porsche	944 2.5L ('88)	PTF**	2844
Opel	GT 1100	PTG	1918	Porsche	944 2.7L ('89)(162 hp)	PTF**	2866
Opel	GT1900	PTG*	2138	Porsche	944 S	PTE*	2975
Opel	Manta	PTG	2230	Porsche	944 S2	PTD*	2892
Peugeot	505 Turbo 2.2L ('86-'88)(150hp)	PTF*	2850	Porsche	944 Turbo ('86-'88)	PTD	2899
Peugeot	505 Turbo 2.2L ('88-'89)(180hp)	PTF**	2950	Porsche	944 Turbo S ('88-'89)	PTD**	2998
Plymouth	Laser Turbo ('90-'94)	PTE	2756	Porsche	959	STSU	2970
Plymouth	Laser Turbo AWD ('92-'94)	PTE*	3073	Porsche	964 Carrera 2	PTD**	2970
Plymouth	Prowler	PTD*	2857	Porsche	964 Carrera 4 (AWD)	PTD**	3190
Pontiac	Fiero (4-cyl)	PTG	2590	Porsche	964 RS	PTC**	2706
Pontiac	Fiero (V6)	PTF*	2778	Porsche	964 RS America	PTC*	2820
Pontiac	Firebird 3.4L (V6)	PTG*	3306	Porsche	965 3.3L (Turbo II--'90-'92)	PTC**	3234
Pontiac	Firebird 3.8L	PTF*	3306	Porsche	965 3.6L (Turbo II--'93-'94)	PTB	3234
Pontiac	Firebird Firehawk	PTC	3481	Porsche	968	PTD*	2910
Pontiac	Firebird WS6	PTD**	3499	Porsche	968 Turbo S	PTB	2866
Pontiac	Formula ('98-'02)	PTD*	3452	Porsche	993 C2 ('94-'95)	PTC*	3064
Pontiac	Formula (pre-'98)	PTE**	3408	Porsche	993 C2 ('96-'99)	PTC**	3064
Pontiac	Formula '87 (5.0L, 215hp)	PTF**	3383	Porsche	993 C2S	PTC**	3064
Pontiac	Grand AM 2.3L (170,180hp)	PTF**	2852	Porsche	993 C4 (AWD)	PTC**	3175
Pontiac	Grand Am 3.4L (V6)	PTG**	3091	Porsche	993 C4S (AWD)	PTB	3197
Pontiac	Grand Prix GT 3.8L ('98-'04)	PTF	3484	Porsche	993 Cup	STSU	2464
Pontiac	Grand Prix GT 3.8L ('05-'06)	PTE	3484	Porsche	993 RS 3.8L	PTB*	2800
Pontiac	Grand Prix GTP ('99-'03)	PTF*	3464	Porsche	993 Turbo (AWD)	STSU	3300
Pontiac	Grand Prix GTP ('04-'06)	PTE	3583	Porsche	993 Turbo S (AWD)	STSU	3203
Pontiac	Grand Prix GXP ('05-'08)	PTE**	3600	Porsche	996 C2 (3.4L) ('99-'01)	PTB	2910
Pontiac	Grand Prix SE 3.1L	PTG*	3384	Porsche	996 C2 (3.6L)('02-'04)	PTB*	2959
Pontiac	GTO ('04)	PTD*	3725	Porsche	996 C4 (3.4L)	PTB	3034
Pontiac	GTO ('05-'06)	PTC*	3725	Porsche	996 C4 (3.6L)	PTB	3267
Pontiac	Solstice ('06-'08)	PTE	2860	Porsche	996 C4S (3.6L)	PTA	3240
Pontiac	Solstice GXP (turbo)('07-'08)	PTC	2988	Porsche	996 GT2	STSU	3130
Pontiac	Trans Am ('98-'02)	PTD*	3494	Porsche	996 GT3	STSU	2976
Pontiac	Trans Am (pre-'98)	PTE**	3477	Porsche	996 Cup	STSU	2550
Pontiac	Trans Am Turbo V6	PTD*	3346	Porsche	996 Turbo	PTA*	3388
Pontiac	Vibe 1.8L ('03-'07)	PTG*	2700	Porsche	996 Turbo S	STSU	3505
Pontiac	Vibe GT ('04-'06)	PTF	2780	Porsche	997 C4 ('06-'07)	PTA	3197
Pontiac	Vibe GT ('03)	PTF*	2780	Porsche	997 C4S ('06-'07)	PTA	3252
Porsche	911 ('63-'69)	PTE*	2248	Porsche	997 Carrera ('05-'07)	PTB*	3075
Porsche	911 ('70-'73)	PTE*	2375	Porsche	997 Club Coupe	PTA*	3053
Porsche	911 ('73-'77)	PTE*	2469	Porsche	997 CS ('05-'07)	PTA	3131
Porsche	911 ('78-'83)	PTE**	2552	Porsche	997 GT3 ('07)	STSU	3076
Porsche	911 ('84-'89)	PTD*	2756	Porsche	997 GT3 Cup	STSU	2536
Porsche	911 Carrera ('73-'77)	PTD*	2469	Porsche	997 Turbo AWD ('07)	STSU	3495
Porsche	911 Turbo 3.0L ('74-'77)	PTC**	2508	Porsche	Boxster ('97-'99)	PTE*	2822
Porsche	911 Turbo 3.3L ('77-'89)	PTC**	2937	Porsche	Boxster ('00-'02)	PTE**	2900
Porsche	911S ('67-'69)	PTD	2248	Porsche	Boxster ('02-'04)	PTD	2920
Porsche	911S ('70-'73)	PTD*	2374	Porsche	Boxster ('05-'06)	PTD*	2855
Porsche	912	PTF**	2095	Porsche	Boxster ('07)	PTD**	2855
Porsche	914-4	PTF**	2138	Porsche	Boxster S ('05-'06)	PTC*	2965
Porsche	914-6	PTE	2070	Porsche	Boxster S ('00-'02)	PTD**	2950
Porsche	924	PTF**	2344	Porsche	Boxster S ('03-'04)	PTC	2911
Porsche	924S ('87)	PTF**	2734	Porsche	Boxster S ('07)	PTC**	2965
Porsche	924S ('88)	PTE	2734	Porsche	Carrera GT	STSU	3043
Porsche	924 Turbo	PTE*	2601	Porsche	Cayenne S ('03-'06)(AWD)	PTF*	4950

Make	Model	Class	Weight	Make	Model	Class	Weight
Porsche	Cayenne Turbo ('08)(AWD)	PTC	5191	Suzuki	Swift ('94-'01)	PTG*	1930
Porsche	Cayman 2.7L ('07-'08)	PTD**	2866	Suzuki	Swift 1.3L GT ('89-'94)	PTF*	1900
Porsche	Cayman S 3.4L ('06-'08)	PTB	3075	Toyota	Camry 2.4L ('02-'06)	PTG*	3086
Renault	Alliance 1.4L (60hp)	PTG	2030	Toyota	Camry 2.4L ('07-'08)	PTG	3263
Renault	Alliance 1.7L (85hp)	PTG*	2030	Toyota	Camry 3.0L (V6)('97-'01)	PTF	3240
Renault	Alliance 2.0L GTA (95hp)	PTG**	2161	Toyota	Camry 3.0L (V6)('03-'05)	PTF*	3296
Rosion	Q1	STSU		Toyota	Camry 3.3L (V6)('04-'05)	PTF*	3351
Saab	900 Turbo SPG ('85-'89)	PTF**	2875	Toyota	Camry 3.3L (V6)('06)	PTF	3450
Saab	900 Turbo SPG ('90-'91)	PTF**	2900	Toyota	Camry 3.5L (V6)('07-'08)	PTE*	3461
Saab	9000 Aero 2.3L Turbo ('93-'97)	PTE	3265	Toyota	Celica AllTrac ('88-'89)	PTE	3270
Saab	9-2X Aero ('05)(AWD)	PTD	3179	Toyota	Celica AllTrac ('90-'93)	PTE	3272
Saab	9-2X Aero ('06)(AWD)	PTD*	3208	Toyota	Celica GT ('00-'05)	PTF**	2425
Saab	9-3 Aero 2.0T & 2.0T ('04-'07)	PTF**	3175	Toyota	Celica GT ('77-'82)	PTG**	2460
Saab	9-3 Aero 2.8L ('06-'07)	PTE**	3285	Toyota	Celica GT ('83-'86)	PTG*	2500
Saab	9-3 Viggen ('99-'02)	PT*	3170	Toyota	Celica GT ('87-'89)	PTG**	2455
Saab	9-5 2.3T	PTE*	3470	Toyota	Celica GT ('90-'99)	PTF	2600
Saab	9-5 Aero 2.3T & 2.3T ('02-'06)	PTE	3470	Toyota	Celica GT-S ('00-'05)	PTE*	2500
Saab	99 EMS ('72-'76)(2.0L)	PTG*	2560	Toyota	Celica GT-S ('83-'85)	PTG	2566
Saturn	Ion ('03-'04)	PTF	2653	Toyota	Celica GT-S ('86-'93)	PTF	2679
Saturn	Ion ('05-'07)	PTG**	2766	Toyota	Celica Supra (1st gen)	PTF**	2789
Saturn	Ion Redline ('04-'07)	PTE*	2945	Toyota	Corolla 1.8L ('03-'07)	PTF	2530
Saturn	Sky ('07-'08)	PTF**	2933	Toyota	Corolla FX-16 GT-S	PTF	2390
Saturn	Sky Redline ('07-'08)	PTC	2990	Toyota	Corolla GT-S 1.6L 16v ('84-'87)	PTF**	2200
Saturn	S-Series (DOHC) ('91-'02)	PTF	2437	Toyota	Corolla GT-S 1.6L 16v ('88-'89)	PTF	2390
Saturn	S-Series (SOHC) ('91-'02)	PTG*	2345	Toyota	Corolla SR5 ('79-'83)(3TC)	PTG	2185
Scion	tC ('05-'08)	PTF	2905	Toyota	Corolla XRS	PTF**	2670
Scion	xA ('04-'06)	PTG*	2340	Toyota	Echo	PTF**	2035
Scion	xB ('04-'06)	PTG	2415	Toyota	Matrix ('03-'07)	PTG*	2673
Subaru	Forester XT ('04-'05) (AWD)	PTF**	3225	Toyota	Matrix XRS (180 hp)('03-'04)	PTF*	2800
Subaru	Forester XT ('06-'07) (AWD)	PTE	3270	Toyota	Matrix XRS ('05-'06)	PTF	2800
Subaru	Impreza 1.8L (AWD)	PTG**	2605	Toyota	MR Spyder	PTF*	2195
Subaru	Impreza 1.8L (FWD)	PTG**	2325	Toyota	MR2 (1st Gen NA)	PTF*	2380
Subaru	Impreza 2.2L (AWD)	PTF**	2730	Toyota	MR2 2.2L DOHC	PTF*	2657
Subaru	Impreza 2.5L ('98-'01)(AWD)	PTE	2840	Toyota	MR2 SC	PTF**	2605
Subaru	Impreza 2.5L ('02-'05)(AWD)	PTF**	2972	Toyota	MR2 Turbo	PTE**	2825
Subaru	Impreza 2.5L ('06-'08)(AWD)	PTE	3016	Toyota	Paseo	PTG**	2025
Subaru	Legacy 2.2L ('90-'94)(AWD)	PTF	2830	Toyota	Prius	PTH	2932
Subaru	Legacy 2.2L ('95-'99)(AWD)	PTF*	2885	Toyota	Solara 3.3L ('04-'06)	PTF*	3419
Subaru	Legacy 2.2L T AWD ('91-'94)	PTF*	3100	Toyota	Solara 3.3L ('07-'08)	PTF	3440
Subaru	Legacy 2.5L ('00-'08)(AWD)	PTF**	3200	Toyota	Supra NA ('88-'92)	PTF**	3430
Subaru	Legacy GT ('05-'08)(AWD)(Turb)	PTD*	3300	Toyota	Supra NA ('94-'98)	PTE*	3265
Subaru	Legacy 3.0 AWD ('08)	PTE	3545	Toyota	Supra T	PTE	3534
Subaru	Outback 3.0 ('01-'04)(AWD)	PTF*	3630	Toyota	Supra TT	PTC**	3450
Subaru	Outback 3.0 ('05-'07)(AWD)	PTE	3610	Toyota	Tercel ('88-'90) (78hp)	PTG	2020
Subaru	Outback XT ('05-'06)(AWD)	PTE*	3415	Toyota	Yaris ('07)	PTG**	2293
Subaru	Outback XT ('07)(AWD)	PTE	3535	Triumph	GT6 MK I	PTF**	1905
Subaru	SVX (AWD)	PTE	3375	Triumph	GT6 MK III	PTE	1904
Subaru	WRX 2.0L ('02-'05) (AWD)	PTD	3085	Triumph	Spitfire MK 2 (75hp, 1147cc)	PTF*	1564
Subaru	WRX 2.5L ('06-'08)(AWD)	PTD*	3140	Triumph	TR4 ('61-'64)	PTF*	2240
Subaru	WRX 2.5L ('09)(AWD)	PTC*	3175	Triumph	TR6 ('69-'76)(2.5L S6 US Carb)	PTF*	2360
Subaru	WRX STi ('04-'07)(AWD)	PTB	3260	Triumph	TR6 ('69-'76)(2.5L S6 Fuel Inj)	PTD	2360
Subaru	WRX STi ('08-'09)(AWD)	PTB**	3395	Volvo	242 GLT ('81-'85)(turbo)	PTF	3072
Subaru	XT	PTG*	2455	Volvo	850 2.4L n.a. ('93-'97)	PTF	3180
Subaru	XT6 (AWD)	PTF*	2885	Volvo	C30 T5 2.5L turbo ('08)	PTE**	2970
Sunbeam	Tiger	PTE*	2575	Volvo	C70 T5 2.3 T Coupe ('01-'02)	PTE*	3200

<b>Make</b>	<b>Model</b>	<b>Class</b>	<b>Weight</b>	<b>Make</b>	<b>Model</b>	<b>Class</b>	<b>Weight</b>
Volvo	C70 T5 2.3 T Conv. ('99-'04)	PTF**	3450	VW	GTI 1.8L 8v ('85-'92)	PTG*	2267
Volvo	C70 T5 ('06-'07)	PTF	3772	VW	GTI 1.8L DOHC	PTF*	2267
Volvo	P1800 ('61-'62)	PTF	2215	VW	GTI 1.8L turbo (150 hp)	PTF	2762
Volvo	S40 1.9 L ('00-'04)	PTF**	2767	VW	GTI 1.8L turbo (180hp)	PTF*	2934
Volvo	S40 2.4L ('04-'06)	PTF	3084	VW	GTI 2.0L 8v ('95-'98)	PTG*	2557
Volvo	S40 2.4L ('07)	PTG**	3234	VW	GTI 2.0L 8v ('99-'00)	PTH**	2765
Volvo	S40 T5 ('05)	PTE	3126	VW	GTI 2.0L DOHC (134 hp)	PTF*	2445
Volvo	S40 T5 ('06-'07)	PTF**	3278	VW	GTI 2.0L Turbo ('06-'08)(200hp)	PTF**	3100
Volvo	S40 T5 ('05-'07)(AWD)	PTE*	3447	VW	GTI 2.8L V6 (174hp)	PTF	3011
Volvo	S60 2.4L	PTF	3230	VW	GTI 2.8L V6 (200hp)	PTF**	3036
Volvo	S60 2.5L Turbo ('04-'06)(AWD)	PTE	3603	VW	GTI 337 (turbo)	PTF**	2857
Volvo	S60 2.5L Turbo ('07)(AWD)	PTF**	3651	VW	Jetta 1.6L	PTH**	2040
Volvo	S60 2.5L Turbo ('04-'06)(FWD)	PTF**	3393	VW	Jetta 1.8L DOHC	PTF*	2305
Volvo	S60 2.5L Turbo ('07)(FWD)	PTF*	3501	VW	Jetta 1.8L SOHC	PTG	2450
Volvo	S60 R ('04-'05)(AWD)	PTD*	3715	VW	Jetta 1.8L turbo GLI	PTF	3106
Volvo	S60 R ('06-'07)(AWD)	PTD*	3715	VW	Jetta 2.0L GLI DOHC	PTF*	2438
Volvo	S60 2.4L T5 ('05-'07)	PTE**	3393	VW	Jetta 2.0L SOHC	PTH	2934
Volvo	S60 2.3L T5 ('01-'04)	PTE*	3406	VW	Jetta 2.0L turbo ('06-'08)	PTF*	3259
VW	Beetle 1.8L T (150hp)(99-'05)	PTF	2820	VW	Jetta 2.5L I5 ('05-'07)	PTG	3230
VW	Beetle 1.9L TDI ('98-'03)	PTH**	2750	VW	Jetta 2.5L I5 ('08)	PTG**	3230
VW	Beetle 1.9L TDI ('04-'06)	PTH**	2850	VW	Jetta 2.8L VR6 12v ('94-'98)	PTF	2927
VW	Beetle 2.0L ('98-'05)	PTH**	2743	VW	Jetta 2.8L VR6 12v ('99-'02)	PTG**	3113
VW	Beetle 2.5L ('06-'08)	PTG**	2884	VW	Jetta 2.8L VR6 24v	PTF*	3179
VW	Beetle Turbo S ('02-'04)	PTF*	3005	VW	Passat 2.0L turbo ('06-'08)	PTF*	3305
VW	Corrado 1.8L DOHC, 2.0L DOHC	PTF**	2403	VW	Passat 2.8L	PTF*	3151
VW	Corrado 2.0L SOHC	PTG**	2418	VW	Passat 3.6L ('06-'08)	PTE*	3576
VW	Corrado G60 1.8L S/C	PTE*	2558	VW	Passat 3.6L ('06-'08)(AWD)	PTE*	3700
VW	Corrado VR6	PTF**	2733	VW	Passat W8 (AWD)	PTE	3918
VW	Golf 1.6L, 1.8L	PTG*	2120	VW	Rabbit 1.6L	PTH**	2000
VW	Golf 1.8L DOHC, 2.0L DOHC	PTF	2672	VW	Rabbit 1.6L Diesel (<'92)	PTH*	2270
VW	Golf 1.9L TDI ('99-'03)	PTH**	2750	VW	Rabbit 1.6L Turbo-Diesel (<'93)	PTH*	2300
VW	Golf 1.9L TDI ('04-'06)	PTH**	2850	VW	Rabbit 1.7L (74hp)	PTH**	2046
VW	Golf 2.0L, 1.4L & 1.6L DOHC	PTG*	2533	VW	Rabbit 2.5L ('06-'07)	PTG**	2975
VW	Golf 2.0L ('99-'06)	PTH**	2771	VW	Rabbit 2.5L ('08)	PTF	2975
VW	Golf 2.5L V5	PTF*	2732	VW	Rabbit GTI 1.8L (90hp)	PTG*	2120
VW	Golf 2.8L V6	PTF*	3102	VW	Scirocco 1.6L (75-78hp)	PTH**	2015
VW	Golf 2.8L VR6	PTE	2546	VW	Scirocco 1.7L (74hp)	PTH**	2040
VW	Golf R32 (AWD)(04)	PTD	3350	VW	Scirocco 1.8L DOHC	PTF*	2287
VW	Golf R32 (AWD)(08)	PTE*	3600	VW	Scirocco 1.8L SOHC	PTG*	2120

## 5.3 Up-Classing System

### 5.3.1 Modifications and Point Assessments:

If your car accrues 20 or more points you will be bumped up in Class. There is no limit - a car with a high level of modifications might move up several Classes.

20 thru 39 points - Up ONE Class

40 thru 59 points - Up TWO Classes

60 thru 79 points - Up THREE Classes

80 thru 99 points - Up FOUR Classes

100 thru 119 points - Up FIVE Classes

120 thru 139 points - Up SIX Classes

140 thru 159 points - Up SEVEN Classes

160 thru 179 points - Up EIGHT Classes

**One (1) \* on a base class assignment denotes a 7 point initial assessment, and two (2) \*\* denotes a 14 point initial assessment that is added to the total number of modification points to determine the final competition class.**

**FORCED INDUCTION VEHICLES will add an additional five (+5) points to the total number of modification points to determine the final competition class. (Forced induction vehicles that have been classed or re-classed based on Dyno testing are exempt from this additional five (+5) point assessment.)**

### **TIRES:**

- 1) DOT-approved R-compound tires with a UTQG treadwear rating of 40 or less (ex. BFG R1, Hankook Z214, Hoosier R6/A6, Kumho V710, etc.--note: G.A.C.& VRL Hoosiers OK) +10
- 2) DOT-approved R-compound tires with a UTQG treadwear rating of 50 to 130 (ex. Kumho V700, Michelin Pilot Sport Cup, Nitto NT01, Pirelli PZero Corsa, Toyo R888, Yokohama A048, etc.—note: see exception below in 3)) +7
- 3) Toyo RA-1 and Nitto NT555R11 +5
- 4) Non-DOT-approved racing slicks +30 (of any origin--re-caps and re-treads are not permitted)
- 5) The following tire sizes will be used as the base tire size for each **Base Class** for all vehicles regardless of their OEM tire size(s). All vehicles in a given base class may use this tire size (or smaller) without a points assessment:

PTA: 295 mm, PTB: 265mm, PTC: 255mm, PTD: 245mm, PTE: 235mm,  
PTF: 215mm, PTG: 195mm, PTH: 175mm

Tire width points assessed or points credited are determined by the difference between the width of the **largest tire** on the vehicle and the assigned base tire size as follows:

Equal to or greater than: 10mm +1, 20mm +4, 30mm +7, 40mm +10, 50mm +13,  
60mm +16, 70mm +19, 80mm +22, 90mm +25, 100mm +28, 110mm +31, 120mm +34, etc.

Equal to or less than: -10mm -1, -20mm -4, -30mm -7, -40mm -10, -50mm -13, -60mm -16,  
-70mm -19, -80mm -22, -90mm -25, -100mm -28, -110mm -31, -120mm -34, etc.

Tire width is determined by the number printed on the tire sidewall by the manufacturer. If a tire does not have a manufacturer's printed number on the sidewall, then actual tread width

measurement will be used. UTQG treadwear ratings are as of the date of the current version of the PT rules. Any new tire or tire with a changed UTQG treadwear rating must be evaluated by the National PT Director before the rating will be legal for use in NASA PT classing. All DOT-approved tires must be available for purchase by the general public through Federal or state licensed tire dealers.

## **WEIGHT REDUCTION:**

Weight reduction points are based on the actual vehicle minimum competition weight (with driver). Removal and lightening of non-essential parts is permitted unless stated otherwise in these rules. Modification of the OEM frame, sub-frame, and floor pan are not permitted (see 5.2.2) Removal or lightening of engine parts is permitted only as listed elsewhere in these rules:

If the base weight used for base classing purposes (above in 5.2.2) minus minimum competition weight (with driver\*) is greater than: 5 lbs +1, 20 lbs +2, 35 lbs +3, 50 lbs +4, 65 lbs +5, 80 lbs +6, 95 lbs +7, 110 lbs +8, 125 lbs +9, 140 lbs +10, 155 lbs +11, 170 lbs +12, 185 lbs +13, 200 lbs +14, 215 lbs +15, 230 lbs +16, 245 lbs +17, 260 lbs +18, 275 lbs +19, 290 lbs +20, 305 lbs +21, 320 lbs +22, 335 lbs +23, 350 lbs +24, 365 lbs +25, 380 lbs +26, 395 lbs +27, 410 lbs +28, 425 lbs +29, 440 lbs +30, 455 lbs +31, 460 lbs +32, 475 lbs +33, 490 lbs +34, 505 lbs +35, etc...

\*Minimum competition weight is the vehicle's lightest weight with the driver and safety gear, during any competition session. Any driver/team who's vehicle at impound does not meet the minimum weight that they have declared on their car classification sheet **will** be disqualified if the number of modification points based on the lighter actual weight puts the car in a higher competition class. **As well, additional penalties may be assessed (section 6.4 and 5.3.2) for failing to meet the listed weight on the Car Classification Form.**

## **ENGINE/DRIVETRAIN:**

- 1) Engine swap: All engine swaps must be evaluated for new base classification by the National PT Director on an individual basis, unless a base class for the particular swap is listed above in 5.2.2 Base Classifications or in Appendix B. The following factors will be taken into account in classing the car: wt./hp ratio, total weight, high torque in the usable rpm range, body style, engine location, drivetrain type, advanced technology/engineering in OEM suspension, brakes, drivetrain, and aerodynamics, and dry sumps (if engine is lowered). Competitors should submit all of the above data to the National PT Director with the request for re-classification of the vehicle. Most engine swaps will require chassis dynamometer testing of the competition-ready vehicle and submittal of the minimum competition weight chosen by the competitor. (see section 5.3.2)
- 2) Increased number of camshafts or non-OEM (non-stock) head(s)/hybrids: engine swap rules with Dyno testing apply—must be evaluated by the National PT Director for re-classification. (see section 5.3.2 Dyno Testing Procedures)
- 3) Non-OEM, upgraded, or modified turbo, supercharger: engine swap rules apply—all OEM naturally aspirated vehicles that have been upgraded to forced induction and forced induction vehicles with an upgraded or modified turbo or supercharger must be evaluated by the National PT Director on an individual basis for new base classification based on chassis dynamometer testing and actual vehicle weight as in 1) above and in Section 5.3.2 Dyno Testing Procedures. After re-classification, modification points will not be assessed for weight reduction or engine. However, if the power output of the vehicle is later increased, the participant will have to get the vehicle re-classified again.

- 4) Increased displacement by: <1.5% +0, 1.5% to <5.5% +4, 5.5% to <7% +6, 7% to <10% +8, 10% to <15% + 10, 15% to <20% +15, > 20% +20.  
Formula to calculate % = current disp. divided by OEM disp., minus 1, x 100 = %  
Example: 407ci/351ci =1.16, minus 1= .16, x 100 = 16% (+15 pts)  
Example: 1852cc/1799cc = 1.029 minus 1 = .029 x 100 = 2.9% (+4 pts)
- 5) Modified or non-OEM camshaft(s) or cam timing gears +6 (for one or more)
- 6) Valve size change, modified, ported or polished OEM head (other than simple shaving of the head only) +6
- 7) Any modifications that result in increased engine compression ratio (including shaving the head or decking the block to factory specs):  
0.50 or less +0, >0.50 +3, >1.0 +6, >2.0 +10, >3.0 +15
- 8) De-stroked engine +4
- 9) Replacement pulleys (other than for supercharger) +1
- 10) Port modification for rotary engine: **Dyno testing rules apply—must be evaluated by the National PT Director for re-classification. (see section 5.3.2 Dyno Testing Procedures)**
- 11) Added dry sump oil system +7 (+14 if motor is lowered from OEM location)
- 12) Aftermarket computer system (any non-OEM “stand-alone” or “piggyback”):  
**+3** naturally aspirated, **+10** forced induction
- 13) Modification of the OEM air intake/box, air filter location, air piping to the turbo/supercharger/intercooler/throttle body/carburetor, or hood/fascia/fender air inlet(s) +1 (air filter upgrade alone—0 pts.)
- 14) Replacement pulley for OEM supercharger +4
- 15) Aftermarket boost controller or modification/alteration of OEM vacuum lines that serve to function as a boost controller +4
- 16) Aftermarket or modified wastegate actuator, wastegate, or vacuum line(s) that serve to control the wastegate actuator function or increase peak boost +3
- 17) Add aftermarket intercooler +7
- 18) Non-OEM or modified intercooler +4
- 19) Non-OEM or modified/ported throttle body +2; **independent throttle bodies +4**
- 20) Non-OEM, modified/ported, **or deleted** intake manifold: 4 cyl. +1, 6cyl. +2, 8 cyl. +3, 12A &13B rotary +2, all other rotary +3
- 21) Non-OEM or modified carburetor, fuel rail, fuel injectors, fuel pump, and/or fuel pressure regulator +2 (no points for fuel pump alone if using OEM fuel and timing maps, sensor inputs and ignition timing)
- 22) Water injection system +6 (An alcohol-water mixture is permitted, but the driver must notify Race Control and Safety that it is being used.)
- 23) Nitrous oxide injection is illegal.
- 24) Modification or porting of the exhaust manifold +2
- 25) Aftermarket or modified header +2
- 26) Non-OEM or modified exhaust system downstream from the header, exhaust manifold, or turbo. (does not include catalytic converter removal/upgrade) +2  
(Note: Replacement of a failing OEM exhaust system may be permitted without a points assessment if the OEM definition in 5.4 OEM Definition is strictly adhered to.)
- 27) Non-OEM or modified exhaust piping, resonators, or mufflers downstream from the OEM catalytic converter(s) locations(s) +1 (for basic “catback” exhaust or performance mufflers only—otherwise, must use 26) +2 if the vehicle has an aftermarket, modified, or deleted header/secondary/downpipe/pre-cat section/catalytic converter)
- 28) Removal, upgrade, or modification of catalytic converter(s). +1

- 29) Non-OEM sequential (semi-automatic) or dog-ring (non-synchromesh) transmission (includes altered gear ratios) +7
- 30) Upgrade number of forward gears in transmission or altered gear ratios +3
- 31) Added paddle/electronic shift +3
- 32) Added limited slip differential or welded/locked differential +3
- 33) Changed or modified limited slip differential (or welded/locked OEM LSD) +1
- 34) Added traction control +3 (no points if proven disabled during competition)
- 35) Relocation of engine/transmission between 1 and 10 inches of the OEM location +7 (note: Relocation of less than 1 inch is not assessed points, and more than 10 inches is not permitted without the approval of the National PT Director.)
- 36) Modification/upgrade from a fixed to a floating rear axle +3

### **SUSPENSION/BRAKES/CHASSIS:**

- 1) Non-OEM shocks/struts/dampers with an external reservoir or more than two ranges of adjustment—must still take points for springs below +10 (example: compression (bump) and both high & low rebound adjustments).
- 2) Non-OEM shocks/struts/dampers with a retail price of greater than \$600 (\$2400 total) or \$750 each if sold only as a coilover with spring included (\$3000 total). Also “Piggyback” external reservoir shocks/coilovers/dampers with a retail price of less than \$1050 per unit (\$4200 total)—must still take additional points for the springs below +7
- 3) Non-OEM or modified/re-valved shocks/struts/dampers +3 (all others)(springs not included)
- 4) Non-OEM or modified coil springs, leaf springs/spacers/brackets, or torsion bars +2
- 5) Conversion of torsion bar/leaf spring suspension to coil spring and strut/shock suspension +2
- 6) Add, replace, remove, or modify anti-roll bars (“sway” bars—front, rear, or both—may have spherical joints on the end links without additional points assessment) +2
- 7) Replace or modify control arms (other than plates, shims, slots, or eccentric bolts/bushings for simple camber/caster adjustment only)(may have spherical/metallic joint(s) for the connection to the spindle/knuckle) +4
- 8) Relocation of front suspension mounting points +6
- 9) Relocation of rear suspension mounting points +6
- 10) Changing the mounting orientation/design of the OEM shock and/or spring perch to invert them +1
- 11) Using the alternate control arm mounting location on cars equipped OEM with multiple choices (example: to increase track width) +6
- 12) Changing the orientation or design of an OEM mounting point or pick-up point of a control arm for a panhard bar or trailing arms +1
- 13) Replaced or modified K-members that change the location of the lower control arms +8
- 14) Tubular K(cross)-members that do not change the location of the lower control arms +2
- 15) Bump steer kits or shimming of the steering rack +2
- 16) Alteration of ball joints/dive angles +2
- 17) Add panhard rod or Watt’s link (regardless of whether the Watt’s link replaces an OEM panhard rod or not) +4
- 18) Replace or modify an OEM panhard rod or Watt’s link +2
- 19) Add torque arm +4
- 20) Replace or modify an OEM torque arm +2

- 21) Increase in track width greater than 3 inches due to non-OEM axles, control arms, brake rotors/hats, wheel spacers, hubs, wheel offset, and/or camber adjustment +6 (measured from the inside of one tire to the outside of the opposite tire at ground level—averaging the measurements in front of and behind the contact patch to negate the effect of toe)
- 22) Non-OEM rear trailing arms (for stiffness only, no change in suspension mount or pick-up points from stock) +1
- 23) Non-OEM rear control arms on FWD vehicles (for stiffness and wheel alignment only, no change in suspension mount or pick-up points from stock) +1
- 24) Non-OEM brake calipers +2
- 25) Metallic replacement suspension bushings (Heim joints/spherical joints) +3 (except for pillow ball camber plate joints, sway bar end links already assessed points in 6) above, and control arm spindle/knuckle joints already assessed points in 7) above)
- 26) Add front lower stress/arm brace (two attachment points maximum) +1
- 27) Add a third attachment point to front or rear strut tower bar (or replace existing 3 point) +1
- 28) Add or modify other chassis stiffening devices or fabricated parts (such as lower strut braces or lower arm braces (with greater than two attachment points), subframe connectors, subframe braces, subframe mounts/bushings, etc) +3
- 29) Non-OEM driver/cockpit adjustable sway bar or suspension settings +4

#### **AERODYNAMICS:**

- 1) Add, replace, or modify front fascia or air dam +3 (except as provided for in 13), 25), 57) of the No-Points Modification list) (note: Additional points must be assessed below for any component of the added/replaced/modified fascia or air dam that performs the functions listed in 2) and 4) below)
- 2) Add, replace or modify a single front splitter/spoiler/wing/foil +3 (note: This part may extend horizontally past the side of the vehicle no greater than five inches. If any portion of this part that protrudes from the side of vehicle is not parallel to the ground, then additional points must be assessed for canards in 4) below.) (note: No material or part may extend the vertical reach of the OEM front fascia without taking fascia modification points above.)
- 3) Add, replace, or modify rear wing or spoiler +4 (a rear wing or spoiler may not exceed a height of eight (8) inches above the roofline (or OEM windshield height for convertibles), or a width greater than the width of the car body.
- 4) Add or modify canards/winglets (includes portions of an added/modified/replaced fascia that provide a downward force other than that listed in 2) above) +2
- 5) Add or fabricate flat bottom/belly tray (rearward of the centerline of the front axle) +5
- 6) Add rear diffuser (note: additional points must be assessed for any vertical panels incorporated into a rear diffuser that are greater than five inches in height) +2
- 7) Replace or modify OEM rear diffuser, rear bumper cover, or rear “fascia” (note: additional points must be assessed for any vertical panels incorporated into a rear diffuser that are greater than five inches in height) +1
- 8) Add rear vertical panels in any location (note: see 6) and 7) and 10)) +2
- 9) Add or modify side skirts +2
- 10) Add vortex generator to roof, rear window, or rear deck lid (note: additional points must be assessed for any vertical panels incorporated into a rear diffuser that are greater than five inches in height) +1
- 11) Removal of the front windshield/windshield frame +7
- 12) Front side window frame air dams/diverters (driver and/or passenger side) +2

## **ROLL CAGES:**

6 or 8-point roll cage designs constructed per the NASA CCR may be utilized without a PT modification point assessment. Additional bars and/or attachment points within the driver's compartment that exceed the allowances in the CCR are also permitted. The following roll cage designs are permitted but will be assessed points as follows:

- 1) One or more bars that penetrate the front bulkhead/firewall +2
- 2) One or more bars that are welded to the chassis (directly or with a plate) anywhere farther than 6" from the end of a tube where it terminates at a plate +2

## **NO-POINTS MODIFICATIONS:**

- 1) Rolled fender lips
- 2) Flared fenders
- 3) Sun/moonroof removal and cover roof hole.
- 4) Battery replacement/lightweight battery/dry cell
- 5) Air bag removal (must be removed or disabled)
- 6) Jack and spare tire removal (required)
- 7) Floor mat removal (required)
- 8) Wheels, wheel studs, wheel bearings replacement/upgrade, **hub modification/replacement**
- 9) Final drive ratio modification
- 10) Simple camber, caster, and toe adjustment by any method that does not alter suspension mounting points (unless the modification used is otherwise assessed points above). Bolt on camber/**caster** plates are not assessed points.
- 11) Ride height adjustment (must still take points for springs and torsion bars above)
- 12) Air filter upgrade (**without modification of the air filter housing or air intake system**)
- 13) Radiator upgrade/shrouding/fascia modification (**drilled or cut holes/slots**) that only provides increased airflow to the radiator or oil/transmission coolers (without aerodynamic or engine air intake improvement)
- 14) Starter motor replacement
- 15) Alternator replacement (must be able to sustain vehicle operation without a battery)
- 16) Oil systems and coolers other than added dry sump
- 17) Motor mounts and inserts replacement/upgrade or modification (with up to 1 inch of relocation of the motor/transmission)
- 18) Engine rebuild with head shave, block decking and 0.020" overbore—provided that compression ratio is not increased by more than 0.5 and displacement is not increased by greater than 1.49%. Forged pistons and internals are legal; however, points must be assessed for de-stroking, and/or increased displacement and compression ratio if greater than the limits listed above. (Note: 0.020" overbore with OEM rods and overbore pistons will yield an increase in displacement of approximately 1.1% for most engines.)
- 19) Engine balancing and blueprinting
- 20) Spark plug wires, plugs, coil, ignition replacement/upgrade
- 21) Turbo blow-off valve upgrade, modification, or addition
- 22) Removal of the engine balance shaft and/or balance shaft drive mechanism
- 23) Lightweight flywheel and/or clutch assembly
- 24) Fuel: Any grade of commercially available unmodified gasoline or diesel--all octane levels of retail available race gas are permitted. No "home brewed" methanol/ethanol/alcohol mixtures are permitted. Methanol injection systems are illegal. Fuel additives are prohibited. **Retail available E-85 is permitted.**

- 25) Brake duct addition or modification, including electric fans (water sprayers are illegal).  
Two holes may be cut or drilled out of the front fascia for brake air ducts. Any hole providing improved intake air to the engine will be assessed one (1) point under Engine 13).
- 26) Non OEM brake pads and rotors
- 27) Brake lines, brake boosters, and master cylinder modification or replacement.
- 28) Emergency brake removal
- 29) Non-metallic replacement suspension bushings
- 30) Steering wheel replacement
- 31) Mirror addition or replacement
- 32) Gear shifters and shift knob replacement/upgrade
- 33) Seat harnesses (must be compliant with NASA CCR)
- 34) Maximum of two hundred and fifty (250) lbs. of added ballast—All ballast must be of solid material (no fluids or shot pellets) and safely secured in any location on the vehicle approved by NASA safety technical inspectors. The preferred method is to use at least one (1) 3/8-inch grade-5 bolt, two (2) “fender” washers and a locking nut system for every fifteen (15) pounds of weight.
- 35) Data acquisition systems—telemetry is not permitted (NASA CCR section 18.7)
- 36) Non-OEM driver’s seat
- 37) Non-OEM front passenger seat
- 38) Relocated Battery
- 39) Undertray/ belly pan forward of the centerline of the front axle
- 40) No aero points for adding a hardtop to a convertible or removal of convertible soft top/frame
- 41) Seam welding of the body/chassis
- 42) Shock tower reinforcement plate (to strengthen tower shock mount location only--no bars)
- 43) Shock mount replacement/modification (only if already taking points for both shocks and springs)(may raise or lower mount location up to two (2) inches if no horizontal movement.)
- 44) Accelerator, brake, and clutch pedal modification or replacement.
- 45) Drive by wire to cable throttle conversion (throttle body must remain identical to OEM in both size and shape to avoid a +2 throttle body assessment).
- 46) Add front strut tower bar (two attachment points—bolted in or as component of the cage)
- 47) Add rear strut tower bar (two attachment points—bolted in or as a component of the cage)
- 48) Lexan windshield, rear window, and rear passenger side windows (windshield must be 3/16” minimum thickness). (See section 7 Safety regarding front side windows)
- 49) OEM ECU/PCM reprogramming or chip (must use OEM ECU/PCM box/housing/hardware)
- 50) Programmable fuel systems without control of engine timing (such as SAFC, VAFC)
- 51) Non- OEM sensors or alteration of sensor inputs (such as non-programmable MAF or MAP voltage “clamps”)
- 52) Steering rack replacement or modification without geometry change (ratio changes)
- 53) Non-OEM valve springs and retainers
- 54) Ignition timing adjustments
- 55) NACA ducts, air ducts, or air hoses placed in a side window frame solely for purposes of driver cooling.
- 56) Front wing window removal and replacement with Lexan
- 57) Headlamps, headlight covers, and fog lights may all be removed, and the holes may be covered with material that replicates the shape of the OEM light/cover, leaving the shape of the OEM fascia intact. Uncovered holes may be used for brake ducts. Any hole providing improved intake air to the engine will be assessed one (1) point under Engine 13).

Note: For NASA racecars/guest classes that are given a base classification in 5.2.1, these modifications must also be legal under the racecar's class rules. The race class rules take precedence over this list.

Note: Many of the modifications listed above can/will alter the overall weight of the vehicle. While these modifications are not assessed points individually, and additional weight reduction methods are permitted without individual points assessment (as stated under Weight Reduction), the overall weight of the vehicle and driver (minimum competition weight) will be used to assess points and/or penalties for all vehicles.

### 5.3.2 Dyno Testing Procedures—Motor Swaps, Forced Induction, Non-OEM Heads/Hybrids, Ported Rotary Engines, National PT Director Assigned Classing

The following rules apply to:

Cars that have an added, modified, or upgraded turbocharger or supercharger.  
Cars that have a non-OEM head(s) or increased number of camshafts (hybrid engines).  
Engine swap vehicles that have been designated as requiring dynamometer testing by the National PT Director.

**Cars with Rotary Engines that have been ported.**

**Other vehicles that have been designated by the National PT Director to be classed based on dynamometer testing.**

(The Dyno testing procedures also apply whenever dynamometer testing is used as a non-invasive tool to help determine technical compliance with the classification rules for any car.)

The owner/driver must submit **the maximum dynamometer horsepower and torque numbers**, and the minimum competition weight of the vehicle (with driver) to the National PT Director prior to the car's first competition in order to be assigned a new A-H base class (for those cars requiring re-classification). All competitors will be required to include the latest certified Dynamometer (Dyno) report and minimum weight in their vehicle logbook at all times. Any subsequent modifications or adjustments done to the car that could alter power output will require repeat Dyno testing, and a new certified Dyno report. NASA Officials may request repeat Dyno testing at any other time.

A certified Dyno report consists of three separate, reproducible Dyno tests with SAE correction. The highest peak horsepower number of the three tests will be used as the official certified horsepower for weight to horsepower calculations. A smoothing factor up to five (5) is permitted. The owner/driver may elect to submit a higher horsepower number for the purposes of reassigning a base class to ensure that any Dyno testing done at another location or at the track by the PT Officials will show hp ratings equal to or less than those provided by the owner/driver. Dynamometer tests must be conducted on a Dynojet Model 248 or 224 for front and rear wheel drive vehicles, and on a Dynojet, Mustang, Dyno Dynamics, or Dynapack for AWD cars, in a commercial facility that offers dynamometer testing as part of their business and is open to the public. Each Regional PT Director may retain the option to specify which business locations will be the approved centers for that particular region. Please check with the PT Director in your area for instructions. All sites approved by the NASA American Iron series are approved for PT.

Certified Dyno reports are potentially valid for up to a maximum of three years (provided that no changes have been made to the vehicle that would alter Dyno readings). However, at his discretion, a NASA PT Director may require an updated certified Dyno report (at the driver's/owner's expense) after one year from the date of the previous report.

Dynamometer tests are official and certified when performed by series Officials. It is the responsibility of the competitor to be within power levels on any Dyno that NASA officials choose to use for testing. The Dynojet will be the preferred Dyno for all vehicles, and will be used exclusively when available.

As AWD Dyno availability is limited, NASA Officials may use any of the four AWD Dynos listed above. AWD drivers need to be especially careful that their cars will be compliant on any official Dyno that is available.

**Vehicles may not have any adjustments during the competition day to systems that allow adjustment of horsepower levels that would serve to alter Dyno readings.** Examples of such systems are driver-adjustable electronic tuning and engine timing advance devices, fuel pump output modification devices, boost controllers, adjustable MAP and MAF voltage clamps, and any other system that could alter the Dyno readings when measured for compliance purposes. Any restriction device placed in the air intake system must be clearly identified as such and marked to indicate its dimensions.

For compliance testing, the dynamometer operator and the PT Director or NASA Official will determine the dynamometer testing procedures and how many test runs will be performed for any given car being tested in order to obtain accurate test data. Prior to the dynamometer inspection the competitor may top off any fluids needed to ensure the engine and drivetrain are not damaged during testing. The fluids must be added with a NASA Official present. No other modifications or adjustments may be made to the car. To ensure fairness, a NASA Official, or an individual appointed by a NASA Official, will operate any cars being inspected on the dynamometer. SAE correction with a smoothing factor of five (5) will be used. Any run that results in an erratic or non-reproducible result may be dismissed by NASA officials.

**Penalties**---If a car is tested by Officials, and found to have a higher hp rating than was submitted for base classification purposes on the Car Classification Form, the following formula will be used to determine possible penalty assessment for cars in classes PTF to PTA. One (1) "penalty" point will be assessed for any deviation above the submitted peak hp number, and it will be considered a "Procedural Violation" as well (see Section 6.4 Penalties). Then, one (1) additional penalty point will be assessed for every 3 horsepower above the submitted number. The total number of penalty points will be added to the car's current number of modification points to determine if the car has illegally competed in a class that is too low. If a vehicle that has been reclassified based on its actual competition weight and Dyno power output is found to weigh less than the minimum weight listed on its Car Classification Form, it will be assessed two (2) penalty points for any deviation below the listed weight, followed by one (1) additional penalty point for each 10 pounds below the listed minimum competition weight. Following the NASA CCR 17.8, there will be a five (5.0) pound leeway allowed during the first time the vehicle is weighed for that event (weekend). There will be no leeway at subsequent weighings for the remainder of the event. Appropriate penalties will then be assessed per the PT rules (6.4), including a penalty for a Procedural Violation for any vehicle failing to meet the minimum competition weight listed on the Car Classification Form.

## 5.4 OEM Definition, Updating and Backdating Rules

For the purposes of NASA PT points assessments, the term OEM will be defined as follows: Any part that is identical in size, shape, and functional characteristics compared to the part that originally came on the vehicle, from the manufacturer, as a standard feature of the base model as it is listed in section 5.2 Base Classifications (factory options and specialty model parts are considered non-OEM) or is listed as a standard replacement part by the OEM manufacturer. Some parts that are produced by aftermarket manufacturers as generic replacement parts may not require a points assessment provided that: they are the same size and shape, and have the same functional characteristics as the OEM part, and that they provide no significant improvement in performance, longevity, or reliability. If it is determined in impound that such a part does not meet the above description, the driver may be disqualified. Consultation with the Regional PT Director prior to competition is advised for any driver using a vehicle with replacement parts that fall under this exception.

**All factory optional parts, upgrades, and vehicle specifications must be assessed points,** unless they legally fall under the update/backdate rule or are on the list of No-Points Modifications. **Base classifications are for the standard base model (base trim package) of a vehicle, without factory options or upgrades,** unless there is a specific PT base classification listing in 5.2 for a non-base trim model.

Updating and backdating of parts between different model years of the same vehicle model is legal provided that the competing vehicle is in the same or higher base class than the donor vehicle, and that the entire assembly is replaced. No interchange of parts between assemblies is permitted in order to create a new assembly. Updating or backdating (without a point's assessment) with specialty models or between two cars that have model names with different numbers or letters in them is prohibited, unless specifically approved. The purpose of this rule is to equalize similar cars in the same (or lower) class, not to allow the creation of vehicles that were never manufactured or homologated. Motors and engine parts cannot be swapped under the update/backdate rule without specific approval. Any update or backdate involving parts that could provide a total weight reduction of greater than 15 pounds needs to be evaluated by PT Officials for possible weight reduction points assessment.

## 6 **Forms, Inspection, Protests, Penalties**

All aspects of NASA CCR Section 17.0 Vehicle Legality Inspection shall be enforced except as defined below.

### 6.1 Car Classification Forms

All competitors will submit a completed Performance Touring Car Classification Form (and certified Dyno report if re-classed under 5.3.2) to the Regional PT Director or Race Director (if there is no PT Director) prior to the first qualifying session of a race day. Once a form has been submitted during a season, if there are no modifications to the vehicle, a new form does not need to be submitted at subsequent races. However, if there are any changes to the vehicle that would alter the modification points for that vehicle in any way, either a new form needs to be submitted, or the PT Director may allow the driver to revise the old form (again, prior to any qualifying sessions that the vehicle is run in with the new modifications). Failure to comply with the correct procedure regarding Classification Forms is a violation of the rules that may be

penalized, regardless of whether or not the vehicle's competition class has changed. The Car Classification Form substitutes for the class rules and vehicle specification sheet that would be present under a traditional racing paradigm. As such, the Form needs to be kept up to date, and accurate at all times. Forms can be downloaded here <http://www.nasaproracing.com/rules/> or from the link on the [www.performancetouring.com](http://www.performancetouring.com) website.

A driver may choose to compete at any time in a higher level class than would be dictated by the Performance Touring Car Classification system. A car may be modified an unlimited number of times, and substitute vehicles may be used provided they comply with all PT rules. Substitution of a vehicle after qualifying sessions are completed will result in the new vehicle being placed at the back of its class in pre-grid.

## 6.2 Vehicle Inspection

All completed PT Car Classification Forms will be available from the PT Director (or Race Director if there is no Regional PT Director) for review by any competing driver by request. Performance Touring vehicles are subject to detailed inspection by any NASA Technical Inspector and visual inspection by Performance Touring competitors at any time when the car is at the track or at prearranged mutually agreed upon times when the car is not at the track. Performance Touring Directors and NASA Officials retain the right to request any disassembly or other procedure required to verify vehicle compliance. At random times or at the discretion of NASA Officials, any car may be ordered to report for rules compliance on a chassis dynamometer. All official Performance Touring dynamometer tests will be open. All Performance Touring competitors have the option to be present for official chassis dynamometer testing. As well, competitors may have GPS accelerometers placed in/on their vehicles at any time by Performance Touring Officials to help verify rules compliance.

## 6.3 Protests

Protests of another competitor's vehicle, for good cause, may be filed up to 30 minutes after the completion of a race, with the Race Director. A specific part does not need to be specified in the protest, but an explanation of why the vehicle is being protested is required. Frivolous and "nuisance" protests may result in some type of action against the protesting party. In addition, if a driver believes that a competitor is compliant under the Performance Touring rules, but that the vehicle is grossly misclassified, he may report this information to the National PT Director, who will evaluate the case, and determine if any changes in the PT base classifications or rules are necessary in order to meet the goal in PT rule 4 Purpose of having a "fair and logical competition environment". All potential rule changes will be evaluated by the NASA National Executives to ensure necessity, appropriateness, and fairness.

## 6.4 Penalties

Cheating and non-compliance are not welcome and will be subject to harsh penalties. Penalties will be assessed as follows, although the Race Director may choose to assess more severe penalties for blatant cheating, including expulsion from the Performance Touring Series on the first offense. Any Procedural Violation of the rules that is found after a qualifying session, but before a race will result in the vehicle moving to the back of its class on the pre-grid. Any Procedural Violation that is found after a race will result in the loss of one position place in the final results. **The following are all** Procedural Violations: failure to revise or resubmit a Car

Classification Form after new modifications have been made, incorrectly assessing modification points, failure to note all modifications that require points assessment, failing a dyno test or vehicle weight measurement by any amount, and providing any incorrect information on the Car Classification Form.

The penalty for competing with a vehicle in a class lower than that dictated by the Performance Touring Classification system, regardless of driver/owner intentions, will be a two race disqualification for the previous two races for the first offense. A second offense will result in a loss of half of the season points, a two race suspension, and disqualification from the race. At third offense, there will be a loss of all season points and a four race suspension. The fourth offense will result in permanent ejection from the series. Any disqualification or suspension will result in zero points that cannot be dropped.

Any decision by NASA Officials during an event may be appealed per the NASA CCR.

## **7     Safety**

All of the rules listed in the NASA CCR Sections 15 and 16 will apply, except, the following rules will supersede those listed in the CCR:

CCR 15.6—Roll cages may be built to provide additional chassis stiffening, including tubes that penetrate the firewall. However, additional tubes and attachment points will be assessed modification points as stated in 5.3.1. Roll Cages

CCR 15.8—An electrical master cut-off switch is required.

CCR 15.9—Steering wheel lock removal is recommended, but not required.

CCR 15.16—An approved suitable racing seat is required.

Air bags must be disabled or removed.

**Front driver and passenger side fixed/Lexan windows are specifically not permitted unless they are factory installed during the manufacturing of the vehicle. Both front side windows must otherwise be in the down position while on track.**

Per the NASA CCR, any driver displaying rough, negligent, or unsportsmanlike conduct will receive harsh penalties, which may include loss of points, suspension, and/or monetary fines at the discretion of NASA Officials.

## **8     Car Appearance**

### **8.1 Numbers and Class Designation**

All NASA PT cars must display the car's number on both sides and the front and rear of the car. Numbers must be of a contrasting color to the car or otherwise clearly visible, at least 10-inches tall with a 1.5-inch stroke for the sides, and four inches tall for the front and rear. NASA PT cars must also display a class designation on both sides and the rear of the car in a four-inch height in contrasting color to the car. Class Designations shall be PT followed by the group number. For example, an A Group competitor would display "PTA" as a class designation. **Drivers are also encouraged to place their class designation in contrasting colors on the inside of their front window, so that a driver in front of them can easily determine in his rear view mirror if the cars are in his class or not. The NASA PT Director may require this additional identifier, especially if there are multiple vehicles competing that are the same model and color, but in different classes.**

## 8.2 General Car Appearance

All vehicles must be in good condition and appearance. Vehicles with excessive body damage, primed body panels, etc., are not permitted. The vehicle must meet the “50/50” rule, which means it must look undamaged and straight at fifty (50) mph from fifty (50) feet away.

### **Appendix A—“Adjusted” Weight/Power Ratio Calculation**

The “adjusted” weight/power ratio is used primarily for classification of cars in Super Touring (ST). However, all Performance Touring cars are subject to a limit on their “Adjusted” weight/power ratio, where exceeding that limit would bump the car into a higher PT class or into the Super Touring classing system.

The “adjusted” weight/power ratio for each vehicle can be calculated based on a simple competition weight to peak chassis dynamometer horsepower ratio (wt./hp), followed by the adjustment of the resulting ratio by adding to, or subtracting from it, based on the list of “Modification Factors” below. Competition weight is defined as the minimum weight of the vehicle, with driver, any time that it competes in a qualifying session or race. Note: peak chassis dynamometer horsepower and dynamometer testing procedures are defined in Section 5.3.2.

The “Modification Factor” listed after each item below is added or subtracted from the actual measured wt/hp ratio to determine the “adjusted” wt./hp ratio that determines vehicle legality in each ST class.

Body Type: 4-door Sedan or 5-door Wagon = +0.4

Transmission: Dog-ring/Straight-cut gears (non-synchromesh) = -0.2  
Sequential/Tiptronic-like/paddle shift/semi-automatic = -0.2

Drivetrain: AWD = -0.5  
FWD = +1.0

Tires: Non-DOT approved tires = -0.75 (VRL and GAC Hoosiers exempt)  
Size 275 to 250 (or 10.5” to 9.6” for non-DOT approved) = +0.4  
Size 245 or smaller (or less than 9.6” for non-DOT approved) = +0.8

Competition Weight:  
Equal to or **Less** than:

<b>3200-2800lbs</b>	<b>2750-2350lbs</b>	<b>2300-1900lbs</b>	<b>1850-1450lbs</b>
3200 lbs -0.05	2750 lbs -0.5	2300 lbs -0.95	1850 lbs -1.4
3150 lbs -0.1	2700 lbs -0.55	2250 lbs -1.0	1800 lbs -1.45
3100 lbs -0.15	2650 lbs -0.6	2200 lbs -1.05	1750 lbs -1.5
3050 lbs -0.2	2600 lbs -0.65	2150 lbs -1.1	1700 lbs -1.55
3000 lbs -0.25	2550 lbs -0.7	2100 lbs -1.15	1650 lbs -1.6
2950 lbs -0.3	2500 lbs -0.75	2050 lbs -1.2	1600 lbs -1.65
2900 lbs -0.35	2450 lbs -0.8	2000 lbs -1.25	1550 lbs -1.7
2850 lbs -0.4	2400 lbs -0.85	1950 lbs -1.3	1500 lbs -1.75
2800 lbs -0.45	2350 lbs -0.9	1900 lbs -1.35	1450 lbs -1.8

Equal to or **Greater** than:

<b>3300-3500lbs</b>	<b>3550-3750lbs</b>	<b>3800-4000lbs</b>	<b>4050-4250lbs</b>
3300 lbs +0.05	3550 lbs +0.35	3800 lbs +0.65	4050 lbs +0.9
3350 lbs +0.1	3600 lbs +0.4	3850 lbs +0.7	4100 lbs +0.95
3400 lbs +0.15	3650 lbs +0.45	3900 lbs +0.75	4150 lbs +1.0
3450 lbs +0.2	3700 lbs +0.55	3950 lbs +0.8	4200 lbs +1.05
3500 lbs +0.3	3750 lbs +0.6	4000 lbs +0.85	4250 lbs +1.1

Note: If between 3201 lbs and 3299 lbs, there is no modification factor.

Note: All vehicle weights will be measured to the tenth of a pound (xxxx.x), then rounded off to the nearest pound for all calculations. Any weight ending in “.5” (xxxx.5x) will be rounded up or down to the benefit of the competitor.

### Example Calculations of “Adjusted” Wt/Power Ratio

Example: 2003 Dodge Viper, with OEM transmission, on DOT approved 345 size tires, weighing 3701 lbs, with peak chassis dyno power of 450 hp:  
 $3701/450 = 8.22$ , plus 0.55 (weight 3700 lbs or greater) = 8.77 (ST2)

Example: 2004 Chevrolet Corvette Z06, with OEM transmission, on DOT approved 345 size tires, weighing 3265 lbs, with 375 peak hp:  
 $3265/375 = 8.70$  (ST2)

Example: 2005 Ford Mustang, with dog-ring gearbox, non-DOT 11” slicks, weighing 3000 lbs, with peak chassis dyno power of 435 hp:  
 $3000/435 = 6.89$ , minus 0.2 (dog box) = 6.69, minus 0.75 (slicks) = 5.94, minus 0.25 (3000 lbs or less) = 5.69 (ST1)

Example: 2005 Subaru STI, with OEM transmission, on DOT approved 305 size tires, weighing 3201 lbs, with 550 peak awhp:  
 $3201/550 = 5.82$ , plus 0.4 (4-door sedan) = 6.22, minus 0.5 AWD = 5.72 (ST1)

Example: 2004 Dodge SRT4, with OEM transmission, on non-DOT approved 10.3” slicks, weighing 2501 lbs, with 500 fwHP:  
 $2501/500 = 5.0$ , plus 0.4 (4-door sedan) = 5.4, plus 1.0 (FWD) = 6.4, minus 0.75 (non-DOT approved tires) = 5.65, plus 0.4 (10.5” to 9.5” non-DOT tires) = 6.05, minus 0.7 (less than 2550 lbs) = 5.35 (SU)

### Appendix B—Pre-Approved Motor Swaps

Acura Integra B18C1 (GSR 170 hp) swapped into a Honda Civic (2300#). The swap will result in the Civic moving up to the PTD base class with a base weight listing of 2300 lbs.

Acura Integra B18C5 (ITR 195 hp) swapped into a Honda Civic (2300 lb). The swap will result in the Civic moving up to the PTC base class with a base weight listing of 2300 lbs.

Acura Integra Type R (JDM 220hp) swapped into an Acura Integra RSX Type S (US). The swap will result in the RSX Type S moving up to the PTD\* base class with a base weight listing of 2770 lbs.

Audi 80 2.0L (108/113hp) swapped into an '81 VW Scirocco 1.7L (74hp) body. The swap will result in the Scirocco moving up to the PTF\*\* class, with a base weight of 2040 lbs.

BMW E36 325i 2.5L (189hp) swapped into a BMW E30 325i (2855#). The swap will result in the E30 moving up to the PTE\* base class with a base weight listing of 2855 lbs.

BMW E36 328 2.8L (190 hp) swapped into BMW E36 318ti (2778 lbs). The swap will result in the E36 318ti moving up to the PTE\* base class with a base weight listing of 2865 lbs.

Eagle Talon turbo 2.0L 16v (210 hp) swapped into an Eagle Talon non-turbo 2.0L (4g63) chassis/body of equal weight. The swap will result in the car moving to the Eagle Talon Turbo's base class of PTE with a base weight listing of 2889 lbs.

Ford Escort LX SPI 2.0L SOHC (110 hp) swapped into '91-'96 Ford Escort LX. The swap will result in the Escort LX Hatchback moving to the PTG\*\* base class with a base weight listing of 2391 lbs. and the Escort LX Wagon moving to the PTG\* base class with a base weight listing of 2484 lbs.

Ford Escort ZX2 Zetec 2.0l VVT (130hp) swapped into '91-'96 Ford Escort LX. The swap will result in the Escort LX (hatchback and wagon) moving to the PTF\* base class with a base weight listing of 2391 lbs.

Ford Mustang '69 351W (290 bhp, 232 net hp)(PTF\*) swapped into a '66 Ford Mustang 289W (271 bhp, 217 net hp)(PTF\*). The swap will result in an increase in the '66 Mustang's listed base weight by 210 lbs to 3190 lbs if the alternate method of weight reduction mod points is used. If not, a +11 point assessment will be made.

Mazda 323 GTX ('90-'94) BP-T 1.8L (176 hp) swapped into '91-'96 Ford Escort LX. The swap will result in the Escort LX (hatchback and wagon) moving to the PTD base class with a base weight listing of 2391 lbs.

Mazda 626 KLZE 2.5L (JDM 200hp) swapped into '91-'96 Ford Escort LX. The swap will result in the Escort LX Hatchback moving to the PTC base class with a base weight listing of 2391 lbs. and the Escort LX Wagon moving to the PTD\*\* base class with a base weight listing of 2484 lbs.

Mazda Miata '94-'97 1.8L (128 hp), using the 1.6L ECU, swapped into '90-'93 Mazda Miata 1.6L (116hp) body. The swap will result in the '90-'93 Miata moving to the PTE base class, with a base weight listing of 2275 lbs. As well, the '90-'93 Miata may update other non-ECU parts from the '94-'97 Miata.

Nissan CA18DET (175hp) swapped into an '89-'94 Nissan 240SX (140hp). The swap will result in the Nissan 240SX moving to the PTE base class, with a base weight listing of 2700 lbs.

Nissan (JDM or USA) VG30DETT (300ZXTT) (300hp) engine swapped into a Nissan 300ZX Z-32 2+2 (n.a)(3414 lb) (222hp) body. The swap will result in the Nissan 300ZX Z-32 2+2 (n.a) moving up to the PTD\*\* base class, with a listed base weight of 3480 lbs. This swap does not apply to the 300ZX Coupe (3219 lbs).

Pontiac Firebird 3.4L V6 (160hp) swapped into an '88 Fiero 2.8L (140hp). The swap will result in the Fiero moving from PTF\* to PTE with a listed base weight of 2778 lbs.

Pontiac Grand Am '99 3.4L V6 (175hp) swapped into an '88 Pontiac Fiero (4 cylinder). The swap will result in the Fiero moving to the PTE\* base class (from PTG), with a base weight listing of 2590 lbs.

VW Jetta 2.0L 16V (134hp) ('90) swapped into a '78 VW Scirocco 1.6L (75hp) body. The swap will result in the Scirocco moving up to PTE\* (from PTH\*\*) with a base weight listing of 2040 lbs.

VW Scirocco 2.0L 8V (ABA) (115hp) swapped into an '80 VW Scirocco 1.7L (74hp) body. The swap will result in the Scirocco moving up to the PTF\* base class (from PTH\*\*), with a base weight listing of 2040 lbs.

VW Scirocco 1.8 L 8V (90hp) swapped into an '81 VW Scirocco 1.7L (74 hp) body. The swap will result in the Scirocco moving up to the PTG\*\* base class (from PTH\*\*), with a base weight listing of 2040 lbs.

## **Appendix C—Technical Bulletins for Specific Models**

### **Allison Legacy:**

Maximum Dynojet 87 rwhp/120 ft-lbs

Minimum competition weight: 1625 lbs

### **Lotus Elise and Exige:**

The Lotus Elise and Exige optional rear toe link brace, along with the spherical joint that replaces the ball joint and attaches to the inboard end of the toe link bar are no-points modifications. OEM geometry, suspension mounting points, the outboard end joint on the toe link, and the toe link bar itself must remain stock.

Similar aftermarket braces that meet the above requirements will also be no-points modifications (even if they have spherical joints on the static ends of the brace itself). Aftermarket kits that include a replacement toe link bar will be assessed +1 point. Aftermarket kits that change the outboard toe link joint to a spherical/heim joint will be assessed an additional +3 pts. for "metallic replacement suspension bushings". Aftermarket kits that do not use the OEM mounting locations for the toe link ends will be assessed an additional +6 pts. for "relocation of rear suspension mounting points".

### **Mazda RX-7 (1<sup>st</sup> Generation):**

A Watts link plate that puts the center pin into double shear for safety purposes only (and has been approved previously for Pro7 use in the SoCal region), is approved for use in PT and TT without a points assessment. Any other changes to the Watts link will require a points assessment per the PT/TT Rules.

### **Mazda RX-7 13B:**

1. Modification of the Variable Dynamic Intake (VDI) by removal of the actuator mechanism, and permanently wiring the VDI open will be a No-Points Modification.
2. Modification of the 5th and 6th port runners, by removal of the actuator mechanism, actuator rods, and removal of the sleeves themselves, will be a No-Points Modification. As well, removal of the actuator mechanism and actuator rods, and fixing the sleeves in the open position will also be a No-Points Modification. However, under either circumstance, if there is any filler material added, non-OEM sleeves added, modification of the OEM sleeves, or other modification to the runners, the car will need to be re-classified based on Dyno testing.

**Panoz GTRA:**

'97-'99 Panoz GTRA 5.0l spec race car: PTB/TTB  
maximum Dynojet rwhp: 235 hp  
maximum Dynojet torque: 305 ft-lbs  
minimum competition weight (with driver): 2925 lbs  
maximum tire width: 275mm  
permitted tires: all DOT approved available OTC in the USA  
wheels: open  
alignment: open to adjustment  
ride height/corner balance: open via coilover adjustment  
suspension/body/aero/cage/transmission: as built  
(Koni non-adjustable coilovers, Tremec 3550 5 speed,  
Brembo 325mm floating brakes--pads open)

**Pro Challenge Road Race Car:**

maximum Dynojet rwhp: 130 hp  
maximum Dynojet torque: 85 ft-lbs  
minimum competition weight (with driver): 1580 lbs  
maximum tire width: 225mm (Hoosier ok)  
permitted tires: all DOT approved available OTC in the USA  
wheels: 15"x8" (model open)  
alignment: open to adjustment  
ride height/corner balance: open via coilover adjustment  
suspension: Bilstein non-adjustable shocks  
body/aero/cage: Fiberglass with race wing—as built by Pro Challenge  
length: 14 feet  
height: 48 inches  
chassis: 1.5" reinforced steel tube frame  
engine: open provided that maximum Dynojet hp and torque numbers are not exceeded  
(if a restrictor is required to meet the 130 rwhp maximum, it must be clearly labeled as such)  
transmission: sequential—motorcycle type  
differential: Winters quick-change or Toyota (locked)  
brakes: Wilwood 4 piston, 10" vented rotors front, Wilwood 2 piston, 10" solid rotors rear

**Thunder Roadster:**

The 2008 released updated body/wing type is not permitted in PT. Those cars are approved for use in Super Touring (ST)