



# Team Racing Endurance Challenge (TREC)

## Official 2019 National Rules

(Rules subject to change)  
July 22, 2019, Version 1.0  
Copyright 2019

## **Table of Contents**

<b>Table of Contents</b>	<b>2</b>
<b>Introduction</b>	<b>3</b>
<b>Intent</b>	<b>3</b>
<b>Sanctioning Body</b>	<b>3</b>
<b>Eligible Vehicles Manufacturers/Models/Configurations</b>	<b>4</b>
<b>Safety</b>	<b>4</b>
<b>On-Course Conduct</b>	<b>4</b>
<b>Administration</b>	<b>6</b>
<b>Licensing Qualification</b>	<b>6</b>
<b>Vehicle Modifications</b>	<b>6</b>
<b>Classes</b>	<b>7</b>
<b>Classing</b>	<b>7</b>
<b>Format</b>	<b>8</b>
<b>Scoring</b>	<b>9</b>
<b>Fueling</b>	<b>9</b>
<b>Refueling / Pit Stops / Pit Lane</b>	<b>9</b>
<b>Appendix A - Fuel Containers</b>	<b>13</b>
<b>Appendix B - TREC Base Classing</b>	<b>16</b>

## 1. Introduction

NASA Team Racing Endurance Challenge (TREC) series is an automobile road course (circuit) competition series focused on road-course competition. These rules are the property of the National Auto Sport Association, Incorporated ®; located at P.O. Box 2366, Napa Valley, CA 94558; 510-232-NASA (6272).

The NASA TREC series is an Endurance Racing series devoted to fun, low-cost competition. It provides for a low barrier of entry to NASA competition, making it very easy to get started in racing.

There are five TREC classes in total, four of which are actually scored - TREC 1, TREC 2, TREC 3, TREC 4, with TREC U being unscored.

## 2. Intent

"A wise man once said, "I wanna go fast!" So... inspired by those words, we sat down with gallons of Mystic Blueberry PowerAid and loaves of Wonder Bread, asked for blessings from little baby Jesus and came up with a set of rules for all our brothers and sisters-in-speed to provide cubic fun for all without cubic dollars.

The intent of the TREC series is to provide an event hyper-focused on fun and safety first, then on low-cost competition with plenty of track time. The series is a drastic departure from typical NASA competition because we are putting fun first before fair competition. The series offers this by focusing on affordable racing with a low barrier to entry and a class structure that encourages competitors to “run what they brung” instead of the alternative, which is typically perceived as a never-ending escalation of modifications required to be competitive. The TREC series structure will provide a place for any build at or below a power to weight ratio of 10:1 WT/HP to be competitive regardless of driver skill or build level using our unique classing structure. It is the competitor’s responsibility to ensure their entered vehicle is at or below the 10:1 WT/HP ratio. This will permit the series to focus on the fun competitive atmosphere the series is intended for.

This atypical NASA series is not the place for building a competitive vehicle to a singular set of rules. Successful participation will inspire sportsmanship and teamwork, which will result in positive growth for the series. This series will offer drivers and teams an opportunity to get started in racing with a low barrier to entry, and in doing so will provide a fun competitive atmosphere for teams to enjoy. The simple nature of the series’ classing structure as spelled out in Section 9 will ensure a continuously varied mix of competition that will provide all teams the opportunity to win their class, and will allow the majority of drivers and teams to have fun, and **FUN IS THE WHOLE POINT! TREC competition is NOT** intended to be taken super seriously. The series is meant for friendly competition and rivalry. Anyone interested in a more serious form of competition should look to the NASA West Endurance Racing Championship (WERC) for highly structured rules with strictly enforced NASA technical compliance standards.

## 3. Sanctioning Body

The NASA TREC series is supported and sanctioned by the National Auto Sport Association (NASA). All competitors must also abide by the rules **set forth in the current Club Codes and Regulations (CCR)** and any supplementary rules issued by the Race Directors, Regional Directors, or National Series Directors.

#### 4. Eligible Vehicles Manufacturers/Models/Configurations

All vehicles must be listed in either Appendix B or originate as four-wheel, fendered/closed-wheel, internal-combustion engine\*, production street vehicles that comply with the modification limitations in Section 8 of these rules.

“Production” vehicle models are those manufactured by an automobile manufacturer (at least 500 produced per year) and approved for street use by the U.S. D.O.T. (Non-USDM vehicles may be approved by the National TREC Director on a case-by-case basis).

Sports racers, “Prototypes,” monocoque chassis purpose-built race cars, “kit” cars, purpose-built track/race cars, tube-frame, and partial tube-frame conversion vehicles are specifically prohibited unless listed in Appendix B.

(\*Hybrids must be approved by the National TREC Director)

#### 5. Safety

##### 5.1. CCR Exceptions

All rules in Section 15 of the NASA CCR shall apply, with the following exceptions that shall supersede those in the CCR:

CCR 15.6—Roll cages may be built to provide an unlimited amount of chassis stiffening. Any number of cage mounting points above the minimum required can be used. Any number of additional tubes, including those penetrating the firewall are permitted. Tube-frame chassis conversion (partial or complete) is not permitted. If a vehicle cannot be driven safely, at full speed, with any of the added tubes removed, it is considered a tube-frame chassis conversion.

CCR 15.10—Front driver and passenger side fixed/Lexan windows are specifically prohibited. Both front side windows must be in the down position while on track.

CCR 15.20—Up to two hundred and fifty (250) lbs. of added ballast is permitted. All ballast must be of solid material (no fluids or shot pellets), safely secured in any location on the vehicle permitted by NASA safety technical inspectors, and comply with Section 15.20 of the NASA CCR.

##### 5.2. On-Course Conduct

- 5.2.1. Any driver displaying rough, careless, and/or irresponsible driving or displaying unsportsmanlike conduct will likely receive harsh penalties, which may include loss of points, suspension, and/or monetary fines at the discretion of NASA Officials. In egregious instances, you may also be required to place the “box of shame” over your head, walk up and down the cold pitlane once while all other teams can “boo” you until you find the team you affected with your less than admiral driving and apologize for the action.

- 5.2.2. In addition to the passing/punting rules in the NASA CCR: running other drivers off the racing surface is stupid and will be penalized by the Race Director. The penalty will be solely at the discretion of the Race Director, but the suggested minimum penalty for such a dangerous and unsportsmanlike maneuver is a disqualification and a one-race suspension.
- 5.2.3. Car-to-car contact within the TREC series is **strictly prohibited**. All car-to-car contact must be reported immediately to a Pit Official or a Race Director.
- 5.2.4. Any team found to be at fault for multiple contact incidents may be ejected from the event.
- 5.2.5. Any driver observed to be driving so slowly that he/she hinders or otherwise significantly interferes with other drivers may be excused from the competition. (This is why we recommend NASA HPDE training for anyone that believes they may not be up to speed).
- 5.2.6. The following is a list of infractions that may bring harsh penalties, including but not limited to, team disqualification, driver ejection, long-time penalties at the black-flag station, or any combination thereof, at the discretion of the Race Director:
  - i) Not adequately slowing for a single yellow flag.
  - ii) Over-driving a waving yellow/red cross flag combination.
- 5.2.7. The drivers of a car overtaking and of the car being overtaken are responsible for safe passes.
- 5.2.8. In a passing situation, “defending” or “protecting” a position is strictly prohibited. This means that a driver must maintain the standard racing line in the braking area (e.g. stay to the right for a left-hand turn, thus “leaving the door open”).
- 5.3. Compressed gas cylinders must remain behind the pit wall at all times while the event is in operation. The head of the cylinder must be protected and the bottle must be secured.
- 5.4. Careful pit stops are required. Careless pit stops are for other organizations.
- 5.5. Night racing
  - 5.5.1. If a race runs past dusk, brake lights, headlights, and tail lights are mandatory.
  - 5.5.2. Any number of additional driving lights may be added to the vehicle, provided they illuminate in the forward direction and they are mounted below the bottom of the windshield as viewed perpendicular to the ground.
  - 5.5.3. Roof-mounted lights are prohibited because we need them on our safety vehicles.
- 5.6. Driver safety gear is required as per the NASA CCR section 15.7. No driver shall be permitted removal of their driving suit while on track that would reveal their tighty whities, however what happens in the NASA paddock stays in the NASA paddock.

## **6. Administration**

- 6.1. All vehicles must display at least one NASA decal on each side and one on the front and one on the rear. No other current sanctioning body decals are permitted.
- 6.2. Lighted or light-reflective numbers are permitted.
- 6.3. Each team is required to obtain and properly install an AMB/My Laps transponder.
- 6.4. Don't drive cars you're not registered to drive or the team will be penalized.
- 6.5. A team may substitute another vehicle before the start of the race, provided it has passed technical inspection and has been approved by the Race Director. If there was a timed session on track to determine qualifying order, then the substituted vehicle must start last.

## **7. Licensing Qualification**

- 7.1. Anyone with a valid driver license may participate in the TREC series classes TREC 2, TREC 3, and TREC 4. Minors that possess a NASA competition license also may compete in any TREC class. It is strongly recommended that each participant attend NASA HPDE events before participating. Anyone new to TREC competition who does not have considerable track experience may be required to attend the mandatory classroom introduction to TREC. Anyone deemed by the Race Director to be too inexperienced to compete will be excused from driving at the event.
- 7.2. Participation in the TREC 1 class requires drivers to hold one of the following NASA Licenses: TREC, Time Trial, Instructor, or Competition. Any team that enters a vehicle that reasonably falls into TREC 1 will be held to this standard.
- 7.3. Anyone who successfully completes four (4) TREC events may apply for a TREC competition license. Anyone with previous racing experience outside NASA may apply for a TREC competition license through their local regional office or through NASA National.
- 7.4. Anyone who holds a TREC competition license and completes six (6) NASA TREC events, may apply for a full NASA competition license.

## **8. Vehicle Modifications**

- 8.1. Any performance-related modifications are permitted providing that they do not decrease safety. (Note: This allowance is intended to provide the series the ability to accommodate the widest range of vehicles in existence today. This is not meant to encourage unlimited modification. The class structure will reward teams that modify their vehicles the least and choose to focus on consistency and reliability.)
- 8.2. Nitrous oxide and methanol injection are prohibited of course.
- 8.3. All vehicles must compete on tires marked with treadwear 180 (or higher) by the manufacturer.

## 9. Classes

TREC 1 = 10:1 WT/HP (Fastest 20% of cars at event under 12:1 WT/HP)

TREC 2 = 12:1 WT/HP Next fastest 25% of cars

TREC 3 = 15:1 WT/HP Next Fastest 25% of cars

TREC 4 = 18:1 WT/HP Bottom 30% of entered cars

TREC U = Any vehicle deemed to be faster than 10:1 WT/HP. (You don't want to be here.)

On-track performance will be monitored closely. Any vehicle displaying acceleration capabilities significantly above that of the entered field of TREC 1 cars will be moved to TREC U and will not receive points or be eligible for the overall podium. These events are not intended to host competition vehicles faster than TREC 1 compliant vehicles and any team that brings one expecting to dominate the field will be moved to TREC U. This decision will be made by the Race Director and will be final for the duration of the event weekend. Do not bring a vehicle faster than 10:1 WT/HP. You will be moved to TREC U.

Classes will be determined using a combination of time brackets and TREC base classing. TREC base classing will use the TREC base class of your vehicle (as listed in Appendix B) and your declared power to weight rating (should your car be modified beyond simple bolt-ons). Base classing either by power to weight or by using the official TREC base classing system are intended as guidelines only. Vehicles are provided a base class with the intent that any car with minimal modifications should be relatively competitive in the listed base class. Any team that chooses to significantly modify their car beyond the base class should instead use the power to weight ratio to figure out their declared class. If you purposely class your car below where you know it should be declared, the Race Director will reclass your car to where it should be following qualifying or during the event (should the situation dictate it).

## 10. Classing

- 10.1. Each team must declare their race class before the start of the event.
- 10.2. Each vehicle's declared class will be verified using the official event qualifying session. This session is meant to provide the time required for each team to demonstrate their expected average on-track performance for the race. A combination of laps turned during the qualifying session will be used. Any team that has drivers with vastly different experience levels should have their most experienced and least experienced driver complete laps during this session. Failure to do so will likely result in the team being re-classed during the race.
- 10.3. Following qualifying, TREC officials will break up the teams into the four (4) declared classes as prescribed by the percentage formula above. The laps turned by different drivers during the session will be averaged together using the NASA TREC qualifying system to ensure each team matches their declared class entry.
- 10.4. The purpose of the qualifying session is to allow NASA officials the opportunity to fairly assess the performance capabilities of each team so that fair competition may commence during the TREC event.

- 10.5. All teams will be monitored during the duration of the TREC event to ensure no team exceeds the declared class performance envelope. Any team that **continually** exceeds the class performance envelope will be moved up to the next class. (**Continually** is purposely meant as subjective. The final decision will rest with the TREC Race Director.)
- 10.6. Any team that “sandbags” in qualifying expecting to be at the top of their class for the race will be reclassified to more closely match the team’s performance potential. This “Sandbagger Rule” may be invoked following qualifying or during any part of the competition weekend.
- 10.7. Every effort will be made by the Race Director(s) to evenly balance the number of cars in each bracket class based on the lap time differences to provide as much competition as possible. This includes the possibility of deleting or adding classes.
- 10.8. Any vehicle perceived to be faster than a TREC 1 entry is subject to being scored as TREC U, and may even be excused from the event at the discretion of the Regional Director based on but not limited to, speed differential and driving etiquette. (This is meant to protect the integrity of the event by providing a fun atmosphere for all teams. TREC events are not the place for your ultrafast race vehicle.)
- 10.9. Any team reclassified by NASA officials from TREC 2 to TREC 1 using the TREC class-balancing formula in section 10.3 will be exempt section 7.2. Any team reclassified to TREC 1 because of the team’s overall vehicle performance will be subject so section 7.2.

## 11. **Format**

- 11.1. Grid closes when the pace car leaves. Late drivers must start in the back of the entire field, or may choose to start from the pit lane, joining the field at the rear. If a driver chooses to start from the pit lane, the car is held in the pit lane during the start and the Race Director should ask Timing and Scoring to add a lap(s) to correct for the driver missing the pace lap(s). Any vehicle starting from the pit lane after the overall leader has completed one lap will not have the Race Director add a lap.
- 11.2. In the case of a red-flag situation, all work on vehicles in the pits (hot pits and cold pits) and paddock may continue provided that they were already in the paddock or pits before the course went red. However, the vehicle must not return to the hot pit lane or track until the green flag is displayed at the starter’s stand.
- 11.3. The pits are “closed” during full-course yellows. Once the last manned flag station before the pit entrance displays the double yellow flags (or by any other defined indication), the pit lane will then be “closed.” If a vehicle enters the pit lane during a full course yellow situation, the driver has two options:
  - A) Park in the team’s pit space and do nothing until the green flag is displayed at the starters’ stand. The driver may not exit the vehicle (unless there is an emergency or is instructed to do so by an official). Work of any kind, including cleaning windows, on the vehicle is prohibited.
  - B) Continue through the pit lane and rejoin the field at the discretion of the re-entry marshal based on safe-release conditions.



## 12. Scoring

The finishing position is determined by the total number of laps completed, whether or not the vehicle is running at the end of the race. If two vehicles have completed the same number of laps, the one that crossed the finish line first will be scored ahead. If two vehicles breakdown on the same lap, then the vehicle that completed the most distance since the green flag will be awarded the higher finishing position. "Distance" is measured from the starting line and does not include the length of the grid or differentials in grid starting position.

## 13. Fueling

- 13.1. If a fuel cell is installed, the OEM tank must be removed.
- 13.2. Vehicles must start with no more fuel than the OEM tanks holds or a maximum of eighteen (18) gallons, whichever is less.
- 13.3. The use of more than two OEM fuel tanks or more than two fuel cells is prohibited.
- 13.4. Carrying more than thirty four (34) gallons of fuel at any given time is prohibited.
- 13.5. The term "filler hose(s)" in this section refers to those attached to the vehicle.
- 13.6. Filler hoses must be secured at each connection point with either a threaded connection or double hose clamps.
- 13.7. Only one fuel fill point is permitted on the vehicle.
- 13.8. Only one five (5) gallon container may be used to refuel the vehicle at any given time.
- 13.9. A single external (to the fuel tank or fuel cell) container that fuel is stored in, or moves through, (e.g. swirl pots, vent cans, surge tanks, etc.) may be used, and that container shall not have a capacity greater than 1.5 liter (0.4 gallons). The container must be constructed of aluminum or stainless steel, with threaded fittings to stainless steel braided fuel hoses. It must be separated from the driver's compartment by a separate bulkhead. Any container over 1.5 liters (0.4 gallons) is considered to be another fuel cell and subject to fuel-cell requirements.

## 14. Refueling / Pit Stops / Pit Lane

- 14.1. All teams are required to keep two (2) gallons of water, at least five (5) pounds of oil absorbent, and at least one five (5) pounds, or larger, BC- or ABC-rated fire extinguisher within their pit space.
- 14.2. No more than the contents of two NASA approved\* standard five (5) gallon plastic fuel containers may be put into the vehicle during any pit stop. Note: Six (6) gallon (or other) containers, sold as "five (5) gallon" fuel containers are NOT permitted.

14.3. All refueling must be done using NASA approved\* five (5) gallon containers. All fuel containers shall remain capped when not in use. The cap may include a hose if the hose is capped when not in use. Shutoff valves are considered to be a legitimate cap. Fuel container vent hoses of less than 3/16th inside diameter need not be capped. Vent lines of larger diameter must be capped or “pinched off” to prevent spillage.

(\*Approved standard 5-gallon plastic fuel containers” are shown in Appendix A)

14.4. All fuel spilled into a pan or overflow container must be returned to a fuel container.

14.5. Refueling Personnel must wear safety equipment equivalent to the driver (except head-and-neck restraint) as per the CCR (i.e. Nomex suit, gloves, shoes, and helmet) during refueling. All over-the-wall crewmembers during the refueling process will be considered Refueling Personnel and subject to proper attire. This includes but is not limited to refuelers, driver changers, and the person required to have a fire extinguisher in hand. All refuelers with open-faced helmets must wear eye protection and a balaclava (head sock) while refueling whether they have any facial hair or not.

14.5.1. Refueler’s may, utilize a Snell or FIA helmet made for auto racing that was manufactured in 1995 or later. Standard crew helmets commercially manufactured for auto racing may be used for refueling providing a balaclava is worn and eye protection is used. This is an example of a permitted crew helmet:



14.6. During refueling

14.6.1. If refueling is to take place during any given pit stop, it will be the first action performed by the crew.

- 14.6.2. Working on the vehicle while refueling is prohibited unless specifically listed in this section.
- 14.6.3. Driver changes during refueling are allowed.
- 14.6.4. During refueling, at least one crewmember must hold a fire extinguisher and be ready to put out a possible fire while other crewmember(s) refuel the vehicle. The person manning the fire extinguisher must remain seven (7) to ten (10) feet away from the refueler(s) so as not to be engulfed in any flash fires that may occur. The person manning the fire extinguisher shall have no other duty during refueling.
- 14.6.5. Refueling begins as soon as any refueling device crosses over the pit wall. Items for refueling may be placed on the pit wall once the vehicle enters the pit lane. The vehicle must be stopped before any refueling item may be brought over the wall or taken from the wall, into the hot pit lane.
- 14.6.6. Refueling has ended when all implements of fuel handling (cans, jugs, hoses, catch/vent cans, or spill trays, etc.) are behind the cold pit wall.

14.7. Refueling rigs are prohibited.

14.8. Only manual refueling is allowed. Stands and other equipment to support all of, or part of, the weight of the fuel jugs during refueling is prohibited.

14.9. Smoking and open flames in the cold/hot pits is prohibited.

14.10. The Race Director must approve any repairs that may create a fire hazard (e.g. welding, grinding) in the hot pits.

14.11. Use of electric power tools and/or pumps for refueling is prohibited.

14.12. The use of hoses; funnel clamps; PVC & ABS fittings, valves, and pipes; threaded connectors; roofing supplies; various plumbing supplies; and most similar items found at a local hardware store are generally permitted, unless otherwise restricted.

14.13. Pressurizing fuel containers or systems is prohibited.

14.14. No fuel may be stored in the hot pit lane or on top of the hot pit wall. A crewmember(s) must be in physical control of any fuel jugs on the wall or over the wall at all times.

14.15. Only fully enclosed oil-type heaters are permitted in the cold/hot pits.

14.16. Tire changes

14.16.1. Only one tire-changing tool may be used at a time. (impact gun, lug star, etc).

14.16.2. Only one side of the car may be jacked up at a time for the purpose of tire changes.

- 14.16.3. Rotating tires is permitted providing that all tires on the vehicle when it leaves the pit stop were the actual tires that were on the vehicle when it came in for that same stop. For example: A team cannot rotate the left side tires (front to rear), then change one right side tire. In any given pit stop a team may change one tire OR may rotate any of the tires, but not both.
- 14.16.4. Use of air jacks / jacking systems is prohibited.
- 14.16.5. The use of any device other than a manual jack(s) or a manually operated hydraulic jack to raise the vehicle is prohibited.

14.17. Pitlane safety

- 14.17.1. Pitlane speed limit is 25 mph.
- 14.17.2. Unless otherwise indicated, the speed limit is in force from the first occupied pit box to the last occupied pit box, unless otherwise marked and specified.
- 14.17.3. Crewmembers must remain behind the pit wall until their vehicle enters the hot pit lane.
- 14.17.4. Only Officials and authorized media are permitted to stand in the pitlane.
- 14.17.5. Crewmembers are only permitted to remain at the trackside wall for the purpose of signaling their driver. Spectating from the trackside pit wall is prohibited.
- 14.17.6. No one is permitted to be in the hot pit lane or near the trackside wall until after the initial green flag has been displayed and all of the vehicles have passed the first corner.
- 14.17.7. When not refueling, there is no limit to the number of crewmembers over the wall during a pit stop. However, each person over the wall must be there to perform a function.
- 14.17.8. There shall be at least one jack stand under a vehicle if a crewmember(s) is working under the vehicle. The weight of the vehicle need not be on the jack stand.

## Appendix A - Fuel Containers

### 1. Intent

It is the intent of this section to further clarify rules regarding “NASA approved standard five (5) - gallon plastic fuel containers.

### 2. Approved Containers

NASA approved containers are limited to “5-gallon containers” shown below. These containers might hold slightly more than 5 gallons, as they come from the factory. Note: Modifications to increase the capacity of these cans are prohibited.



LEGAL CONTAINER REGARDLESS OF BRAND



LEGAL CONTAINER REGARDLESS OF BRAND



**LEGAL HUNSAKER BRAND ONLY**

Note: Any hoses or fittings may be used, but the only modification to the jug permitted is the removal of the top of the outlet to install a hose on the jug outlet.

### 3. Examples of Illegal Containers



NOT LEGAL CONTAINER REGARDLESS OF BRAND



NOT LEGAL CONTAINER REGARDLESS OF BRAND

## Appendix B - TREC Base Classing

NA = Not Allowed

<u>Make</u>	<u>Model</u>	<u>Class</u>	<u>Make</u>	<u>Model</u>	<u>Class</u>
Acura	CL 2.2L	4	Audi	TT (225 hp)(‘02-‘06)(AWD)	3
Acura	CL V6	4	Audi	TT (250 hp)(‘04-‘06)(AWD)	3
Acura	CL-S	4	Audi	TT Quatro 3.2L (‘08-‘09)(AWD)	2
Acura	CL-S (6 spd)	4	Austin	Mini 1L (<40hp)	4
Acura	Integra 1.6L (‘86-‘89)	4	Austin	Mini 1L, 1.1L (40 to 47hp)	4
Acura	Integra 1.8L (non-VTEC)	4	Austin	Mini Cooper (55hp)	4
Acura	Integra GS-R	4	Austin	Mini Cooper 1071S	4
Acura	Integra Type-R	3	Austin	Mini Cooper 1275S	4
Acura	NSX 3.0L (‘91-‘96)	1	BMW	128i Coupe (‘08-‘09)	3
Acura	NSX	1	BMW	135i Coupe (‘08)	2
Acura	RL (‘05-‘07)	4	BMW	1 M Coupe (‘11)(3.0L turbo)	1
Acura	RL (pre‘05)	4	BMW	2002 (‘68-‘74)	4
Acura	RSX	4	BMW	2002 (‘75-‘76) (2403 lb)	4
Acura	RSX-S	3	BMW	2002tii	4
Acura	TL-S (‘02-‘03)	4	BMW	318 1.8L (E30)(pre-‘92)	4
Acura	TL (pre ‘04)	4	BMW	318 (E36)(‘92-‘98)(1.8L & 1.9L)	4
Acura	TL (‘04-‘05)	4	BMW	318 ti (‘95-‘99)	4
Acura	TL 3.2L (‘06-‘07)	4	BMW	323 (‘98-‘00)(2.5L)	4
Acura	TL Type-S 3.5L (‘07-‘08)	3	BMW	325e (121 hp)	4
Acura	TL 6-spdt MT SH-AWD (‘10-‘11)	2	BMW	325 (E30)(‘87-‘91)(168hp)	4
Acura	TSX (‘04-‘07)	4	BMW	325is (E30)(‘87-‘91)(168hp)	4
Alfa Romeo	164 (‘91-‘93)(FWD) (183 hp)	4	BMW	325ic (‘92)(168 hp)	4
Alfa Romeo	1600 Spider	4	BMW	325 (‘92-‘95)(189 hp)	4
Alfa Romeo	2000 Spider	4	BMW	325 (‘01-‘06)(2.5L184 hp)	4
Alfa Romeo	2600 Spider	4	BMW	325i (‘06)(3.0L 215hp)	4
Alfa Romeo	Milano 2.5L (‘87-‘89)	4	BMW	328 2.8L (‘96-‘00)	4
Alfa Romeo	Milano 3.0L (‘87-‘89)	4	BMW	328 (‘07-‘08) (3.0L 230 hp)	4
Audi	A3 2.0T (200 hp)(‘06-‘07)	4	BMW	330 (‘01-‘06)(225hp)	4
Audi	A3 3.2 AWD (250 hp)(‘06-‘07)	4	BMW	330 (‘06)(255hp)	3
Audi	A4 1.8T (150 hp)(‘97-‘00)	4	BMW	335 3.0L (‘07-‘08)	1
Audi	A4 1.8T (150 hp)(AWD)(‘97-‘99)	4	BMW	5 series (<226hp)(RWD)(inc ‘07)	4
Audi	A4 1.8T (170 hp)	4	BMW	5 series (RWD)(‘08)	4
Audi	A4 2.0T (197 hp)(‘05-‘07)	4	BMW	540	3
Audi	A4 2.0T AWD (200 hp)(‘05-‘07)	4	BMW	M Coupe/Roadster (240hp)	3
Audi	A4 2.8L (190 hp)	4	BMW	M Coupe (315 hp)	1
Audi	A4 3.0L (220 hp)	4	BMW	M Roadster (315 hp)	1
Audi	A4 3.2L (255 hp)(AWD)(‘07)	3	BMW	M3 (E30)(pre-‘89)	3
Audi	A6 2.7T (AWD)	4	BMW	M3 (E30)(‘89-‘91)	4
Audi	A6 4.2L (‘00-04)(AWD)	4	BMW	M3 (E36)(‘95-‘99)	3
Audi	A6 4.2L (‘05-‘06)(AWD)	3	BMW	M3 (E46)(‘01-‘06)	1
Audi	A6 4.2L (‘07)(AWD)	3	BMW	M3 (E90, E92, E93)(‘08-‘11)	1
Audi	A8 4.2L (AWD)(‘97-‘03)	3	BMW	M5 E28,E34(‘85-‘93)	3
Audi	A8 4.2L (AWD)(‘03-‘06)	3	BMW	M5 E39 (‘00-‘03)	1
Audi	A8 4.2L (AWD)(‘07)	3	BMW	M5 E60 (‘06-‘08)	NA
Audi	A8 6.0L (AWD)(‘05-‘07)	2	BMW	M6	4
Audi	Coupe (110 hp)	4	BMW	M6 (‘06-‘08)	NA
Audi	Coupe (164 hp)	4	BMW	MINI Clubman S (‘08-‘10)	4
Audi	RS 4 (4.2L) (AWD)(‘07)	1	BMW	MINI Cooper (‘01-‘04)	4
Audi	S4 (‘03-‘07)(AWD)	2	BMW	MINI Cooper (‘05-‘10)	4
Audi	S4 (pre ‘03)(AWD)	3	BMW	MINI Cooper (‘11-‘12)	4
Audi	S8 (‘01-‘03)(AWD)	2	BMW	MINI Cooper S (‘02-‘04)	3
Audi	TT (180 hp)(‘00-‘06)	4	BMW	MINI Cooper S (‘05-‘10)	3



<u>Make</u>	<u>Model</u>	<u>Class</u>	<u>Make</u>	<u>Model</u>	<u>Class</u>
BMW	MINI Cooper Works ('06-'08)	3	Chevrolet	Corvette '63-'82 (>425 hp)	1 - 4
BMW	MINI Cooper Works ('09-'10)	2	Chevrolet	Corvette '63-'82 (200hp)	1 - 4
BMW	Z3 4-cyl	4	Chevrolet	Corvette C4 ('85-'91)	2
BMW	Z3 6-cyl (2.5L)	4	Chevrolet	Corvette C4 ('92-'96) (LT1)	2
BMW	Z3 6-cyl (2.8L)	4	Chevrolet	Corvette C4 (LT4 option) (330 hp)	1
BMW	Z3 6-cyl (3.0L)	3	Chevrolet	Corvette C5 (inc. FRC w/o Z51)	1
BMW	Z4 2.5L	4	Chevrolet	Corvette C5 (all w/ Z51)	NA
BMW	Z4 3.0L ('03-'05)	3	Chevrolet	Corvette C6 ('05-'07)(Z51 ok)	NA
BMW	Z4 3.0L (215 hp)('06-'08)	4	Chevrolet	Corvette C6 ('08)(LS3)	NA
BMW	Z4 3.0L (255 hp)('06-'08)	3	Chevrolet	Corvette GS ('96)	1
BMW	Z4 M ('06-'08)	1	Chevrolet	Corvette GS ('10+)	NA
BMW	Z4 sDrive30i ('09-'11)	3	Chevrolet	Corvette Z06 ('01-'04)	NA
BMW	Z4 sDrive35i ('09-'11) (turbo)	1	Chevrolet	Corvette Z06 ('06-'08)	NA
BMW	Z4 sDrive35is ('11) (turbo)	1	Chevrolet	Corvette ZR-1	1
BMW	Z8	1	Chevrolet	Cruze 1.4L Turbo ('11)	4
Buick	Gran Sport 455 ('70)	2	Chevrolet	Cruze 1.8L ('11)	4
Cadillac	Catera	4	Chevrolet	HHR SS ('08-10)	3
Cadillac	CTS 2.8L ('05-'07)	4	Chevrolet	Impala SS ('04-'05)	4
Cadillac	CTS 3.6L ('03-'07)	4	Chevrolet	Impala SS ('06-'08)	4
Cadillac	CTS-V ('04-'07)	1	Chevrolet	Impala SS ('94-'96)	4
Cadillac	CTS-V ('09-'11)	NA	Chevrolet	Monte Carlo 3.9L LTZ ('06)	4
Cadillac	CTS-V Sports Wagon ('11)	NA	Chevrolet	Monte Carlo SS 3.8L ('04-'05)	4
Cadillac	STS (4.6 V8) AWD ('05)	3	Chevrolet	Monte Carlo SS 5.3L ('06-'07)	3
Cadillac	STS (V6)('05-'07)	4	Chevrolet	Monte Carlo SS (pre '04)	4
Cadillac	STS (V8)('05-'07)	3	Chevrolet	S10 Extreme (180hp)	4
Cadillac	STS-V ('06-'07)	2	Chevrolet	Sonic (1.4L turbo)('12)	4
Cadillac	XLR ('04-'07)	2	Chevrolet	Sonic (1.8L)('12)	4
Cadillac	XLR-V 4.4L V8 ('07)	1	Chrysler	300 (3.5L) ('05-'07)	4
Caterham	Super 7 (240 hp)	NA	Chrysler	300C (5.7L)('05-'07)	3
Chevrolet	Aveo ('04-'07)	4	Chrysler	300C (5.7L) (AWD)('05-'07)	3
Chevrolet	Camaro 3.1L	4	Chrysler	300C SRT8 ('05-'07)	2
Chevrolet	Camaro 3.4L	4	Chrysler	Cirrus 4-cyl	4
Chevrolet	Camaro 3.8L	4	Chrysler	Conquest (turbo)	4
Chevrolet	Camaro 5.0L carb (170 hp)('87)	4	Chrysler	Conquest Tsi (turbo)	4
Chevrolet	Camaro SS ('98-'02)	2	Chrysler	Crossfire (215hp) ('04-'07)	4
Chevrolet	Camaro SS ('96-'97)	3	Chrysler	Crossfire SRT6 ('05-'06)	1
Chevrolet	Camaro SS ('10-11)	1	Chrysler	PT Cruiser	4
Chevrolet	Camaro SS ('12)	1	Chrysler	PT Cruiser GT	4
Chevrolet	Camaro Z28 ('98-'02)	3	Datsun	510 (96 hp)	4
Chevrolet	Camaro Z28 (pre '98)	3	Datsun	510 (L20B swap)	4
Chevrolet	Camaro ZL1 ('12)	NA	Datsun	1600 Roadster ('66-'70)(96hp)	4
Chevrolet	Cavalier	4	DeTomaso	Pantera	2
Chevrolet	Cavalier Z24	4	Diasio	D962R	NA
Chevrolet	Cobalt 2.2L ('05-'08)	4	Dodge	Caliber RT 2.4L AWD ('07-'08)	4
Chevrolet	Cobalt 2.4L ('06-'08)	4	Dodge	Caliber SRT4 2.4L Turbo ('07-'08)	2
Chevrolet	Cobalt SS 2.0L (S/C)('05-'07)	4	Dodge	Challenger R/T ('09-'10)	2
Chevrolet	Cobalt SS (turbo)('08)	2	Dodge	Challenger SRT8 ('08-'10)	2
Chevrolet	Corvair (140hp)	4	Dodge	Charger 3.5L ('06-'07)	4
Chevrolet	Corvair (95,100hp)	4	Dodge	Charger 5.7L ('06-'07)	3
Chevrolet	Corvair Corsa Turbo	4	Dodge	Charger SRT8 ('06-'07)	2
Chevrolet	Corvair Monza GT Spyder	4	Dodge	Magnum RT	4
Chevrolet	Corvette '63-'82 (>200, <330 hp)	1 - 4	Dodge	Magnum RT AWD	3
Chevrolet	Corvette '63-'82 (>330, <425 hp)	1 - 4	Dodge	Magnum SRT8	2

<u>Make</u>	<u>Model</u>	<u>Class</u>	<u>Make</u>	<u>Model</u>	<u>Class</u>
Dodge	Neon DOHC Coupe	4	Ferrari	Testarossa	NA
Dodge	Neon DOHC Sedan	4	Fiat	124 Spider 1400	4
Dodge	Neon SOHC Coupe	4	Fiat	124 Spider 1600	4
Dodge	Neon SOHC Sedan (1st gen)	4	Fiat	124 Spider 1800	4
Dodge	Neon SOHC Sedan (2nd gen)	4	Fiat	124 Sport Spider 2000	4
Dodge	Neon SRT4 ('03-05)	4	Fiat	128 (55-60 hp)	4
Dodge	Neon SRT4 ACR	3	Fiat	500 ('12)(USA)	4
Dodge	Shelby Charger (110hp)	4	Fiat	X1-9 1.3L	4
Dodge	Shelby Charger (146hp)	4	Fiat	X1-9 1.5L	4
Dodge	Shelby Charger GLHS (turbo)	4	Fiat	X1-9 2000	1
Dodge	Shelby Lancer	4	Ford	Contour SVT	4
Dodge	Shelby Omni GLH (146 hp)	4	Ford	Escort 1.9L	4
Dodge	Shelby Omni GLHS	4	Ford	Escort 2.0L	4
Dodge	Stealth (DOHC)	4	Ford	Escort GT (1.8L)	4
Dodge	Stealth (SOHC)	4	Ford	Escort ZX2	4
Dodge	Stealth Turbo ('91-'93)(AWD)	3	Ford	Escort ZX2 S/R	4
Dodge	Stealth Turbo ('94-'96)(AWD)	2	Ford	EXP 1.6L ('82-'85)	4
Dodge	Stratus 4-cyl	4	Ford	F150 SVT Lightning	4
Dodge	Stratus RT	4	Ford	Festiva	4
Dodge	Viper	NA	Ford	Focus (2.0L 16v) ('05-'08)	4
Dodge	Viper ACR	NA	Ford	Focus (2.0L 16v)('00-'04)	4
Eagle	Talon 2.0L (135-140hp)	NA	Ford	Focus (2.0L 8v)('00-'02)	4
Eagle	Talon Turbo ('90-'94)	4	Ford	Focus (2.3L 16v)('04)	4
Eagle	Talon Turbo ('95-'98)	4	Ford	Focus ST 2.3L 16v ('07)	4
Eagle	Talon Turbo AWD ('90-'94)	4	Ford	Focus SVT (2.0L)('02-'04)	4
Eagle	Talon Turbo AWD ('95-'98)	4	Ford	Focus ZX4 ST (2.3L)('05-'06)	4
Elan	NP01 (NASA Prototype)	1	Ford	GT	NA
Ferrari	308	3	Ford	Mustang Boss 302 ('12)	NA
Ferrari	328	1	Ford	Mustang Cobra ('93)	4
Ferrari	355	NA	Ford	Mustang Cobra ('94-'95)	4
Ferrari	360	NA	Ford	Mustang Cobra ('96-'98)	2
Ferrari	430	NA	Ford	Mustang Cobra ('99 & '01)	2
Ferrari	550	NA	Ford	Mustang Cobra R ('00)	1
Ferrari	612	NA	Ford	Mustang Cobra R ('93)	3
Ferrari	348 (<305 hp)	2	Ford	Mustang Cobra R ('95)	2
Ferrari	348 (320 hp)	1	Ford	Mustang Cobra SVT ('02+)	1
Ferrari	360 Challenge	NA	Ford	Mustang GT ('05-'06)	2
Ferrari	456GT	NA	Ford	Mustang GT ('07-'08)	2
Ferrari	575M	NA	Ford	Mustang GT ('10)	2
Ferrari	Enzo	NA	Ford	Mustang GT ('11)	1
Ferrari	F430	NA	Ford	Mustang I4	4
Ferrari	Superamerica	NA	Ford	Mustang I4 turbo	4

<u>Make</u>	<u>Model</u>	<u>Class</u>	<u>Make</u>	<u>Model</u>	<u>Class</u>
Ford	Mustang I6	4	Honda	Civic EX 1.6L ('92-'95)	4
Ford	Mustang Mach 1	2	Honda	Civic EX 1.6L ('96-'00)	4
Ford	Mustang SVO ('84-'86)	4	Honda	Civic EX 1.7L ('01-'05)	4
Ford	Mustang V6 (pre-'99)	4	Honda	Civic Non-VTEC (92hp)	4
Ford	Mustang V6 ('99-'04)	4	Honda	Civic Si 1.6L ('92-'95)	4
Ford	Mustang V6 ('05-'09)	4	Honda	Civic Si 1.6L ('99-'00)	4
Ford	Mustang V6 ('10)	4	Honda	Civic Si 2.0L ('01-'05)	4
Ford	Mustang V6 ('11)	2	Honda	Civic Si 2.0L ('06-'08)	4
Ford	Mustang V8 ('64-'68 <272 hp)	4	Honda	Civic Type R ('07) (JDM)(225 hp)	2
Ford	Mustang V8 ('69-'70 <291 hp)	4	Honda	Civic VX	4
Ford	Mustang V8 ('71-'73 <286 hp)	4	Honda	CRX DX 1.5L 16v ('88-'91)	4
Ford	Mustang V8 ('79-'86 <226 hp)	4	Honda	CRX DX 12v ('85-'87)	4
Ford	Mustang V8 LX ('87-'93 <226 hp)	4	Honda	CRX HF	4
Ford	Mustang V8 GT ('87-'93 <226 hp)	4	Honda	CRX Si 1.5L ('85-'87)	4
Ford	Mustang V8 ('94-'98 <226 hp)	4	Honda	CRX Si ('88-'91)	4
Ford	Mustang V8 ('99-'04)	3	Honda	CRX 1.6L DOHC VTEC	4
Ford	Pinto 1.6L	4	Honda	CR-Z (1.5L Hybrid)('11)	4
Ford	Pinto 2.0L ('71-'74)	4	Honda	Fit ('07-'08)	4
Ford	Pinto 2.3L	4	Honda	Prelude S ('92-'96)	4
Ford	Pinto 2.8L	4	Honda	Prelude Si ('92-'96)	4
Ford	Probe GT	4	Honda	Prelude Si (pre-'92)	4
Ford	Probe Turbo	4	Honda	Prelude VTEC ('93-'01)	4
Ford	Sierra Cosworth 2.0L T (204 hp)	3	Honda	S2000 (2.0L)('00-'03)	2
Ford	Sierra Cosworth AWD (220 hp)	3	Honda	S2000 (2.2L)('04-'08)	2
Ford	Shelby GT500 5.4L S/C ('07-'09)	NA	Honda	S2000 CR (2.2L)('08)	1
Ford	Shelby GT500 5.4L S/C ('10-'11)	NA	Hyundai	Accent 1.5L (105hp)	4
Ford	Taurus GL	4	Hyundai	Accent 1.6L ('01-'08)	4
Ford	Taurus SHO	4	Hyundai	Elantra 1.6L	4
Ford	Thunderbird Super Coupe/Turbo	4	Hyundai	Elantra 1.8L	4
Ford	Thunderbird V6 (pre-'02)	4	Hyundai	Elantra 2.0L ('00-'08)	4
Ford	Thunderbird V8 ('02)	4	Hyundai	Genesis 3.8L ('09-'10)	4
Ford	Thunderbird V8 ('03+)	4	Hyundai	Genesis 4.6L ('09-'10)	2
Ford	Thunderbird V8 ('90-'97)	4	Hyundai	Genesis Coupe 2.0L Turbo ('10)	3
Geo	Metro 1.0L	4	Hyundai	Genesis Coupe 2.0L T Track ('10)	2
Geo	Metro 1.3L	4	Hyundai	Genesis Cp 3.8 V6 Track ('10-'12)	1
Geo	Prizm	4	Hyundai	Tiburon 2.0L ('03-'07)	4
Geo	Storm	4	Hyundai	Tiburon 2.0L ('97-'01)	4
Geo	Storm GSI	4	Hyundai	Tiburon V6 2.7L ('03-'07)	4
Honda	Accord 2.0L (120hp)	4	Hyundai	Tiburon V6 GT LTD 2.7L ('06-'08)	4
Honda	Accord 2.2L ('90-'97)(130hp)	4	Infiniti	G20 ('93-'02)	4
Honda	Accord 2.3L	4	Infiniti	G20 ('91-'92)	4
Honda	Accord 2.4L ('03-'07)	4	Infiniti	G35 (incl. 6MT) (pre-'05)	3
Honda	Accord 2.7 V6 ('95-'97)	4	Infiniti	G35 (incl. 6MT)('05-'06)	3
Honda	Accord 3.0 V6 ('03-'07)	4	Infiniti	G35 Coupe 6MT ('07)	3
Honda	Accord 3.0 V6 ('98-'02)	4	Infiniti	G35 (306 hp)(incl. Sport)('07-'08)	3
Honda	Civic 1.6L SOHC ('88-'91)	4	Infiniti	G35x (AWD)('07-'08)	2
Honda	Civic Base ('88-'91)	4	Infiniti	G37 (7 sp auto)('09-'11)	1
Honda	Civic Coupe 1.8L ('06-'08)	4	Infiniti	I30 ('00-'01)	4
Honda	Civic CX ('92-'95)	4	Infiniti	I30 ('96-'99)	4
Honda	Civic del Sol S (<107hp)	4	Infiniti	I35	4
Honda	Civic del Sol Si (<128hp)	4	Infiniti	Q45 ('02-'07)	4
Honda	Civic del Sol VTEC (DOHC 1.6L)	4	Infiniti	Q45 (pre-'02)	4
Honda	Civic DX 1.5L 16v ('88-'91)	4	Jaguar	S-Type 3.0L (235 hp)	4

<u>Make</u>	<u>Model</u>	<u>Class</u>	<u>Make</u>	<u>Model</u>	<u>Class</u>
Jaguar	S-Type 4.0L, 4.2L	3	Mazda	Mazda6 2.3L ('07-'08)	4
Jaguar	S-Type R 4.2L S/C ('03-'04)	2	Mazda	Mazda6 3.0L (V6) ('03-'05)	4
Jaguar	S-Type R 4.2L S/C ('05-'07)	2	Mazda	Mazda6 3.0L (V6) ('06-'08)	4
Jaguar	XJ Vanden Plas (<301 hp)	4	Mazda	Mazdaspeed Protégé (Turbo)	4
Jaguar	XJ8 3.5L	4	Mazda	Mazdaspeed3 (turbo)('07-'09)	3
Jaguar	XJ8 4.2L	3	Mazda	Mazdaspeed3 (turbo)('10)	3
Jaguar	XJ8 S/C ('00-'07)	2	Mazda	Mazdaspeed6 (AWD)('06-'07)	3
Jaguar	XJR ('98-'07)	2	Mazda	Miata 1.6L	4
Jaguar	XJS ('88-'91)	4	Mazda	Miata 1.8L ('94-'97)	4
Jaguar	XKR-SC ('00-'06)	2	Mazda	Miata 1.8L ('99-'05)	4
Jaguar	XKR-SC ('07)	1	Mazda	Miata MX-5 ('06-'11)	4
Jaguar	XKE	3	Mazda	Miata MX-5 turbo ('04-'05)	4
Jaguar	X-Type ('02-'07) AWD	4	Mazda	MX-3	4
Jen.-Healey	2.0L ('73-'76)	4	Mazda	MX-3 GS	4
Kia	Rio	4	Mazda	MX-6 (2.2L)(110hp)	4
Kia	Sephia	4	Mazda	MX-6 GT (turbo)	4
Kia	Spectra	4	Mazda	MX-6 V6 ('92-'97)	4
Lamborghini	Diablo VT	NA	Mazda	Protégé 1.6L	4
Lexus	GS300 ('06)	4	Mazda	Protégé 1.8L	4
Lexus	GS300 ('93-'05)	4	Mazda	Protégé 2.0L	4
Lexus	GS350 ('07-'08)	3	Mazda	Protégé 5	4
Lexus	GS400	3	Mazda	Protégé MP3	4
Lexus	GS430 ('01-'07)	3	Mazda	RX-3 ('72-'78) (12A)	4
Lexus	GS460 ('08)	3	Mazda	RX-7 12A	4
Lexus	IS250 ('06-'08)(6sp man.)	4	Mazda	RX-7 13B	4
Lexus	IS250 (AWD)('06-'08)	4	Mazda	RX-7 13B GSL-SE (1st Gen)	4
Lexus	IS F ('08-'09)	1	Mazda	RX-7 TT	1
Lexus	IS300	4	Mazda	RX-7 Turbo II	3
Lexus	LS400	4	Mazda	RX-8 ('04-'08)	3
Lexus	LS430	4	Mazda	RX-8 ('09-'11)	3
Lexus	LS460 ('07-'08)	3	Mazda	RX-8 R3 ('09-'11)	2
Lexus	SC300	4	Mazda	RX-8 (197 hp)(Auto)('04-'05)	4
Lexus	SC400	4	Mazda	RX-8 (212 hp)(Auto)('06-'07)	4
Lexus	SC430 ('02-'08)	4	Mercedes	190E 2.3 (16v)	4
Lincoln	LS (V8) ('03-'06)	4	Mercedes	190E 2.6L ('86-'93)	4
Lotus	Elan M100 ('91-'92)(turbo)	3	Mercedes	C230 ('02-'05)	4
Lotus	Elise ('05-'07)	1	Mercedes	C230 ('06-'07)	4
Lotus	Esprit (V8) TT	NA	Mercedes	C280 ('94-'00)	4
Lotus	Esprit 4 Turbo	1	Mercedes	C280 ('06-'07)	4
Lotus	Exige ('06)	1	Mercedes	C300 ('08)	4
Lotus	Exige S ('07)	NA	Mercedes	C32 AMG ('02-'04)	2
Lotus	Exige 240R, S240, S260	NA	Mercedes	C320 ('01-'05)	4
Mazda	323 (pre'95--82hp)	4	Mercedes	C43 AMG ('98-'00)	2
Mazda	323 GTX (1.6L T)	4	Mercedes	C55 AMG ('05-'06)	1
Mazda	626 2.0L	4	Mercedes	CL55 AMG (5.4L)('01-'02)	2
Mazda	626 2.5L V6	4	Mercedes	CL65 AMG ('06)	NA
Mazda	Mazda2 ('11)	4	Mercedes	CLK55 AMG ('04-'06)	2
Mazda	Mazda3 (2.0L)('04-'06)	4	Mercedes	CLK430 ('99-'01)	3
Mazda	Mazda3 (2.0L)('07-'10)	4	Mercedes	CLK430 ('02-'03)	3
Mazda	Mazda3 (2.3L)('04-'06)	4	Mercedes	CLK500 ('03-'06)	3
Mazda	Mazda3 (2.3L)('07-'09)	4	Mercedes	CLK550 ('07)	2
Mazda	Mazda3 (2.5L)('10)	4	Mercedes	CLK63 AMG ('07)	NA
Mazda	Mazda6 2.3L ('03-'06)	4	Mercedes	E55 AMG ('03-'06)	1

<u>Make</u>	<u>Model</u>	<u>Class</u>	<u>Make</u>	<u>Model</u>	<u>Class</u>
Mercedes	E55 AMG ('99-'02)	2	Mitsubishi	Starion ESI-R (turbo)	4
Mercedes	E63 AMG ('07)	NA	Nissan	200SX 1.6L	4
Mercedes	SL55 AMG ('03-'06)	1	Nissan	200SX 2.0L ('80-'81)	4
Mercedes	SL55 AMG ('07)	1	Nissan	200SX 2.0L Turbo	4
Mercedes	SL65 AMG ('07)	NA	Nissan	200SX SE-R (2.0L)	4
Mercedes	SLK 320 ('01-'04)	4	Nissan	240SX	4
Mercedes	SLK32 AMG ('02-'04)	1	Nissan	240SX (S14 220hp swap)	3
Mercedes	SLK 350 ('05-'08)	2	Nissan	240SX HICAS	4
Mercedes	SLK55 AMG ('05-'07)	1	Nissan	240SX SOHC ('89-'90) (140hp)	4
Mercury	Capri 1.6L (75hp)	4	Nissan	240Z	4
Mercury	Capri 2.0L ('71) (100hp)	4	Nissan	260Z	4
Mercury	Capri 2.0L ('72-'74)	4	Nissan	280Z	4
Mercury	Capri 2.3L ('76-'77)	4	Nissan	280ZX	4
Mercury	Capri 2.6L, 2.8L ('72-'74)	4	Nissan	280ZX Turbo	4
Mercury	Capri 2.8L ('76-'77)	4	Nissan	300ZX all (Z31--'84-'88) NA	4
Mercury	Cougar 2.5L V6	4	Nissan	300ZX Turbo (Z31--'84-'89)	4
Mercury	Marauder	4	Nissan	300ZX NA (Z32) 2+2	4
Merkur	XR4Ti	4	Nissan	300ZX NA (Z32--'89-'96)	4
MG	Midget 1.1L, 1.3L, 1.5L	4	Nissan	300ZX TT	2
Mitsubishi	3000 VR-4 ('91-'93)(AWD)	3	Nissan	350Z (287hp)('03-'05)(enth. ok)	2
Mitsubishi	3000 VR-4 ('94-'99)(AWD)	2	Nissan	350Z (300hp)('06)(enth. ok)	2
Mitsubishi	3000GT (NA-DOHC)	4	Nissan	350Z (306hp)('07-'08)(enth. ok)	2
Mitsubishi	3000GT (NA-SOHC)	4	Nissan	350Z Nismo ('07-'08)	1
Mitsubishi	Eclipse 2.4L (pre-'06)	4	Nissan	350Z Roadster ('06)	3
Mitsubishi	Eclipse 2.4L ('06-'08)	4	Nissan	350Z Track ('05-'06),35ann, GT	2
Mitsubishi	Eclipse GT 3.8L ('06-'08)	4	Nissan	350Z Track Model ('03-'04)	2
Mitsubishi	Eclipse GT 3.0L ('00-'05)	4	Nissan	370Z ('09)(6 sp. manual)	1
Mitsubishi	Eclipse Turbo ('90-'94)	4	Nissan	370Z Sport Model ('09)	1
Mitsubishi	Eclipse Turbo ('95-'98)	4	Nissan	370Z Nismo ('09)	NA
Mitsubishi	Eclipse Turbo ('99)	4	Nissan	Altima 2.4L	4
Mitsubishi	Eclipse Turbo AWD ('92-'94)	4	Nissan	Altima 2.5L ('02-'09)	4
Mitsubishi	Eclipse Turbo AWD ('95-'98)	4	Nissan	Altima 3.5L ('02-'06)	4
Mitsubishi	Eclipse Turbo AWD ('99)	4	Nissan	Altima 3.5L ('07-'08)	3
Mitsubishi	Galant 2.4L ('94-'03)	4	Nissan	Altima 3.5L SE-R ('05-'06)	3
Mitsubishi	Galant 2.4L ('04-'07)	4	Nissan	GT-R ('09+)	NA
Mitsubishi	Galant 3.0L V6 (195hp)	4	Nissan	Maxima 3.5L ('02-'03)	4
Mitsubishi	Galant 3.8L (230 hp)('02-'07)	4	Nissan	Maxima 3.5L ('04-'06)	4
Mitsubishi	Galant 3.8L Ralliart ('07)	4	Nissan	Maxima 3.5L ('07-'08)	4
Mitsubishi	Galant VR4 (AWD) ('91-'92)	4	Nissan	NX2000	4
Mitsubishi	Lancer 2.0L ('02-'07)	4	Nissan	Pickup ('90-'97)(2WD)	4
Mitsubishi	Lancer 2.0L DE, SE ('08)	4	Nissan	Pulsar NX 1.8L	4
Mitsubishi	Lancer 2.4L ('04-'07)	4	Nissan	Sentra 1.6L ('87-'88)(8v)(69hp)	4
Mitsubishi	Lancer Evo VIII ('03-'05)(AWD)	1	Nissan	Sentra 1.6L (16v)	4
Mitsubishi	Lancer Evo VIII MR ('05)(AWD)	1	Nissan	Sentra 1.8L ('00-'06)	4
Mitsubishi	Lancer Evo IX ('06)(AWD)	1	Nissan	Sentra 2.0L ('07-'08)	4
Mitsubishi	Lancer Evo MR ('06)(AWD)	1	Nissan	Sentra SE ('98-'01)	4
Mitsubishi	Lancer Evo RS ('06)(AWD)	1	Nissan	Sentra SE-R 2.0L ('91-'94)	4
Mitsubishi	Lancer Evo X GSR ('08)(AWD)	1	Nissan	Sentra SE-R 2.5L ('02-'06)	4
Mitsubishi	Lancer Evo X MR ('08)(AWD)	1	Nissan	Sentra SE-R 2.5L ('07-'08)	4
Mitsubishi	Lancer Ralliart ('09)	2	Nissan	Sentra Spec V ('02-'06)	4
Mitsubishi	Mirage	4	Nissan	Sentra Spec V ('07-'08)	4
Mitsubishi	Mirage 1.8L	4	Noble	M12 GTO-3R (352 hp 3.0L V6)	NA
Mitsubishi	Starion (turbo)	4	Noble	M400 (425 hp 3.0L V6)	NA

<u>Make</u>	<u>Model</u>	<u>Class</u>	<u>Make</u>	<u>Model</u>	<u>Class</u>
Oldsmobile	Cutlass Calais 2.3L Int. (150hp)	4	Porsche	924S ('87)	4
Oldsmobile	Cutlass Calais 2.3L Int. (180hp)	4	Porsche	924S ('88)	4
Oldsmobile	Cutlass Calais 2.3L Quad442	4	Porsche	924 Turbo	4
Oldsmobile	Cutlass Calais Quad442 W41	4	Porsche	928 ('78-'82)(4.5L)	3
Opel	GT 1100	4	Porsche	944 ('83-'87)	4
Opel	GT1900	4	Porsche	944 2.5L ('88)	4
Opel	Manta	4	Porsche	944 2.7L ('89)(162 hp)	4
Peugeot	505 Turbo 2.2L ('86-'88)(150hp)	4	Porsche	944 S	4
Peugeot	505 Turbo 2.2L ('88-'89)(180hp)	4	Porsche	944 S2	3
Plymouth	Laser Turbo ('90-'94)	4	Porsche	944 Turbo ('86-'88)	3
Plymouth	Laser Turbo AWD ('92-'94)	4	Porsche	944 Turbo S ('88-'89)	2
Plymouth	Prowler	3	Porsche	959	NA
Pontiac	Fiero (4-cyl)	4	Porsche	964 Carrera 2	2
Pontiac	Fiero (V6)	4	Porsche	964 Carrera 4 (AWD)	2
Pontiac	Firebird 3.4L (V6)	4	Porsche	964 RS	1
Pontiac	Firebird 3.8L	4	Porsche	964 RS America	2
Pontiac	Firebird Firehawk	2	Porsche	965 3.3L (Turbo II--'90-'92)	1
Pontiac	Firebird WS6	2	Porsche	965 3.6L (Turbo II--'93-'94)	1
Pontiac	Formula ('98-'02)	3	Porsche	968	3
Pontiac	Formula (pre-'98)	3	Porsche	968 Turbo S	1
Pontiac	Formula '87 (5.0L, 215hp)	4	Porsche	993 C2 ('94-'95)	2
Pontiac	Grand AM 2.3L (170,180hp)	4	Porsche	993 C2 ('96-'99)	1
Pontiac	Grand Am 3.4L (V6)	4	Porsche	993 C2S	1
Pontiac	Grand Prix GT 3.8L ('98-'04)	4	Porsche	993 C4 (AWD)	1
Pontiac	Grand Prix GT 3.8L ('05-'06)	4	Porsche	993 C4S (AWD)	1
Pontiac	Grand Prix GTP ('99-'03)	4	Porsche	993 Cup	NA
Pontiac	Grand Prix GTP ('04-'06)	4	Porsche	993 RS 3.8L	1
Pontiac	Grand Prix GXP ('05-'08)	3	Porsche	993 Turbo (AWD)	NA
Pontiac	Grand Prix SE 3.1L	4	Porsche	993 Turbo S (AWD)	NA
Pontiac	GTO ('04)	3	Porsche	996 C2 (3.4L) ('99-'01)	1
Pontiac	GTO ('05-'06)	2	Porsche	996 C2 (3.6L)('02-'04)	1
Pontiac	Solstice ('06-'08)	4	Porsche	996 C4 (3.4L)	1
Pontiac	Solstice GXP (turbo)('07-'08)	2	Porsche	996 C4 (3.6L)	1
Pontiac	Trans Am ('98-'02)	3	Porsche	996 C4S (3.6L)	1
Pontiac	Trans Am (pre-'98)	3	Porsche	996 GT2	NA
Pontiac	Trans Am Turbo V6	3	Porsche	996 GT3	NA
Pontiac	Vibe 1.8L ('03-'07)	4	Porsche	996 Cup	NA
Pontiac	Vibe GT ('04-'06)	4	Porsche	996 Turbo	NA
Pontiac	Vibe GT ('03)	4	Porsche	996 Turbo S	NA
Porsche	911 ('63-'69)	4	Porsche	997 C4 ('06-'07)	NA
Porsche	911 ('70-'73)	4	Porsche	997 C4S ('06-'07)	NA
Porsche	911 ('73-'77)	4	Porsche	997 Carrera ('05-'07)	1
Porsche	911 ('78-'83)	3	Porsche	997 Club Coupe	NA
Porsche	911 ('84-'89)	3	Porsche	997 CS ('05-'07)	NA
Porsche	911 Carrera ('73-'77)	3	Porsche	997 GT3 ('07)	NA
Porsche	911 Turbo 3.0L ('74-'77)	1	Porsche	997 GT3 Cup	NA
Porsche	911 Turbo 3.3L ('77-'89)	1	Porsche	997 Turbo AWD ('07)	NA
Porsche	911S ('67-'69)	3	Porsche	Boxster ('97-'99)	4
Porsche	911S ('70-'73)	3	Porsche	Boxster ('00-'02)	3
Porsche	912	4	Porsche	Boxster ('02-'04)	3
Porsche	914-4	4	Porsche	Boxster ('05-'06)	3
Porsche	914-6	4	Porsche	Boxster ('07-'08)	2
Porsche	924	4	Porsche	Boxster ('09-'10)	2

<u>Make</u>	<u>Model</u>	<u>Class</u>	<u>Make</u>	<u>Model</u>	<u>Class</u>
Porsche	Boxster S ('05-'06)	2	Subaru	Outback 3.0 ('05-'07)(AWD)	4
Porsche	Boxster S ('00-'02)	2	Subaru	Outback XT ('05-'06)(AWD)	4
Porsche	Boxster S ('03-'04)	2	Subaru	Outback XT ('07)(AWD)	4
Porsche	Boxster S ('07-'08)	1	Subaru	SVX (AWD)	4
Porsche	Boxster S ('09-'10)	1	Subaru	WRX 2.0L ('02-'05) (AWD)	3
Porsche	Boxster Spyder ('11)	1	Subaru	WRX 2.5L ('06-'08)(AWD)	3
Porsche	Carrera GT	NA	Subaru	WRX 2.5L ('09-'12)(AWD)	2
Porsche	Cayenne S ('03-'06)(AWD)	4	Subaru	WRX STi ('04-'07)(AWD)	1
Porsche	Cayenne Turbo ('08)(AWD)	2	Subaru	WRX STi ('08-'12)(AWD)	1
Porsche	Cayman 2.7L ('07-'08)	2	Subaru	XT	4
Porsche	Cayman S 3.4L ('06-'08)	1	Subaru	XT6 (AWD)	4
Renault	Alliance 1.4L (60hp)	4	Sunbeam	Tiger	4
Renault	Alliance 1.7L (85hp)	4	Suzuki	Swift ('94-'01)	4
Renault	Alliance 2.0L GTA (95hp)	4	Suzuki	Swift 1.3L GT ('89-'94)	4
Rosion	Q1	NA	Suzuki	SX4 Sport ('08-'09)	4
Saab	900 Turbo SPG ('85-'89)	4	Suzuki	SX4 Sport ('10)	4
Saab	900 Turbo SPG ('90-'91)	4	Toyota	Camry 2.4L ('02-'06)	4
Saab	9000 Aero 2.3L Turbo ('93-'97)	4	Toyota	Camry 2.4L ('07-'08)	4
Saab	9-2X Aero ('05)(AWD)	3	Toyota	Camry 3.0L (V6)(97-'01)	4
Saab	9-2X Aero ('06)(AWD)	3	Toyota	Camry 3.0L (V6)(03-'05)	4
Saab	9-2X Linear ('05-'06)(AWD)	4	Toyota	Camry 3.3L (V6)(04-'05)	4
Saab	9-3 Aero 2.0T & 2.0T ('04-'07)	4	Toyota	Camry 3.3L (V6)(06)	4
Saab	9-3 Aero 2.8L ('06-'07)	3	Toyota	Camry 3.5L (V6)(07-'08)	4
Saab	9-3 Viggen ('99-'02)	4	Toyota	Celica AllTrac ('88-'89)	4
Saab	9-5 2.3T	4	Toyota	Celica AllTrac ('90-'93)	4
Saab	9-5 Aero 2.3T & 2.3T ('02-'06)	4	Toyota	Celica GT ('00-'05)	4
Saab	99 EMS ('72-'76)(2.0L)	4	Toyota	Celica GT ('77-'82)	4
Saturn	Ion ('03-'04)	4	Toyota	Celica GT ('83-'86)	4
Saturn	Ion ('05-'07)	4	Toyota	Celica GT ('87-'89)	4
Saturn	Ion Redline ('04-'07)	4	Toyota	Celica GT ('90-'99)	4
Saturn	Sky ('07-'08)	4	Toyota	Celica GT-S ('00-'05)	4
Saturn	Sky Redline ('07-'08)	2	Toyota	Celica GT-S ('83-'85)	4
Saturn	S-Series (DOHC) ('91-'02)	4	Toyota	Celica GT-S ('86-'93)	4
Saturn	S-Series (SOHC) ('91-'02)	4	Toyota	Celica ST ('90-'93)	4
Scion	iC ('05-'10)	4	Toyota	Celica Supra (1st gen)	4
Scion	iC ('11)	4	Toyota	Corolla 1.8L ('03-'07)	4
Scion	xA ('04-'06)	4	Toyota	Corolla FX-16 GT-S	4
Scion	xB ('04-'06)	4	Toyota	Corolla GT-S 1.6L 16v ('84-'87)	4
Subaru	Forester XT ('04-'05) (AWD)	4	Toyota	Corolla GT-S 1.6L 16v ('88-'89)	4
Subaru	Forester XT ('06-'07) (AWD)	4	Toyota	Corolla SR5 ('79-'83)(3TC)	4
Subaru	Impreza 1.8L (AWD)	4	Toyota	Corolla XRS	4
Subaru	Impreza 1.8L (FWD)	4	Toyota	Echo	4
Subaru	Impreza 2.2L (AWD)	4	Toyota	Matrix ('03-'07)	4
Subaru	Impreza 2.5L ('98-'01)(AWD)	4	Toyota	Matrix XRS (180 hp)(03-'04)	4
Subaru	Impreza 2.5L ('02-'05)(AWD)	4	Toyota	Matrix XRS ('05-'06)	4
Subaru	Impreza 2.5L ('06-'08)(AWD)	4	Toyota	MR Spyder	4
Subaru	Legacy 2.2L ('90-'94)(AWD)	4	Toyota	MR2 (1st Gen NA)	4
Subaru	Legacy 2.2L ('95-'99)(AWD)	4	Toyota	MR2 2.2L DOHC	4
Subaru	Legacy 2.2L T AWD ('91-'94)	4	Toyota	MR2 SC	4
Subaru	Legacy 2.5L ('00-'08)(AWD)	4	Toyota	MR2 Turbo	3
Subaru	Legacy GT ('05-'08)(AWD)(Turb)	3	Toyota	Paseo	4
Subaru	Legacy 3.0 AWD ('08)	4	Toyota	Prius	4
Subaru	Outback 3.0 ('01-'04)(AWD)	4	Toyota	Solara 3.3L ('04-'06)	4

<u>Make</u>	<u>Model</u>	<u>Class</u>	<u>Make</u>	<u>Model</u>	<u>Class</u>
Toyota	Solara 3.3L ('07-'08)	4	VW	Golf 1.9L TDI ('99-'03)	4
Toyota	Supra NA ('88-'92)	4	VW	Golf 1.9L TDI ('04-'06)	4
Toyota	Supra NA ('94-'98)	4	VW	Golf 2.0L TDI ('10)	4
Toyota	Supra T	4	VW	Golf 2.0L, 1.4L & 1.6L DOHC	4
Toyota	Supra TT	1	VW	Golf 2.0L ('99-'06)	4
Toyota	Tacoma X-Runner ('05-'10)	4	VW	Golf 2.5L V5	4
Toyota	Tercel ('88-'90) (78hp)	4	VW	Golf 2.8L V6	4
Toyota	Yaris ('07)	4	VW	Golf 2.8L VR6	4
Triumph	GT6 MK I	4	VW	Golf R32 (AWD)('04)	3
Triumph	GT6 MK III	4	VW	Golf R32 (AWD)('08)	4
Triumph	Spitfire MK 2 (75hp, 1147cc)	4	VW	GTI 1.8L 8v ('85-'92)	4
Triumph	TR4 ('61-'64)	4	VW	GTI 1.8L DOHC	4
Triumph	TR6 ('69-'76)(2.5L S6 US Carb)	4	VW	GTI 1.8L turbo (150 hp)	4
Triumph	TR6 ('69-'76)(2.5L S6 Fuel Inj)	3	VW	GTI 1.8L turbo (180hp)	4
Volvo	242 (2.3L) ('83-'85)	4	VW	GTI 2.0L 8v ('95-'98)	4
Volvo	242 GLT ('81-'85)(turbo)	4	VW	GTI 2.0L 8v ('99-'00)	4
Volvo	850 2.4L n.a. ('93-'97)	4	VW	GTI 2.0L DOHC (134 hp)	4
Volvo	850 T-5R ('95), R ('96-'97)	4	VW	GTI 2.0L Turbo ('06-'09)(200hp)	4
Volvo	C30 T5 2.5L turbo ('08)	3	VW	GTI 2.0L Turbo ('10-'11)(200hp)	4
Volvo	C70 T5 2.3 T Coupe ('01-'02)	4	VW	GTI 2.8L V6 (174hp)	4
Volvo	C70 T5 2.3 T Conv. ('99-'04)	4	VW	GTI 2.8L V6 (200hp)	4
Volvo	C70 T5 ('06-'07)	4	VW	GTI 337 (turbo)	4
Volvo	P1800 ('61-'62)	4	VW	Jetta 1.6L	4
Volvo	S40 1.9 L ('00-'04)	4	VW	Jetta 1.8L DOHC	4
Volvo	S40 2.4L ('04-'06)	4	VW	Jetta 1.8L SOHC	4
Volvo	S40 2.4L ('07)	4	VW	Jetta 1.8L turbo GLI	4
Volvo	S40 T5 ('05)	4	VW	Jetta 2.0L GLi DOHC	4
Volvo	S40 T5 ('06-'07)	4	VW	Jetta 2.0L SOHC	4
Volvo	S40 T5 ('05-'07)(AWD)	4	VW	Jetta 2.0L turbo ('06-'08)	4
Volvo	S60 2.4L	4	VW	Jetta 2.5L I5 ('05-'07)	4
Volvo	S60 2.5L Turbo ('04-'06)(AWD)	4	VW	Jetta 2.5L I5 ('08)	4
Volvo	S60 2.5L Turbo ('07)(AWD)	4	VW	Jetta 2.8L VR6 12v ('94-'98)	4
Volvo	S60 2.5L Turbo ('04-'06)(FWD)	4	VW	Jetta 2.8L VR6 12v ('99-'02)	4
Volvo	S60 2.5L Turbo ('07)(FWD)	4	VW	Jetta 2.8L VR6 24v	4
Volvo	S60 R ('04-'05)(AWD)	3	VW	Passat 2.0L turbo ('06-'08)	4
Volvo	S60 R ('06-'07)(AWD)	3	VW	Passat 2.8L	4
Volvo	S60 2.4L T5 ('05-'07)	3	VW	Passat 3.6L ('06-'08)	4
Volvo	S60 2.3L T5 ('01-'04)	4	VW	Passat 3.6L ('06-'08)(AWD)	4
VW	Beetle 1.8L T (150hp)('99-'05)	4	VW	Passat W8 (AWD)	4
VW	Beetle 1.9L TDI ('98-'03)	4	VW	Rabbit 1.6L	4
VW	Beetle 1.9L TDI ('04-'06)	4	VW	Rabbit 1.6L Diesel (<'92)	4
VW	Beetle 2.0L ('98-'05)	4	VW	Rabbit 1.6L Turbo-Diesel (<'93)	4
VW	Beetle 2.5L ('06-'08)	4	VW	Rabbit 1.7L (74hp)	4
VW	Beetle Turbo S ('02-'04)	4	VW	Rabbit 2.5L ('06-'07)	4
VW	Corrado 1.8L DOHC, 2.0L DOHC	4	VW	Rabbit 2.5L ('08)	4
VW	Corrado 2.0L SOHC	4	VW	Rabbit GTI 1.8L (90hp)	4
VW	Corrado G60 1.8L S/C	4	VW	Scirocco 1.6L (75-78hp)	4
VW	Corrado VR6	4	VW	Scirocco 1.7L (74hp)	4
VW	Golf 1.6L, 1.8L	4	VW	Scirocco 1.8L DOHC	4
VW	Golf 1.8L DOHC, 2.0L DOHC	4	VW	Scirocco 1.8L SOHC	4