

# **TECHNICAL REGULATIONS**

HONDA CUP | MODERN TURBO SERIES



# TECHNICAL REGULATIONS 2025-26 Summer Series

The following Technical Regulations are set out in accordance with the Honda Cup Modern Turbo race series, and it should be clearly understood that if the following regulations do not clearly specify that you can do it, you should work on the principle that you cannot. If no class is specified, then the regulation shall apply to all competing vehicles.

The MT class rules are in their infancy and are subject to change by evolution to accommodate any suitable Honda chassis.

#### 1. General Information

- 1.1 This Schedule shall be read in its entirety and shall take precedence over Appendix 2 Schedule A of the 'National sporting Code' excepting where an item is not specifically covered within Schedule Honda Cup, in which case Appendix 2 Schedule A will apply.
- **1.2** Only vehicles approved by the Honda Cup Register as compliant with the technical regulations detailed herein are eligible to compete in the series.
- 1.3 All technical eligibility and/or safety equipment enquiries must be submitted in writing to the Series Scrutineer or Technical Officer. Enquiries must reference the relevant article and clearly specify the subject matter. A written reply will be provided in response to all written enquiries. Verbal statements have no validity in matters of technical eligibility or safety compliance.
- 1.4 If a competitor is found—whether knowingly or unknowingly—to be in breach of these regulations, they may be excluded from earning points until the vehicle is brought into compliance. This decision is at the discretion of the Series Coordinator or Technical Officer.
- 1.5 It is the sole responsibility of the competitor to prove the eligibility of any components used on their vehicle.

### 2. Definitions

Definition of terms used within this Schedule shall be referenced from the National Sporting Code, Appendix 2 Schedule A and as detailed below:

**'Long block'** means the engine cylinder head, including valve train and engine block assembly including crankshaft, conrods and pistons together as one component. Does not include and not limited to cams, sump or manifolds.

'Non-standard' means those components which are not 'standard' fitment.

**'OEM'** refers to original equipment manufactured by Honda Motor Co., or an OEM-style replacement part that matches the original specifications and design.

**'Original'** means the manufacturer specification, as supplied when new and without modification in accordance with the reference Honda motor co. parts manual.

**'Race trim'** means the condition in which the car competes, and shall include all fluids, ballast, driver and their safety apparel.

**'Race weight'** means the minimum weight of the competing car in Race trim, including driver. It may be measured at any time during the qualifying sessions and/or races, on the official scales of the meeting.

**'Space-frame'** means a tubular structure with a lightweight body where the stresses are absorbed by the tubular chassis and none by the body.



**'Standard'** means the component/s as originally optioned or fitted to the make, model and type of car by the original manufacturer at the time of the initial sale.

**'Stock Unibody'** means the vehicle manufacturer's assembly or structure to which all suspension subframes and mechanical components attach.

**'Undertray"** means a device fitted under the vehicle that can play a role in the vehicle's aerodynamics.

# 3. Eligible vehicles

**3.1** Modern Turbo eligible chassis are FK2, FK8 and FL5. Vehicles must run a factory K20C1 engine.

No other engine/chassis configurations permitted unless prior approval is obtained in writing from the series technical officer.

## 4. Race weights - Controls and penalties

Honda Cup Modern Turbo minimum race weights, including all fluids, driver and safety apparel at any point in time during any official competition are as follows:

Engine	Minimum weight (kg)	
2000cc K20C1	1325	

- **4.1** Minimum race weights will be the weight as the car is being raced, including driver and can be checked at any time before, during and immediately following competition by the Series Tech Officer or their assistant on the series official scales of the day.
- 4.2 Minimum race weights are based on actual engine capacity and tyre type as declared on the official Honda Cup entry form. If a competitor's engine capacity and/or tyre type changes during the race season it is the sole responsibility of the competitor to advise the series Tech Officer at least seven days prior to the commencement of the round.
- 4.3 Minimum race weights must be maintained at all times during competition, including official qualifying and racing. The minimum race weight is defined as the combined weight of the driver and race car, measured either before or after the race. Competitors whose vehicles fall below this weight will be penalised. Weigh-ins are conducted at the discretion of the Tech Officer and their assistants. Refusal to be weighed when requested will result in immediate exclusion from the meeting and forfeiture of any points earned. A competitor who cannot comply with the Honda Cup minimum race weight regulations throughout the event may be excluded from the results and from further participation.
  - (1) If a competitor is up to 5 kg under the minimum race weight, they will receive an official warning and be required to correct the weight. Rechecks may be conducted at the Tech Officer's discretion. A second breach at the same event will result in a 15-second time penalty added to the handicap delayed start time for the next race competed in, which may carry over to the next event. Further breaches may result in an additional 15-second penalty or exclusion from collecting points, at the discretion of the Series Coordinator or Tech Officer (see article 1.4).
  - (2) If a competitor is more than 5.1 kg and up to 10 kg under the minimum race weight, a 15-second time penalty will be added to the handicap delayed start time for the next race competed in, which may carry over to the next event. Further breaches may result in an additional 15-second penalty or exclusion from collecting points, at the discretion of the Series Coordinator or Tech Officer (see article 1.4).
  - (3) If a competitor is more than 10.1 kg under the minimum race weight, they may be excluded from collecting points, at the discretion of the Series Coordinator or Tech Officer (see article 1.4).

## 5. Safety requirements

The following safety equipment shall be fitted to the competing vehicle

- **5.1** A roll cage installed in full compliance with Schedule A requirements.
- **5.2** A safety harness and a fire extinguisher shall be installed, in compliance with Schedule A.
- **5.3** All drivers must wear approved fire-resistant protective clothing in full compliance with Schedule A at all times during competition.



- **5.4** Any driver wishing to race with the driver's side window down shall have a window net fitted and in place in full compliance with Schedule A.
- **5.5** No tow hooks or other sharp objects shall protrude further forward or backwards more than the bumper.
- **5.6** Safety equipment as may be required by round organizer.
- 5.7 Onboard Cameras: It is mandatory for all competitors to carry a fully functional onboard incar camera with a wide-angle lens that records to an SD card at a minimum resolution of 720P. Footage from the cameras may be used where there is an incident which is subsequently brought before the Clerk of the Course for investigation. The decision to review any such video footage is at the discretion of the Clerk of the Course, the Stewards of the Meeting or the Driving Standards Officer. It is the competitor's sole responsibility to ensure safe installation and effective operation of the camera equipment. At all times cameras must be fitted in accordance with Schedule A regulations and be approved by the Chief Scrutineer. Cameras must be mounted in a central to left position with the steering wheel and front windscreen in clear view. A limited number of loan devices are available to those who may require one, on a first come, first serve basis.

## 6. Body shell, vehicle exterior and sub-frames.

- **6.1** Bodywork shall be standard. Front doors and boot lid shall remain OEM with steel outer skin but can be modified, composite doors are not permitted. Any aftermarket panel must be approved prior to fitting. Approval can be obtained from the Tech Officer. Approval must be made and will be given in writing.
- **6.2** The side profile must remain standard. Rear bumpers are to remain complete, no removing of lower half or "aero" holes permitted. Roof chopping and /or body channelling is not permitted.
- **6.3** Rear spoiler or wing must be an OEM component fitted in its original position.
- **6.4** No front splitters or aftermarket under trays permitted
- **6.5** Arch rolling is permitted but guards must be OEM in position, shape and size. Measurement is to be taken from a standard guard attached in the standard position. Bolt on or weld on flares are not permitted. Any rolling shall be blended to the original OEM shape.
- **6.6** Side skirt panels may be fitted but must remain compliant with MSNZ Schedule A regarding ground clearance and safety at all times.
- **6.7** Åll non-standard parts should be able to be easily removed from the front and rear of the vehicle, must have the same dimensions as standard and a similar visual appearance.
- **6.8** Engine must be in identical position to standard.
- **6.9** Ducting for the purpose of the flow of cooling air for brakes is permitted only provided that such ducting does not alter the profile of the vehicle. Ducting of air into, through and away from the radiator through non-standard opening/holes in the bumper or bonnet is not permitted.
- **6.10** Front and rear windscreens must be OEM. Front windscreen must remain as laminated safety glass. Side windows may be OEM or approved plastic. Plastic glazing fitted to both front doors must have a hole to grip through to allow for easy removal in case of an emergency.

## 7. Vehicle interior

- **7.1** A driver's seat shall be installed offset from the centre line of the vehicle.
- **7.2** 7.2 The vehicle shall retain the standard dash pad. Alternative front inner door panels may be fitted.
- **7.3** There must be provision for a passenger seat and seat belts to be fitted.
- **7.4** The vehicle shall retain all factory body bracing. No metal to be removed from shell interior.

## 8. Chassis

- 8.1 Vehicles must use an approved stock uni-body chassis, which may not be modified other than a roll cage complying with Schedule A. This assembly/structure must consist of at least the following sheet steel pressings welded together in their standard position, door pillars, sills, front and rear inner guards, nose cone, front bulkhead, chassis rails, radiator support and floor pan.
- 8.2 Inner steel Guards must remain standard.
- **8.3** Chassis rails and floor pan must remain standard in standard position. No modifications to floor pan permitted.
- 8.4 The firewall must remain standard in the standard position however filling of holes is permitted.



8.5 The floor pan and exhaust tunnel must remain completely unmodified.

# 9. Engine Specifications

**9.1** Engine designation and capacity requirements:

Engine block	Bore max.	Stroke max.	Cylinder head	Maximum capacity (cc)	Pistons	Rods	Turbo
K20C1	86.0	85.9	RPY	1996	RPY, 66V	RPY, 6B2	

- 9.2 Engine block and cylinder head must be Honda OEM casting.
- 9.3 Overbore allowance for class capacity calculations: Engines shall be allowed a maximum overbore allowance of 0.5 mm from their standard bore diameter. This is to allow serviceability of the engines so they remain in their class up to that maximum allowance. Refer to 9.1.
- **9.4** Engine block must use Honda OEM crankshaft, rods and pistons of that engine origin without any modification.
- **9.5** Camshafts, valves, valve springs and retainers must be of Honda OEM engine type origin without any modification.
- **9.6** Cam gears and variable cam timing controls must remain OEM and operational.
- 9.7 Intake manifold must be of Honda OEM engine origin that fit without any modification.
- **9.8** Port matching between intake and head is permitted a maximum of 15 mm each way into the manifold port and cylinder head.
- 9.9 Intake pipe and air filter is free pre turbo.
- **9.10** Throttle body must be Honda OEM that fits without any modification.
- 9.11 Head gasket is free.
- **9.12** The engine placement shall remain as per standard location forward of the vehicle's wheelbase centre line. Engine mounts may be upgraded to hard rubber type mounts or commercially available billet housing with urethane bonded style bush, no solid mounting.
- **9.13** Lubrication system must remain OEM with only a modified breather and catch tank permitted.
- **9.14** Water cooling system must retain operational OEM water pump. OEM or aftermarket replacement radiators are permitted in the standard position.
- 9.15 The exhaust system is free post-catalytic converter but must follow the standard routing.
- **9.16** The downpipe must be a Torque Performance Developments N2 catted 100-thou downpipe.
- 9.17 The ECU must be OEM, tuned and locked by Torque Performance Developments.
- 9.18 The turbocharger must be an unmodified OEM unit.
- **9.19** The intercooler is free but must be a direct bolt-in replacement.
- **9.20** Boost control must be managed and locked via the ECU. No aftermarket controllers or bleed valves are permitted.
- 9.15 All engines must have the provision to be sealed by means of a numbered wire tag securing the rocker cover to the cylinder head as per corresponding picture in Appendix #1 before any official event begins. Tags may only be removed under the supervision or authorisation of a Honda Cup series official or their nominated counterpart, which must be gained in writing prior their removal. Non-authorised removal of sealing tags will result in forfeiture of any points accumulated during the period of which the applicable tag was fitted.

## 10. Fuel systems

- **10.1** The only fuel used at any round of the series is unleaded 95, 98 or 100 octane (RON) petrol as commercially available from retail service station forecourt pumps throughout New Zealand and comply with the Fuel Specification Chart detailed in Schedule A Part 2 of the current Motorsport New Zealand Manual. Blended fuels are not permitted.
- **10.2** All Competitors upon entering the Series agree to fuel samples being taken for compliance purposes.
- **10.3** The standard under floor fuel tank must be retained and used. Upgraded under floor fuel delivery lines and pump may be fitted.

#### 11. Transmissions

- **11.1** The transmission must comprise a working clutch and gearbox assembly, having a minimum of five forward and one reverse gear. The placement shall remain, as per standard manufacturer, forward of the vehicle's wheelbase centre line.
- **11.2** Transmission casing must remain OEM standard.
- 11.3 Gear ratios must remain OEM standard
- **11.4** Sequential shifting gearboxes are not permitted.



- 11.5 Differential must remain OEM standard
- **11.6** Gear shift mechanism must be OEM. Upgraded bushes/cables are permitted. Quick shift levers are permitted.

# 12. Electrical systems

- **12.1** Unmodified headlights must remain in place and must not be vented or covered with non-transparent materials or wrap. Taillights must also remain in place.
- **12.2** One high level rain light must be installed in compliance with Schedule A and used when directed by the Clerk of course.
- **12.3** Headlights or other forward facing lights can only be used at times of darkness or when lapping another vehicle. No flashing forward facing lights are permitted.
- 12.4 No rear facing flashing lights shall be used in dry conditions.
- 12.5 Brake lights must be operational.
- 12.6 Fuse box or boxes may be relocated.
- 12.7 Ignition system must remain standard. Ignition leads may be upgraded.
- **12.8** All competitors must use, at a minimum, a one-way race radio receiver (either hired or personally owned) for official race communication. Two-way radio communication systems are permitted that are compatible with race radio.
- **12.9** All competitors must run a transponder (hired or owned). If no transponder is run or transponder failure occurs then that competitor will not be eligible for fastest lap points for that race/qualifying and be required to rectify the issue before the next race. The series officials have the right to assess a suitable lap time for a competitor that has not recorded a time for use when calculating the grid for race 3 (Handicap reverse grid).

### 13. Suspension

- **13.1** The vehicle's overall wheelbase must remain standard. Front and rear track width, measured at the hub face, must also remain standard. However, wheel spacers up to a maximum of 10 mm per side are permitted, provided that the resulting wheel offset does not fall below the minimum offset as specified in Section **16.1**.
- **13.2** Only standard suspension pickup points must be used, and these shall not be altered, modified or added too.
- **13.3** Standard suspension type must be used (i.e. torsion bar must remain torsion bar and coil over must remain coil over).
- **13.4** Front uprights and rear link suspension remain standard. Spindle height cannot be modified
- **13.5** Unmodified OEM front lower arms must be used. Lower ball joint camber adjusters are permitted.
- **13.6** Rear suspension lower arms, camber arms and toe links may retain unmodified components or may be replaced with direct fit un-modified aftermarket components.
- 13.7 OEM style rubber or urethane bushes and ball joints must be used.
- 13.8 Aftermarket tension or compression struts (traction bars) are not permitted.
- 13.9 Shock absorbers must OEM.
- **13.10** Lowering springs are permitted.
- **13.11** Sway bars may be an unaltered OEM part from a compatible model using OEM pickup points and OEM style end links. Upgraded hard rubber or urethane bushes are permitted.

### 14. Brake systems

- **14.1** Braking system must remain OEM including brake booster, master cylinder, and calipers. Brake booster can be non-operational.
- 14.2 Brakes disks are open but must remain OEM size.
- **14.3** Front and rear brake pads are free.
- **14.4** OEM bias valve may be removed and one aftermarket rear pressure limiting valve may be fitted.
- **14.5** A maximum of one calliper per wheel.
- **14.6** No liquid cooling or fluid recirculation is permitted.
- **14.7** Master cylinder braces are permitted.
- 14.8 All cars must run one dual-circuit master cylinder.

### 15. Steering

- **15.1** OEM steering system must be retained but the steering wheel and boss may be aftermarket provided compliance with Schedule A is maintained.
- **15.2** A standard OEM steering rack must be used but power steering racks may be converted to non-power steering.



## 16. Wheels and tyres

16.1 Maximum wheel and tyre size

Wheel diameter max. (inch)	Wheel width max. (inch)	Wheel offset min. (mm)	Tyre size
18	9	+35	265/35R18

- **16.2** Only approved Nankang CR-S tyres, in sizes and compounds as approved by Honda Cup and listed above in **16.1**, may be used in any Honda Cup official practice, qualifying, race, or display. One set of last season AR-1's may be used under dispensation.
- **16.3** A maximum of eight tyres can be used over a season. Tyres will be marked and recorded by the Technical Team before qualifying.
- **16.4** Wet tyres are free, but dimension must not exceed the registered dry race tyre sizing.
- **16.5** Competitors will introduce four tyres at their first round of the season and then may introduce a maximum of two tyres per subsequent round until their full allocation of 8 x tyres is reached.
- **16.6** If a competitor changes class mid-season, they are not eligible for four new tyres and must continue in accordance with **16.5** for the season.
- **16.7** Tyres from previous rounds of the same season that have been marked and that have legible markings may also be used in subsequent rounds. (If markings have rubbed off or are illegible this must be brought to the attention of the tech officer for remedying).
- **16.8** Used tyres can be introduced instead of new tyres e.g. tyres from last season may be marked at a round if a competitor does not wish to introduce new unused tyres. These will contribute to the maximum tyre allocation.
- **16.9** It is the driver's responsibility to ensure all tyres are marked and legible for the duration of competition.
- **16.10** If a competitor has a tyre flat spot, puncture or the tyre is damaged, it can be replaced after consulting with the Tech Officer. If the Tech officer considers the replacement tyre is likely to give a performance advantage, he will mark the replacement tyre and may give the competitor a grid position penalty.
- **16.11** If a race or meeting is declared wet and cars have to run on wets, a driver can bank their allocation of slicks for the next meeting however they must be mounted on wheel rims and marked at the declared meeting.
- 16.12 The use of an unmarked or unapproved tyre without the approval of a series official during any potential points-awarding competition will result in a 15-second time penalty added to the handicap delayed start time for the next race competed in, which may be carried over to the next event. Any subsequent breaches at the same event will result in a further 15-second time penalty added to the handicap delayed start time or may result in the competitor being omitted from collecting points at the discretion of the Series Coordinator or Tech Officer as per article 1.4.

## Appendix #1

## **Engine sealing location**





