



Honda Challenge Series

Official 200~~8~~7 Rules and Classifications

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1. Introduction

The NASA Honda Challenge Series was created to meet the needs of Honda/Acura owners looking for a series specifically tailored to accommodate Honda and Acura vehicles that are modified to a degree which might be found illegal in other racing series, yet provide a set of rules that would still accommodate existing Honda race cars and provide a “showcase” to unify the field.

The following rules are not guidelines for this class but an actual listing of the allowed and the required modifications. These rules and addendums specify the only modifications allowed. **If these rules do not expressly state a modification is allowed, it is prohibited.** No item, which is allowed, shall also perform a prohibited function.

Occasionally, rules may be generically specified which are not legal for some cars. Refer to specific models for restrictions. Some equipment may be required to support the sponsors that have contributed to the year end points fund. *The driver is responsible for vehicle legality.*

1.1 Rules Subject to Change

These rules are subject to change. The most up-to-date version of this document is available on the web, at www.nasaproracing.com/rules.html. **Rule Addendums may be published throughout the year and will be posted on www.nasaforums.com**

2. Intent

The NASA Honda Challenge Series will encourage competitors to create an aftermarket-sourced configuration that will allow their car perform at an optimum level. The intent of the rules is to allow competitors to use a combination of parts that will increase the performance, competitiveness, and look of the vehicle. It is the intent of the NASA Honda Challenge Series to serve as a “showcase” for aftermarket tuners and manufacturers and create tremendous exposure for their products and services while providing a friendly, accommodating, and challenging environment for the series drivers. The series is designed to keep costs in control by allowing limited suspension, brake, engine, and body modifications.

3. Sanctioning Body

The NASA Honda Challenge Series is sanctioned by the National Auto Sport Association (NASA). All events are governed by these NASA Honda Challenge Series rules, applicable addendums, prima fascia rules, as well as those found in the latest version of the NASA *Club Codes and Regulations* © (CCR). All decisions made by the NASA Honda Challenge Series administration are final, except under certain conditions, as specified by the CCR. All competitors agree to abide by the rules set forth in the NASA’s Club Codes and Regulations (NASA CCR) and any supplemental rules issued by the Honda Challenge Series Directors.

4. Safety

4.1 Safety Requirements

All safety standards not specified herein must conform to the NASA Club Codes and Regulations (CCR). Where conflicts are found between the CCR and these rules, these rules must supercede the conflicting rules found in the CCR. However, in the interest of safety, any participant that determines a conflict exists must immediately report it to the series administration for clarification.

4.2 Class Safety

The NASA Event Director, Honda Challenge Series Directors, the Race Director, the Honda Challenge Series Race Director, the Chief Scrutineer OR the Honda Challenge Series Chief Scrutineer may exclude any car from competition for any item(s) that they deem to be unsafe.

4.3 Tow Eyes

NASA CCR-compliant tow eyes are required for all classes.

4.4 Air Bags

All cars equipped with air bags must either have the systems disabled or removed.

4.5 Sunroofs/Moonroofs

All cars equipped with Sunroofs or Moonroofs made of **glass** must be either:

- a) removed from the vehicle (in this case arm restraints required); or
- b) replaced by an acceptable covering such as sheet metal, aluminum, or composite (i.e. lexan, carbon fiber) that is securely attached to the vehicle covering the opening; or
- c) covered with tape on both sides of glass.

All cars equipped with Sunroofs or Moonroofs made of **metal** must be either:

- a) retained if additional fasteners are used to secure them to the vehicle; or
- b) removed from the vehicle (in this case arm restraints required); or
- c) replaced by an acceptable covering such as sheet metal, aluminum, or composite (i.e. lexan, carbon fiber) that is securely attached to the vehicle covering the opening.

4.6 Masterswitch

All cars shall have a NASA CCR-compliant Master Switch.

4.7 Fuel Safety Cell

The installation of a NASA CCR-compliant fuel safety cell is not required but is strongly recommended.

4.8 Fire Extinguisher/Fire System

All cars shall have a NASA CCR-compliant fire extinguisher. Additionally, it shall be mounted in compliance with the NASA CCR. A NASA CCR-compliant onboard fire system is not required but is strongly recommended.

4.9 Roll Cage

All cars shall have a NASA CCR-compliant roll cage. Additionally,

- 1) Any number of additional mounting points may be used.
- 2) Any number of additional tubes may be used, *even for chassis stiffening*.
- 3) Any size mounting plate may be used, subject to material and minimum specifications in the NASA CCR.
- 4) Two (2) forward cage braces per side (total of four (4)) may pass through the firewall and connect at no more than two (2) mounting points in the engine compartment (i.e. strut tower or frame).

- 5) Tubes may be welded at any contact point, or even be “seam welded.” Additional material may be used to connect roll cage tubing to chassis of car. I.E. A pillar bar may have material welded to both itself and the A pillar of the car.
- 6) If modification number 4.9.4 and/or 4.9.5 above is utilized, an additional thirty (30) pound weight penalty will apply.
- 7) All tubes that are added shall be inspected for safety reasons. Any tube deemed to be hazardous to the driver must be removed.

4.10 Door Safety Bars

The driver side OEM side impact beam may not be removed or modified unless NASCAR-style bars (or other approved design as defined in CCR) *which extend to the outer door skin* are added to the roll cage. The passenger side OEM side impact beam may not be removed unless two (2) bars are utilized in the cage design (i.e. two (2) horizontal bars or X design).

It is highly recommended using a NASCAR style door bar for adequate side impact protection. In any case, *NASA CCR-compliant roll cage door protection is required on both sides of the car.*

4.11 Door Glass

The driver side window glass, window operating mechanism, inner door panel, and interior door latch assemblies may be removed. Passenger side window glass, window operating mechanism, inner door panel, and interior door latch assemblies may be removed.

If retained, driver and/or passenger side door glass must be covered with a protective panel (stock panel is permitted).

5. Classification of Vehicles

5.1 Classes

H1

H1 shall consist of two categories of vehicles.

- Hybrid Vehicles
- Restricted Preparation Vehicles (RPV)

H1 Hybrid Vehicles

A Hybrid Vehicle is defined as any non-Restricted Preparation Vehicle (as specified below) built with components that are sourced from a stock Honda or Acura vehicle of a different model, domestic market or generation. These sourced components may be for the engine, the transmission, the suspension, the driveline, etc. Certain updating/backdating is allowed and will NOT, per se, classify the vehicle as a Hybrid.

Year	Make	Model	Motor	Trim	Note	Weight
All	Honda/Acura	All	D-series		Single Cam(s), Intake Manifold is unrestricted with the exception of Individual Throttle Bodies	1950
All	Honda/Acura	All	B16-series		Crank may not allow excess of 1600cc, ITR or Blox “ITR” Style Manifold allowed	2100
All	Honda/Acura	All	B18 <u>A/B/C/C5</u> , B20, <u>others not listed</u>		ITR or Blox “ITR” Style Manifold allowed	2250 <u>0</u>
<u>All</u>	<u>Honda/Acura</u>	<u>All</u>	<u>B20</u>		<u>ITR or Blox “ITR” Style Manifold allowed</u>	<u>2300</u>
All	Honda/Acura	All	K20 & H series		See sec. 9.3.1(h, j, k, l)	2400
<u>All</u>	<u>Honda/Acura</u>	<u>All</u>	<u>F20A, F22A, F22B</u>		<u>See sec. 9.3.1L</u>	<u>2400</u>

All	Honda/Acura	All	K24		See sec. 9.3.1(h, j, k, l)	2450
All	Honda/Acura	All	F20C/G-series		2.0 Liter	257565 0
All	Honda/Acura	All	F22C/G-series		2.2 Liter	267575 0

H1 Restricted Preparation Vehicles

A Restricted Preparation Vehicle is not defined but rather specified. The current RPVs allowed to compete are listed below.

Year	Make	Model	Motor	Trim	Note	Weight
917 -03	Acura	NSX	All			2800
00-04	Honda	S2000	2.0L			2650 2575
00-04	Honda	S2000	2.2L			2750 2675
04- 06	Acura	TL	see rules			2850
2007	Acura	TL		TypeS		3020

Note: The S2000 may update/backdate its motor with the corresponding weight shown in the table.

H2

H2 shall consist of two categories of vehicles.

- Limited Preparation Vehicles (LPV) as classified by engine type only
- Limited Preparation engine codes that are not listed are not eligible for the class
- Restricted Preparation Vehicles (RPV) as classified by engine and chassis combination

H2 “Limited Preparation” Vehicles

Year	Make	Model	Motor	Note	Max Comp	Weight
All	Honda/Acura	All	D-series	Cam(s) unrestricted, Compression via head gasket and head shave is unrestricted, Intake Manifold is unrestricted with the exception of Individual Throttle Bodies	None	2000
All	Honda/Acura	All	B16-series (Non CTR)	Crank may not allow stroke to exceed 1600cc, OEM Type R or CTR Cams allowed, OEM ITR or Blox ITR manifold allowed	10.9:1	2250
All	Honda/Acura	All	B16 B “CTR”	100% OEM	11.3:1	2400
All	Honda/Acura	All	B18A/B	ITR or Blox “ITR” Style Manifold allowed	9.9:1	2200
All	Honda/Acura	All	B18C1	OEM Cam, OEM ITR or Blox “ITR” Style Manifold Allowed	11.1:1	2400
All	Honda/Acura	All	B18C5 (US or JDM)	100% OEM	11.6:1	2500
All	Honda/Acura	All	B20	OEM Cam, OEM ITR or Blox “ITR” Style Manifold allowed	10.1:1	2250
All	Honda/Acura	All	H22/H23	100% USDM <u>or JDM</u> OEM	10. 65 :1	267 00

H2 "Restricted Preparation" Vehicles

Year	Make	Model	Motor	Trim	Note	Weight
All	Acura	RSX	2.0L i-VTEC	Type S		2700
06-07	Honda	Civic		Si		2700
All	Acura	TSX	K24			2800

H3

H3 vehicles that comply with the H2 rules may also compete in H2. H3 vehicles are permitted to compete in H2 as well. Competitors that do not wish to compete against cars with engine swaps are given the ability to choose classes. As such, weights have been adjusted within the group in order to equalize competition in H3.

Year	Make	Model	Motor	Trim	Note	Weight
93-96	Honda	Prelude	VTEC			2725
97-04	Honda	Prelude	All			2725 800
All	Acura	Integra	B18C5	Type R		2575
95-2001	Acura	Intergra	B18C	TypeR	JDM	2625
All	Acura	RSX	2.0L i-VTEC	Type S		2750
06-07	Honda	Civic		Si		2750
All	Acura	TSX	K24			2900
All	Acura	Integra	B18C	GS-R		2450
92-96	Honda	Prelude		Si, Si-4WS		2650
99-00	Honda	Civic	1.6L B-series	Si		2200
All	Honda	Del Sol	1.6 L B-series	VTEC		2200

H4

Year	Make	Model	Motor	Trim	Note	Weight
90-93	Acura	Integra	1.8L non-VTEC			2500
94-01	Acura	Integra	1.8L non-VTEC			2500
90-97	Honda	Accord	2.2 L	LX/DX		2525 600
<u>94-97</u>	<u>Honda</u>	<u>Accord</u>	<u>F22B</u>	<u>EX</u>		<u>2600</u>
<u>98-02</u>	<u>Honda</u>	<u>Accord</u>	<u>F23A1</u>	<u>LX/EX</u>		<u>2690</u>
<u>98-02</u>	<u>Honda</u>	<u>Accord</u>	<u>F23A5</u>	<u>DX</u>		<u>2590</u>
88-91	Honda	Civic	1.6L	Si		2150
92-95	Honda	Civic	1.6L VTEC	EX, Si	SOHC	2200
96-00	Honda	Civic	1.6 VTEC	EX		2200
88-91	Honda	CRX	1.6L	Si		2150
96-97	Honda	Del Sol	1.6 L non-VTEC	S		2150
96-97	Honda	Del Sol	1.6 L VTEC	Si	SOHC	2200
92-96	Honda	Prelude		S		2525 625
88-91	Honda	Prelude	B20A5, B21A1			2500
2001+	Honda	Fit			JDM	2050
2006	Honda	Civic		DX/LX/EX		2415

H5

Year	Make	Model	Motor	Trim	Note	Weight
86-89	Acura	Integra	1.6L		May run H4 at 2275lbs	2500
pre - 90	Honda	Accord		LXi		2500
88-91	Honda	CRX		DX	May run H4 at 1900lbs	2175
92-00	Honda	Civic		/DX/LX	May run H4 at 2175lbs	2400
92-95	Honda	Civic	8 valve	CX	May run H4 at 1900lbs	2175
All	Honda	Civic			NOC	2000
All	Honda	CRX			NOC	2000
1987	Honda	Prelude		Si		24 5075

NOTE: NOC – Not Otherwise Classified

5.1.1 Weight

Minimum vehicle weights (listed in pounds) are the result of research based on the weights of Honda Challenge legal racecars. Potential power – to – weight ratio largely determines the minimum weight for any given vehicle. Other factors include brakes, torque, and wheelbase. Vehicle weights will be taken, as driven or raced, post qualifying or race, with driver.

Note: Since this is a new series vehicle weights may be adjusted to equalize fairness in class. Notice will be given no less than 10 days prior to an event.

5.1.2 Ballast

Up to two hundred (200) pounds of additional weight may be added to the vehicle providing that all of the following conditions are met:

- 1) This additional weight must serve no other purpose than to increase the weight of the vehicle. This additional weight shall be known as “ballast.”
- 2) Ballast must be made of solid metal.
- 3) All pieces of ballast must be bolted within the passenger footwell area, through the floor pan on the passenger side of the cockpit, between the firewall and rear most factory seat mounting holes for the front seat.
- 4) All ballast must be secured in such a way that it cannot come loose in an impact. This means that the bolts holding the weight must be strong enough to support the load and be backed by big enough washers so that the mounting will not punch through the thin metal floor. Also, at least two (2) bolts (3/8 or larger) must be used for the larger weights such as fifty (50) pound dumbbells.

However, it is ***strongly recommended*** at that least one (1) 3/8-inch SAE Grade-5 bolt, two (2) fender washers, and a locking nut system be used for every ten (10) pounds of weight. Example: A seven (7) pound block requires at least one (1) bolt system as described herein. A thirty (30) pound block requires at least a three (3)-bolt system. NOTE: Metric Grade 8.8 is equivalent to SAE Grade 5.

5.2 Vehicles Not Currently Classified

Drivers wishing to compete in a vehicle that is not currently classified must submit a written request to the NASA Honda Challenge Series Directors describing the vehicle and its specific modifications for which they wish to have classed. These requests should be postmarked no less than thirty (30) days before the date of a race the driver wishes to enter. Send such requests to the following address:

- Please contact the NASA Honda Challenge Series leader in your region.

6. Prohibited Items (H1-H5)

- b) Nitrous Oxide Systems.
- c) Forced Induction (turbochargers, superchargers, ram air, etc).
- d) Dry Sump Engine Oiling Systems

7. Allowed Modifications- H1- H5

OEM, stock and/or factory refers to the same model, domestic market and generation as the listed vehicle. When allowed modifications permit other models, domestic markets and/or generations, it will be specified as part of the allowed modification.

7.1 Engine

- a) Engines may be balanced and/or blueprinted. Lightning of moving parts beyond what is necessary to balance is prohibited. Engine bearings may be replaced with aftermarket replacements and engine clearances (piston to wall, valve lash, etc) are unrestricted and are considered blueprinting.
- b) Engines may be bored to a maximum of .040 inch (1 mm) over standard bore size.
- c) Factory replacement pistons or the exact equivalent shall be used. Exact equivalent shall be defined as the same dome/dish/valve relief configuration, weight, ring thickness and location, and pin location as the OEM replacement piston. Wrist pins and method of retention must also conform to OEM specifications. In the event that a .040 factory replacement piston/wrist pin is not available, the oversize pistons/wrist pins shall not weigh any less than the largest size OEM piston for that engine.
- d) Piston rings are unrestricted but must be of proper OEM ring thickness.
- e) Cylinder head intake ports, exhaust ports, and intake manifold may be port matched but cannot be machined beyond one (1) inch into the head or intake.
- f) Valves and valve seats may be machined and may only be replaced with the exact OEM equivalent.
- g) Valve guide material is unrestricted.
- h) Compression may be increased one half (.5) a point greater than OEM number.
- i) Cylinder head gasket surfaces may be machined so long as it does not increase compression beyond the maximum value allowed for make and model.
- j) Timing gears must remain OEM. Cars equipped from the factory with plastic timing gears may replace them with metal gears so long as cam timing remains stock. OEM crank timing gear may be adjusted with an offset key back to stock position. Offset keys may be used with cam gears on SOHC engines only.
- k) Any OEM Honda or Acura ECU (including other models, domestic markets (JDM) and generations) may be used, and may be relocated ONLY to facilitate cage installation. Reprogramming of OEM ECU is allowed. Piggyback ECU's that plug into the OEM ECU (e.g. Hondata) are allowed. VAFC (VTEC/Air/Fuel) controllers or other devices that perform the same function may be used. OBD0 equipped cars may update distributor and associated wiring to OBD1 or OBD2
- l) Polyurethane or hard rubber motor mounts and/or inserts may be used.
- m) Any air intake system in front of the throttle body (including mass air sensor) may be used (stock throttle body must be retained).
- n) Carbureted vehicles may use an alternate carburetor of the same design and configuration (for example, a single barrel can be replaced with an alternate single barrel, but not a dual barrel).
- o) Any exhaust header and exhaust system may be used. All emission related devices may be removed or disabled. Catalytic converters may be removed.
NOTE: Some facilities have rules governing sound limits. Vehicles must fall within these limits to be allowed to compete.
- p) Fasteners may be replaced with items of unrestricted origin, but performing the exact OEM function.
- q) Gaskets (including the use of phenolic spacers) may be replaced with others of unrestricted origin so long as they do not violate any other rules contained herein.
- r) Engine drive belts may be replaced with others of unrestricted origin.
- s) Alternate accessory drive pulleys ("underdrive pulleys") may be used. Crankshaft may use any pulley (size and material unrestricted).
- t) Alternate water pumps of *OEM design* may be used and must bolt to engine without modification.
- u) Cars equipped with vacuum advance distributors may perform necessary distributor modifications to install other Honda electronic advance distributors.

7.2 Ignition

- a) Any ignition system that utilizes the original OEM distributor for spark delivery is permitted. Internal distributor components and cap may be replaced with others of non-OEM origin. An external ignition coil may be added. Crankfire ignitions are prohibited unless fitted as OEM.
- b) Spark plugs and ignition wires may be replaced with others of unrestricted origin.

c) Ignition timing is unrestricted.

7.3 Fuel Systems

- a) NASA CCR-Compliant fuel safety cells are allowed. Rear floorpan may be modified to accommodate a fuel cell. If the fuel cell is not present, said opening must be covered with metal and sealed.
- b) Fuel lines, fuel pumps or fuel pressure regulators may be replaced with others of unrestricted origin.
- c) Adjustable fuel pressure regulators are permitted.

7.4 Oil System

- a) Engine oil coolers and remote oil filters of unrestricted origin may be used.
- b) Valve covers may be modified *only* to accommodate a breather and/or filler.
- c) A pressure accumulator such as an Accusump may be used.
- d) Oil pans and all related items such as baffles, pickup, pump and scrapers may be added/replaced with others of unrestricted origin. (No dry sumps unless OEM.)

7.5 Transmission and Driveline

- a) The flywheel may be replaced with others of unrestricted origin, provided it is the same diameter as stock and would accommodate a stock clutch and pressure plate. (See item b) as well.)
- b) The clutch and pressure plate may be replaced with others of unrestricted origin so long as the pressure plate would bolt to a unmodified OEM flywheel.
- c) Limited slip differentials are unrestricted but must fit into an unmodified OEM housing.
- d) Final drive ratio is unrestricted. All other gearing must remain OEM in part and gearing.
- e) Shift levers and knobs are unrestricted.
- f) Polyurethane or hard rubber transmission mounts and/or inserts may be used.
- g) Polyurethane or hard rubber shifter mounts and/or inserts may be used.

7.6 Engine Cooling

- a) Any radiator may be used but must be mounted in the factory OEM location.
- b) Radiator caps are unrestricted.
- b) Thermostats may be modified or removed. Restrictors may also be utilized.
- c) Cooling fans may be added or removed. Means of actuation is unrestricted.
- d) Ethylene glycol-based anti-freeze is not permitted. Other additives, such as Redline Water Wetter, are permitted. (Certain exceptions to this rule may be made in cold weather climates on a race by race basis.)

7.7 Miscellaneous

- a) All Heating Ventilation and Air Conditioning (HVAC) components may be removed.
- b) Heater hoses, clamps and heater control valves may be added or substituted with those of unrestricted origin, or removed.
- c) Heater cores may be removed or plugged.
- d) Windshield wiper arms, motors, controls and washer bottles may be removed.
- e) Power steering pumps, hoses and their mounting brackets may be removed.
- f) Any battery of same ~~type~~, size, voltage, and weight as the original is required and must be installed in the original OEM location.
- g) Cruise Control components may be removed.
- h) Mirrors may be replaced with any item serving the same purpose.
- i) All engine components not listed in these rules shall conform to factory OEM specifications.
- k) Any unused wiring may be removed
- l) Weather stripping and sound deadening may be removed
- l) Any OEM Honda/Acura steering rack may be used but must attach to the vehicle without modification

7.8. Suspension

- a) Minimum ride height shall be four (4) inches measured without driver at the lowest point of the rocker panel but not the welded seam.
 - b) Single bodied adjustable shock absorbers of unrestricted origin may be used. However, the number and type shall be the same as stock OEM.
 - c) Bump stops may not be more than two (2) inches in length.
 - d) MacPherson strut cars may substitute struts or use any insert.
 - e) Adjustable spring perches (coilovers) are allowed and may be part of the shock body.
 - f) Any spring rate or torsion bar rate may be used. However, the same number and type as stock shall be retained except helper springs are permitted.
 - g) Sway bars of unrestricted origin may be used, but may not be adjustable while the vehicle is in motion.
 - h) Suspension bushings of unrestricted origin are allowed. (spherical, Delrin, etc.)
 - i) Camber adjustment devices (plates/shims/eccentric, etc.) are unrestricted but are limited to one per wheel. Front and rear upper control arms may be modified or replaced with items that allow camber and/or caster adjustment only
 - j) Independent rear suspension mounting holes may be slotted or reinforced for camber and/or toe adjustment.
 - k) Cars may add stayrod(s) between the shock towers and/or lower suspension mounting points.
- Note: All suspension parts must retain their original attachment points at the chassis, and the suspension must maintain its original design and function.*
- l) OEM Rear Toe adjustment arm may be replaced with any substitute*

7.9 Brakes

- a) Brake pad or brake shoe are unrestricted.
- b) Brake fluid is unrestricted.
- c) Replacement brake lines (rigid and/or flexible) are unrestricted.
- d) Brake bias or proportioning valves may be used. Adjustment controls may be driver accessible.
- e) Brakes may be ducted from existing holes in the vehicle's bodywork provided they extend in a forward direction (from brake forward). Auxiliary lights not listed as "required" items in this rulebook may be removed to facilitate brake cooling ducts.
- f) Rotor backing plates ("dust shields," "splash shields") may be removed or modified to facilitate cooling.
- g) Brake rotors and/or drums must be the same type, material, and dimensions as OEM. Brake rotors and/or drums from alternate companies may be used. Brake rotors and/or drums may be cryogenically treated.
- h) ABS systems may be disabled, removed, or relocated.
- i) Parking brakes and all associated components may be removed.

7.10 Body

- a) Vehicle bodywork must remain stock except for the following:

- 1) Front splitter/spoilers/air dams may be used provided they are either bolted or riveted to the vehicle (not taped). Front splitter/spoilers/air dams may not extend rearward more than 1/2 (one half) inch past the front of the front wheel well opening. Front splitter/spoilers/air dams shall not protrude beyond the overall outline of the body when viewed perpendicular to the ground above the part. Canards or any other aerodynamic devices that attach to the body are prohibited (except where allowed by the rules herein).
~~Front (chin) spoilers/air dams may be used provided they are either bolted or riveted to the vehicle (not taped). Front (chin) spoilers/air dams may not extend rearward of the front of the front wheel well opening. Front (chin) spoilers/air dams shall not protrude beyond the overall outline of the body when viewed perpendicular to the ground above the part. Canards or any other aerodynamic devices that attach to the body are prohibited (except where allowed by the rules herein).~~
- 2) Any rear deck spoiler/wing that attaches to bodywork is allowed. Rear spoiler may not protrude beyond the overall outline of the body when viewed perpendicular to the ground above the part.
- 3) Rocker sill kits may be acceptable on a case-by-case basis. Consult with the NASA Honda Challenge Series Director for approval.
- 4) Splash guards, wheel well molding, and body side molding may be removed or replaced

with alternate materials.

5) Headlight lenses may be replaced with alternate materials of unrestricted origin. These materials must not serve as ducting. The headlight bucket must remain in place. Removal of the headlight assemblies is not permitted.

6) Tail light and side marker lights may be replaced with any design that performs the same function.

7) Fender lips may be rolled or flattened for tire clearance. Non-metallic fender liners may be removed.

8) Hood and trunk pins are allowed. In addition, hood and trunk latch mechanism may be removed so long as some positive action external latch is used.

9) Convertible tops and related hardware shall be removed.

10) Radio antennas may be removed or added for two-way communication.

11) Two (2) openings may be cut in the front valence to allow up to a three (3) inch diameter duct leading to the front brakes only. Factory fog lights may be removed and holes used for brake ducts or left open.

12) Screens or mesh may be added to prevent debris entering the bodywork.

13) The Del Sol is allowed to remove or replace the rear window with Lexan in order to accommodate rear roll bar braces. This body modification is for the sole purpose of rear roll bar brace installation.

14) Impact Bumper(s) must remain OEM. Exception: Additional material may be added to OEM bumper (not frame) to extend the unit for additional body/chassis protection. The bumper support and any added material must remain behind bodywork.

b) All exterior alterations must be deemed aesthetically acceptable by the NASA Honda Challenge Series before a vehicle can compete.

c) All vehicles must have at least one (1) Vehicle Identification Number (VIN) attached to the vehicle and correspond to the make and model of that vehicle. This VIN shall be the basis of all OEM specifications. Body swaps are, however, allowed.

7.10.1 Body Swaps

a) Vehicle body swaps are permitted ~~in the event of a collision that renders a car's tub "unusable."~~

b) The body swapped into must have no structural advantages over the original body.

c) The trim level of the car *as it is classed for competition* must remain intact. Mixing and matching of trim levels is not permitted. Examples of body swaps:

Legal: A H3 Integra GS-R may be rebuilt from an Integra RS tub. The "advantages" of the RS shell are the lack of sunroof and ABS – both of which may be removed under these rules.

Illegal: An H3 Integra GS-R may *not* be rebuilt using an Integra Type R shell. The Type R shell has structural reinforcements that are not available on RS/LS/GS/GS-R Integras.

7.11 Vehicle Interior

a) Any NASA CCR-Compliant steering wheel may be used.

b) Any NASA CCR-Compliant driver's seat may be used.

c) The factory dashboard must remain intact but may be modified to accommodate roll cage, gauges, switches and instrumentation.

d) Interior mirror(s) are unrestricted.

e) All interior trim pieces such as: interior panels, glove box, seats, carpet, headliner, center console and sound deadening may be removed.

f) The spare tire and associated components must be removed.

g) A dead pedal may be added.

h) Foot pedals may be altered for driver comfort.

i) Stereo, speakers and related wiring may be removed.

j) Factory seat belts may be removed.

k) Gauges and instruments may be added, removed, or replaced.

l) Ducting may be installed to provide fresh air to the driver's compartment. Ducts may be installed in the driver or passenger window area. A "fresh air system" which supplies air to the driver only is also permitted.

m) Driver cooling (such as cool suit) systems may be used.

7.12 Wheels and Tires

- a) Wheels replaced with any substitute subject to the following restrictions.
 - 1) Any wheel diameter may be used.
 - 2) The maximum wheel width for H2-H5 is seven (7) inches.
 - 3) Any size wheel may be used in ~~HU~~ and H1
 - 3) Wheels must be made of metal.
- b). The required tire for Honda Challenge point races is the Toyo Proxes RA-1
- c) Track width may be changed by use of spacers or wheel offset, but the top one-third (1/3) of the tire may not protrude outside of the fender when viewed from above.
Example: If your tire measures twenty-seven (27) inches in diameter, the top nine (9) inches of the tire may **NOT** protrude outside of the fender when viewed from above.
- d) Fenders may be rolled and/or inner lip may be removed to prevent tire rubbing. Fenders may **NOT** be cut or flared with additional material to increase its size.
- e) Wheel studs, wheel bolts and/or wheel nuts are unrestricted.

8. Graphics and Identification

- a) Certain graphics are required on NASA Honda Challenge Series racecars. Information on these materials is available at the NASA Honda Challenge Series website, www.hondachallenge.com or by emailing the NASA Honda Challenge Series Directors at info@hondachallenge.com
- b) All cars are required to display at least four (4) NASA CCR-Compliant NASA racing stickers.
- c) Numbers must be permanent and displayed on each side of the vehicle. Numbers should be a minimum of eight (10) inches tall and of contrasting color to their background. Additionally numbers should be displayed at the front and rear of the vehicle at a minimum of four (4) inches tall.
- d) Class designation must be permanent and displayed on each side of the vehicle. Class designation should be a minimum of three (3) inches tall and of contrasting color to their background.
- e) Drivers who are considered Rookie drivers must display NASA CCR-Compliant Rookie markings.
- f) Vehicles that do not display required decal packages will not be allowed to compete.
- g) Vehicles may be disqualified if timing/scoring cannot read number and/or class. All decals, numbers, etc. must be permanent. *Magnetics will not be acceptable*. Vinyl markings are considered permanent.
- h) Honda Challenge window banner is mandatory at the NASA Championship event at Mid Ohio. Contact your Honda Challenge group leader for purchasing information.

9. Allowed Modifications- H1 Only

9.1 Introductory Notes

- a) This section of the rules are to be read as an addition to, or replacement of, the rules for car preparation listed in sections pertaining to section 7 Allowed Modifications (H1-H5).
- b) Rules listed within section 9 may be in contradiction with those listed in section 7. In these cases, the Allowed Modifications (H1 Only) in section 9 supercede those in sections pertaining to Allowed Modifications in section 7 (H1-H5).
- c) In section 9 of the rulebook, the description of a component of a race car as "unrestricted" implies that any part, from any manufacturer (Honda or otherwise) may be used to construct said component(s).
- d) **Restricted Preparation Vehicles (e.g. the Acura NSX) are not eligible to be prepared as "Hybrids."** The intention is for Restricted Preparation Vehicles to compete against Hybrids. Restricted Preparation Vehicles must follow the preparation rules in section 7 Allowed Modifications (H1-H5) except where stated otherwise.

9.2 H1 Restricted Preparation Vehicles Only

- a) Batteries are unrestricted as to type, size, voltage, and weight as OEM provided it installed in the original OEM location.
- b) Restricted Preparation Vehicles may use any metal wheel (subject to 7.12(c))
- c) S2000, NSX, and TL are allowed any brake system as permitted in 9.3 with 75lbs weight penalty

- d) S2000, NSX, and TL are permitted the use of Remote Reservoir Shocks with a 75lbs weight penalty.
- e) S2000 may use any rear shock of same design as OEM (attached external canister) without weight penalty. Note: Use of remote canister that is not attached to the main shock body will necessitate weight penalty.

f) Restricted Preparation vehicles may use any engine management system

9.3 H1 Hybrid Vehicles Only

In addition to any unmodified part from any Honda or Acura model, market, or generation, the following components are unrestricted:

- Brake Systems
- Engine cylinder head porting (“from the block up”)
- Engine Management Systems
- Compression Ratio
- Fasteners (e.g. bolts) anywhere in the engine
- Valve preparation (angle, cut, etc) but not size or material
- Valve Springs, valve locks, valve retainers, and valve shims
- Camshaft (except “K” series)
- Camshaft gears (including adjustable)
- Fuel Pumps, fuel Injectors, fuel rails
- Engine and transmission mounts, and associated components (shift linkages, etc) required to perform an engine/drive train swap
- Engine management systems (ECUs, piggyback computers, etc)
- Any metal wheel (subject to 7.12(c) and 9.3.1(d))
- Battery type, size, voltage, ~~and~~ weight and location.
- Power Steering System

However, Hybrid Vehicles will be limited to an engine displacement of 2.4 liters. Additionally, no components may be prepared beyond the limits stated within these rules.

For Hybrid Vehicles ONLY, OEM, stock and/or factory refers to any Honda or Acura model, domestic market or generation. These hybrid exchange parts must be unmodified unless modifications are specifically permitted.

9.3.1 H1 Hybrid Vehicle Engine Preparation

- a) This section is intended to clarify the engine preparation rules specific to Hybrid Vehicles.
- b) The engine, from the top (deck surface) of the engine block “down” to the ground, MUST be constructed entirely of Honda/Acura OEM parts. No aftermarket parts are permitted in ~~this~~, the “bottom end,” of a Hybrid Vehicle engine except otherwise permitted in these rules. Although engine overboring is not subject to the .040 allowance permitted in section 7.1(c) pistons are required to comply with 7.1.c of this rulebook. Pistons must be available as an OEM Honda part. Piston tops may be “notched” or “cut” for valve clearance only.
- c) “Above the engine block” cylinder head preparation and porting is unrestricted unless otherwise stated in 9.3.1(h). Valve size and material must conform to original specification for that particular head. Rocker shaft assemblies are also unrestricted.
- f) ~~Throttle Bodies and~~ Intake Manifolds are *not* considered part of the cylinder head and must be unmodified OEM Honda parts. Port matching is allowed but cannot be machined beyond one (1) inch into the intake manifold.
- g) Items (~~such as throttle bodies and intake manifolds~~) that attach to the cylinder head may be re-drilled for fitment purposes ONLY. Alteration of air and; fuel, ~~and/or coolant~~ passages is not permitted. Fitment modifications that alter air and; fuel, ~~and/or coolant passages~~ as a side effect will be deemed illegal.
- h) K Series cylinder head must use unmodified OEM camshafts and rocker assembly that is sold with K series cylinder head. JDM is considered OEM and permitted. Cylinder head preparation must conform to rules in ~~109.3.4(A-He) unless otherwise stated herein~~.
- i) A block guard that ties the top edge of the cylinder bores together is permitted for use in thea B20 block and D series block only. The unit may be welded in place. This allowance is specifically designed to allow a plate to be installed at the top of the bores and may not extend more than one inch below the top of the engine block. This allowance does not permit the block to be “sleeved” which is the process of replacing the cylinder bores with a stronger design.
- j) Any throttle body may be used providing it has an outlet size of 62mm or less. Over-boring of stock throttle body is permitted up to 62mm.

k) K series engine blocks must utilize the Honda specified crank, rods, and pistons. I.E. K20 block must use K20 pistons, rods, and crank.

l) K24 engine compression is limited to 11.0:1, K20 engine compression is limited to 12.0:1, and H22/H23/F20A/F22A/F22B engine compression is limited to 11.5:1.

9.4 Chassis and Body Preparation- H1 Only

- a) Batteries are unrestricted in size, type and weight and may be relocated. Batteries located inside passenger compartment must be mounted in accordance with the CCR.
- b) Headlights and any associated attaching hardware may be replaced, substituted with any material, or removed. Location may be used to pickup air for brake cooling, engine cooling, or air intake only.
- c) Hood, trunk, rear hatchback, bumper supports, and the front bumper cover may have material removed or replaced with a substitute of unrestricted material. (Composite materials are allowed for those items.)
- d) Front fenders may be replaced with a substitute of unrestricted material but must retain the style (no air reliefs) and dimensions of the OEM fender (flares are not permitted).
- e) The S2000 may utilize any composite "hardtop".
- f) The rear bumper cover may be replaced with a cover of alternate material and design. The shape may not contain diffuser tunnels any greater than three (3) inches in depth (measured across the vertical ribs to the top of tunnel). Area in front (towards driver) of rear bumper cover must remain open (like OEM) and may not be sealed off to smooth airflow. Rear bumper covers may be trimmed up to the bottom edge of the OEM crash bumper. Rear bumper covers may contain holes to relieve air pressure. The sum total of the area of these holes may not be greater than the remaining bumper material. The design must be tasteful and secure.
- g) Passenger and rear windows may be replaced with polycarbonate/Lexan material. Front windshield must remain stock.

h) Window channel may be removed

ih) Any front and rear spoiler may be used that extends no more than one and one half (1.5) inches beyond the outline of the body when viewed from above. Front splitter/under tray may not extend rearward of the front of the front wheel well opening. Canards or other aerodynamic devices that attach to the body bumper are prohibited (except allowed by the rules herein).

ij) Cockpit and/or remote adjustable spoiler controls are prohibited.

ik) Ballast location is unrestricted.

lk) Dashboards may be replaced with another of unrestricted material but must remain in original location. The dashboard must be tasteful and cover any exposed wires and/or roll cage bars under the dash.

m) Crossmember may be modified for the sole purpose of engine fitment.

n#) Remote Reservoir shocks are allowed with a 75lbs weight penalty. Note: any shock with an external reservoir is considered "remote"

o) OEM tie rod ends may be replaced with a substitute.

p) Aftermarket control arms of exact OEM length and OEM location of pickup points may be utilized.

q) Impact bumper may be fabricated, replaced, or modified with a metal substitute to perform same function.

10. Allowed Modifications- H2 Only

10.1 Introductory Notes

a) Vehicles should be prepared to the standards in section 7 except where listed below. Rules in Section 10 are to be read as an addition to, or replacement of, the rules for car preparation listed in sections pertaining to section 7.

b) Rules listed within this section may be in contradiction with those listed in section 7 pertaining to Allowed Modifications (H1-H5). In these cases, the Allowed Modifications (H2 Only) in section 10 supercede those in section 7 pertaining to Allowed Modifications (H1-H5).

c) In section 10 of the rulebook, when the description of a race car's component is permitted to be "unrestricted" it allows any part, from any manufacturer (Honda or otherwise) may be used to construct said component(s).

d) **Restricted Preparation Vehicles (e.g. the Acura RSX) are NOT eligible to be prepared as "Limited Prep" Vehicles.** The intention is for Restricted Preparation Vehicles to compete against H2 Limited Prep vehicles. Restricted Preparation Vehicles must follow the preparation rules in section 7 Allowed Modifications (H1-H5) except where stated otherwise.

10.2 H2 Limited Preparation Vehicles Only

The following additional modifications are allowed:

- a) Any Honda/Acura USDM or JDM chassis may be used with a listed Limited Prep engine
- b) Any Honda/Acura master cylinder or brake booster may be used. Removal of booster is permitted. my be used
- c) Brake Calipers, Brake Rotors, and method of attachment are unrestricted
- d) Fasteners (e.g. bolts) anywhere in the engine
- e) Camshaft gears (including adjustable) are unrestricted
- f) Fuel Pumps, fuel Injectors, fuel rails are unrestricted
- g) Any OEM transmission from a particular series of engine may be used with the same series of engines. Example: Any B-series transmission may be used with any B-series engine. Only a H-series transmission may be used in with a H-series engine.
- h) Engine and transmission mounts, and associated components (shift linkages, axles, wiring, etc) required to perform an engine/drive train swap are allowed
- i) Engine management systems (Stand alone ECUs, piggyback computers, etc)
- j) Any metal wheel (subject to section 7.12)
- k) Battery type, size, voltage, ~~and~~ weight and location is unrestricted
- l) Remote Reservoir shocks are allowed with a 75lbs weight penalty. Note: Any shock with an external reservoir is considered "remote"
- m) Non OEM composite hoods are permitted
- n) Any Honda/Acura Knuckle/Hub/Control arm may be used on any Honda/Acura Chassis providing suspension pick up points are not changed on chassis or OEM parts. Example- Honda CRX may use Acura Integra knuckles.

For clarification purposes note that the following are NOT allowed on all Limited Preparation Vehicles:

- Unrestricted Cylinder Head Porting
- Unrestricted Camshaft(s) {except where stated otherwise}
- Unrestricted Intake Manifold Porting

10.3 H2 Limited Preparation Vehicle Engine Preparation

This section is intended to clarify the engine preparation rules specific to Limited Prep Vehicles:

- a) The entire engine assembly, (cylinder head and block) MUST be constructed entirely of Honda/Acura OEM parts. Cylinder head and internal engine parts must be OEM parts for that particular engine code. Updating and backdating of parts for that engine code is permitted. No aftermarket parts are permitted in, the "bottom end," of a Limited Prep Vehicle engine (except were specifically stated). Example(s): 1) A USDM D16A6 may not use pistons from a D16ZC engine and a head from a D16Y8. 2) A USDM B18C1 may not use ITR crank and pistons with ITR head and call it a B18C5. 3) A JDM B18C (GSR) may use ITR crank, pistons and ITR head and call it a JDM ITR engine since that is the proper engine code for both engines. The engine, from the top (deck surface) of the engine block "down" to the ground, MUST be constructed entirely of Honda/Acura OEM parts. No aftermarket parts are permitted in, the "bottom end," of a Limited Prep Vehicle engine (except were specifically stated).
- b) "Aftermarket OEM" replacement pistons and rings are allowed but must be identical in every manner to the OEM Honda/Acura part. Note: Piston size must not exceed OEM sizes.
- c) Cylinder head preparation must conform to rules in 7.1 (e), (f), and (g)
- d) Valve preparation (angle, cut, etc) is unrestricted, but ~~not~~ size must remain factory spec ~~and~~ material must remain OEM Honda.
- e) Valve Springs, valve locks ,valve retainers, and valve shims are unrestricted
- f) Any Honda throttle body may be used providing it utilizes an outlet size of 62mm or less. Over-boring of stock throttle body is permitted. Any throttle body may be used that is 62MM or less at its largest point
- g) Port matching is allowed but cannot be machined beyond one (1) inch into the intake manifold.
- h) Items (such as throttle bodies and intake manifolds) that attach to the cylinder head may be re-drilled for fitment purposes ONLY. Alteration of air, fuel, and/or coolant passages is not permitted. Fitment modifications that alter air flow as a side effect will be deemed illegal.

10.4 H2 Restricted Preparation Vehicle Preparation

a) Brake Calipers, Brake Rotors, and method of attachment are unrestricted

11. NASA Honda Challenge Series Championship

11.1 Eligibility

Please consult with your region for championship eligibility. Each region has a different number of events and may use a different system. You will be required to participate in a minimum number of races to qualify for an award.

11.2 Points Calculation

a) It is the intent of the NASA Honda Challenge Series Directors to have two qualifying points races per weekend. Because of scheduling and other uncontrollable events, this quantity is subject to change. Please check with your region as to the number of eligible races, which will count for season points. Unless otherwise notified, points will be awarded as listed in the NASA CCR.

11.3 Contingencies, Trophies and Other Prizes

- a) Contingency awards, trophies and prize information varies from weekend to weekend. The most current information is always available on the NASA Honda Challenge Series website, or by contacting the NASA Honda Challenge Series staff.
- b) The winning driver(s) must claim any contingencies, trophies, and other prizes within ninety (90) days after the race has completed. Unclaimed awards will be forfeited and may become property of the NASA Honda Challenge Series.

12. On Course Conduct

The philosophy behind the NASA Honda Challenge Series is a simple one. It is intended to be a Motorsports showcase for Honda products in a clean, sportsmanlike environment. The belief is that a skilled, clean, well-executed pass is preferable to "punting" one's competition off the racetrack or "leaning" against them to gain position. It is felt that a sportsmanlike environment, where skill is more highly valued than aggression, fosters sportsmanship and friendship. It also helps the participants maintain a reasonable budget.

This being said, participants in the NASA Honda Challenge Series need to be aware that accidents happen in automobile racing. Racing is, by nature, a dangerous sport. It should be noted that any driver displaying rough, negligent, or unsportsmanlike conduct will receive harsh penalties, which may include loss of points, suspension and/or fines. Additionally, an Incident Review Board (IRB) may be assembled to investigate any on-track incident. Please consult the NASA CCR for specifics with regard to incidents and penalties.

13. Appendices

Appendix A: Contacting the National Auto Sport Association

The National Auto Sport Association can be contacted via their Internet web site at <http://www.nasaproring.com>. Those who do not have Internet access may contact NASA as follows:

NASA National Office
P.O. Box 21555
Richmond, CA 94820

Phone: 510-232-NASA (6272)
FAX: 510-412-0549

Appendix B

Specified Measurement

Whenever the manufacturer specifications or these rules do not specify a measurement, the common average measurement will be used. This common average measurement must be determined by either;

- 1) Calculating a mean average of at least three measurements from the corresponding parts found on other vehicles, or
- 2) The series technical administrator will make a determination based on any other reasonable method, providing that the data, system, or logic that was used be made known to the public. The second option is only permitted under circumstances where option number one becomes impractical, as determined by the NASA Honda Challenge Series Race Director.

Tolerances

All published measurements infer a tolerance of +/- one-half ($1/2$) of the last specified decimal place. All rounding will be done to the nearest decimal place that is specified by the manufacture or these rules. In a case where a measurement falls exactly on the halfway mark, it must be rounded up or down in favor of the competitor. This section does not apply whenever the manufacturer specifications, or these rules, specify a tolerance.