

# Honda Cup Rules

01/12/2006

Honda Cup is a class within the California Sports Car Club and as such all its rules are created by the Honda Cup rules committee and governed and approved by the Competition Committee of the California Sports Car Club and subsequently approved by the Board of Governors. In addition these rules and all those racing under them are subject to all of the applicable provisions of the Sports Car Club of America (SCCA) and its General Competition Rules (GCR). In addition to following these rules all competitors are reminded to insure they know and follow all of the supplemental regulations created by the California Sports Car Club (posted on the California Sports Car Club web site) and all the rules within the GCR. Any modification to these rules will be made by the Honda Cup rules committee and must be approved by the Competition Committee.

## A. Purpose

The Honda Cup is designed to provide an exciting, highly competitive, Honda-specific racing venue. Technical innovation is strongly encouraged while close racing will be ensured by a minimum of easily met and enforced restrictions. The speed and technology level of the Honda Cup have been structured such that those competitors seeking to move upward to professional production car racing may do so with a minimum of transitional issues.

## B. Intent

The intent of the Honda Cup rules is to create an "open class" of Honda-specific racing that reflects the current state of the Honda enthusiast aftermarket. This includes engine transplants ("swaps"), highly modified drive trains and significant chassis changes. Allowed modifications are intended to meet the dual purposes of increasing both performance and durability while keeping costs to a reasonable level for the speed of the vehicles. If the rules do not permit a modification then the competitor must clarify the modification with the Honda Cup rules committee before making the modification to their vehicle. By combining these goals, it is hoped that the series will attract a new breed of enthusiasts and racers to SCCA road racing.

## C. Car Classification

Any Honda or Acura automobile of model year 1988 and later is eligible, including models sold outside the United States. No forced induction or nitrous is allowed.

Vehicles not currently classified must submit a request to the Honda Cup rules committee before competing.

## D. Safety Requirements

- a) All safety equipment shall comply with GCR section 17
- b) Roll cages shall comply with GCR section 18.3 ('Touring Roll Cage') as a minimum, except for the following provisions: Any number of extra mounting or attachment points may be used, and any number of extra bars may be used, even for chassis stiffening. There is no restriction on the size of mounting plates.

- c) Steering wheel locks must be disabled or removed.
- d) Air bags must be disabled or removed.
- e) Towing eyes as per GCR 17 shall be fitted.
- f) Glass sunroofs must be replaced with either a metal or composite substitute.
- g) Driver and passenger door glass must either be removed or covered with a protective panel.
- h) Driver door side impact beams may be removed only if NASCAR style door bars are fitted.
- i) The use of a fuel cell is required, unless the stock fuel tank is located between the axle centerlines, and within the main chassis structure (i.e. frame rails, etc.).
- j) There must be a metal bulkhead completely separating the cockpit from the compartment containing the fuel tank or fuel cell. This does not negate the requirement that the fuel cell bladder be contained in a metal container.
- k) The fuel filler cap and filler neck shall be isolated from the driver cockpit with steel and/or aluminum so that in the case of spillage, leakage, or failure, fuel will not reach the driver. Breathers must vent outside the car.
- l) If the OEM fuel tank is used then two steel straps (25 mm wide) must be added to support the tank.
- m) Fire suppression systems as per GCR 17.22.1 shall be used.

## **E. Authorized modifications**

### **1. Engine**

- a) Engine block must be a Honda casting.
- b) Cylinder sleeves unrestricted, including 'blockguard' type inserts.
- c) Piston & wrist pin unrestricted.
- d) Connecting rod unrestricted, but must not be made from titanium.
- e) Piston ring number, type and location unrestricted.
- f) Compression ratio unrestricted.
- g) Oil pan unrestricted, but dry sumps are not allowed.
- h) Crankcase ventilation unrestricted subject to CGR catch can requirements. Vacuum pumps prohibited.
- i) The intake manifold may be substituted with a part from another Honda engine. The intake manifold may be modified for fitments purposes only. Port matching extending no more than 1 inch from the cylinder head and throttle body mounting faces is allowed. Intake manifold gaskets are open, including the use of replacement insulating gaskets, limited to a maximum thickness of 6.5 mm.
- j) The maximum bore size is listed in section F (engine classification).
- k) The maximum throttle body interior diameter is 62 mm, measured by determining that a rectangular metal template of size 62mm x 1mm may not enter the throttle body throat from the flange size of the throttle body.
- l) The oil pump may be replaced, but must remain in the stock location. Oil pan baffles, lines, hoses and filters are unrestricted. Dry sump systems are prohibited. A pressure accumulator ("Accusump") may be fitted.
- m) Crank and accessory pulleys unrestricted.

- n) B-Series engines may use any after-market intake manifold, provided that the manifold uses a single OEM Honda throttle body subject to the 62mm maximum interior diameter in 1.k

## **2. Cylinder Head**

- a) Head must be a Honda casting.
- b) Spring, valve guides, retainers, rocker arms and valve guides unrestricted.
- c) B-Series & H-Series engine cylinder head porting unrestricted.
- d) Non B-Series & H-Series engine cylinder head porting limited to the bowl area only.
- e) Port matching extending no more than 1 inch from the intake and exhaust manifold mounting faces is allowed.
- f) Valves unrestricted, but must retain the OEM valve head size, and must not be made from titanium,
- g) Camshafts are unrestricted.
- h) Adjustable camshaft sprockets are allowed.
- i) The use of titanium is prohibited anywhere in the cylinder head, except for valve spring retainers.

## **3. Electronics**

- a) ECUs unrestricted, including the use of additional controllers and/or 'piggybacks'.
- b) Ignition system unrestricted.
- c) Fuel pump(s), instruments unrestricted.

## **4. Cooling System**

- a) Radiator unrestricted.
- b) Engine oil, transmission and differential coolers may be added or substituted. Location is unrestricted, provided they are not mounted in the driver/passenger compartment.
- c) Cooling fans may be removed or replaced.
- d) Air conditioning and heater may be removed.
- e) Hoses and clamps may be substituted.
- f) The water pump may be substituted or replaced, but the location and operating principle must remain the same as OEM.

## **5. Transmission and Final Drive**

- a) Transmission ratios may be altered by substituting OEM Honda parts.
- b) Transmission casing must remain stock.
- c) Clutch and flywheel unrestricted.
- d) Shift linkage and shift lever unrestricted.
- e) Any final drive ratio may be used provided it fits inside the stock differential housing.
- f) Any LSD is permitted.

## **6. Suspension**

- a) Stock suspension mounting points must be used apart from steering rack mounts, which may be altered for the correction of bump steer. Any Honda steering rack may be utilized.

- b) Cars with McPherson strut suspension may use eccentric bushings and/or slotted plates for adjusting camber and castor.
- c) Springs and shocks are unrestricted, including remote reservoir shocks.
- d) Aftermarket hubs allowed.
- e) The steering tie rod outer ball joint may be altered or substituted for bump steer adjustment.
- f) Adjustable links, bushings, rod ends and spherical bearings are allowed.
- g) Sway bars are open, but may not be cockpit adjustable.

## **7. Brakes**

- a) Master cylinders, brake rotors, calipers, pads, shoes, brake lines, proportioning valves and fluid are unrestricted.
- b) Maximum one caliper per wheel.
- c) Water-cooled calipers may not be used.
- d) ABS may be used.
- e) OEM traction control and vehicle stability assistance may be used if originally fitted to the vehicle.

## **8. Wheels and Tires**

- a) Specification tires are the Toyo RA-1 and Hankook Ventus Z211 (C30 & C70 compounds). The maximum advertised tire width is 245 mm, except when allowed by 8.e
- b) Any wheel may be used.
- c) Any wheel stud, bolt and nut may be used.
- d) Wheel spacers may be used.
- e) S2000 vehicles are subject to a maximum advertised tire width of 255 mm front and rear. Alternatively, S2000 vehicles may use tires with a maximum advertised tire width of 245 mm front and 275 mm rear with an additional 100 lbs weight penalty.

## **9. Body/Structure**

- a) No part of the car, except for the exhaust system and suspension components, shall be lower than the lowest part of the wheel rims.
- b) Fenders and wheel openings may be rolled or flattened for tire clearance, but not cut. Fender liners may be removed. Fender flares are prohibited. The top of the tire must fit within the fender when viewed from above.
- c) Front spoilers / splitters, side skirts and moldings, replacement bumpers, aerodynamic under trays, dive plates or canards, rear wings and rear diffusers of any material may be used, subject to GCR 17.14 ('Aerodynamic Skirts') No device shall not protrude beyond the overall outline of the body when viewed from above perpendicular to the ground by more than 3 inches to the front, 3 inches to the rear, and 1 inch to either side.
- d) Aerodynamic devices must be fixed while the car is in motion.
- e) Hoods, fenders, bumper covers, mirrors, hard tops and trunks may be replaced with any substitute including composite materials.
- f) Passenger and rear window glass may be replaced with lexan. The front windshield must be glass.
- g) Convertibles must use a hard top.

- h) Air ducting for cooling or other purposes may be added, altered or removed.
- i) Headlights may be removed, replaced and/or blanked off.
- j) The battery may be substituted and/or relocated subject to GCR 17.11 ('Batteries')
- k) Engine mounts are unrestricted.

**10. Other**

- a) Fuel is subject to CGR 17.4 ('Fuel')
- b) A strip at the top of the front windshield 6" high and the full width of the windshield shall be left free for the display of sponsorship decals.
- c) On each side of the vehicle body an area 18" x 4" shall be left free for the display of sponsorship decals.

**F. Engine Classification**

- a) An engine will be classified according to engine type, bore and stroke as per the table below.
- b) An engine may be classed in a larger size for the same engine type if the bore or stroke is more than the maximum allowed. e.g. A B18 with a 84 mm bore will be classified as B-Series 2.0

Engine	Maximum Bore	Maximum Stroke
D-Series 1.6	76 mm	90 mm
B-Series 1.6	82 mm	77.4 mm
B-Series 1.8	82 mm	89 mm
B-Series 2.0	85 mm	89 mm
K-Series 2.0	87 mm	86 mm
K-Series 2.4	88 mm	99 mm
H-Series	88 mm	90.7 mm
F20C	88 mm	84 mm
F22C	88 mm	90.7 mm

**G. Minimum Weights**

Vehicle weights will be measured at the end of a session including driver. The minimum weight for a vehicle shall be listed on the bottom of the windshield in 1 inch high numbers/letters.

- D-Series 1.6 liters 2050 lbs
- B-Series 1.6 liters 2150 lbs
- B-Series 1.8 liters 2250 lbs
- B-Series 2.0 liters 2350 lbs
- K-Series 2.0 liters 2350 lbs
- K-Series 2.4 liters 2550 lbs
- H-Series 2350 lbs
- F20C 2.0 liters 2550 lbs
- F22C 2.2 liters 2650 lbs

## H. Championship

Championship points are as follows:

Place	Points
1	20
2	16
3	14
4	12
5	11
6	10
7	9
8	8
9	7
10	6
11	5
12	4
13	3
14	2
15	1

1 additional point will be awarded for setting the fastest qualifying time and 1 additional point will be awarded for setting the fastest lap time during the race.