

Hornsby Slot Cars - Group 'C' Hardbody Rules

CONCEPT

A class for 1/24th scale reproductions of cars that raced in the Group 'C' series in the period 1982 to 1994.

1. BODY

1.1. The body must be assembled from a currently commercially available 1/24th scale plastic model kit of a Group 'C' car that raced in international competition in the period 1982 to 1994 inclusive. Only hard plastic body kits intended for static display are permitted and entrants may be required to provide evidence supporting the availability and eligibility of their chosen kit.

1.2. The body shell shall be deemed to comprise that part of the body kit forming the external panel work of the main body of the car, although that shell may be comprised of multiple parts.

1.3. The following kit components must be fitted to the car in an unmodified state (except for modifications permitted under section 1.11). – body shell, any other external body panels including vents and ducting, front and/or rear wing assemblies (see 1.7.), windscreen, side windows, headlight covers, headlight and taillight mount panels and/or assemblies, mirrors (see 1.7.).

1.4. The following kit components must be fitted to the car, however they may be modified or replaced with aftermarket detail parts or hand made parts as long as a suitably detailed external appearance is maintained – air intake grilles, radiators, fluid filler caps, exhaust pipes, light lenses (also see 10. Lights), tow hooks, et al. Entrants are encouraged to duplicate the external appearance of the original 1:1 car as closely as possible.

1.5. The under body tray in front of the front wheel arch and behind the rear wheel arch must be fitted to the car. This includes any splitters or diffusers and any externally visible under body kit components in these areas, particularly the rear of the car. The front under tray may be modified for guide flag clearance.

1.6. "Externally Visible" – for the purpose of scrutineering, components will be designated as externally visible if they can be seen with the car sitting on an opaque tech block. Components visible only through wheel arches will not be designated as externally visible.

1.7. Mirror and wing mounts may be replaced with flexible materials as long as they duplicate the original mount design and position. Minor modifications to facilitate fitting flexible mounts are permitted.

1.8. The body must be painted and detailed to resemble a car that raced, or could have raced, in the class and period specified. Fantasy liveries are permitted provided logos and sponsors were available in the specified period.

1.9. Body kits with rear wheel covers may have the wheel covers removed if the real car raced without them in the class and period specified. It is the entrant's responsibility to provide evidence of such an occurrence.

1.10. No part of the chassis may be visible when the body is viewed from above. Body openings that allow the chassis to be seen from above must be covered from the inside with suitably detailed material.

1.11. Modifications to the body shell and/or panels necessary to fit the body to the chassis are permitted. Minor modifications to fit aftermarket detail parts are permitted. Modifications judged to be for the purpose of reducing weight, or failure to fit required components, will incur a weight penalty or in extreme cases, exclusion from the event.

1.12. Weight penalties will consist of between 5 and 10 grams of ballast attached to the underside of the body at the highest point in front of the windscreen. The scrutineer will be the sole judge of the amount of penalty ballast to be applied and such ballast must remain in place for the entire event.

2. INTERIOR

- 2.1. The body must be fitted with a detailed driver's compartment covering the interior of the car side to side and front to rear.
- 2.2. As a minimum the interior must contain a driver figure with arms and head, a steering wheel, gearshift and fire extinguisher.
- 2.3. The interior and driver must be painted in realistic fashion and the driver must appear to be wearing a safety harness.
- 2.4. The interior may be made from any material with the exception of the driver's head which must be made from resin or other hard plastic.

3. WEIGHTS

- 3.1. Minimum total car weight – 175 grams
- 3.2. Minimum body weight (including mounts) – 60 grams
- 3.3. Ballast may be added to the top of the chassis but it may not extend beyond the footprint of the chassis and body mounts. Ballast may be attached by tape, glue or bolted to existing chassis holes.

4. MEASUREMENTS

- 4.1. Maximum front spur – 83 millimetres but not wider than the body measured across the front wheel arches.
- 4.2. Maximum rear spur – 83 millimetres but not wider than the body measured across the rear wheel arches.
- 4.3. Minimum starting ground clearance – 1.00 millimetres
- 4.4. Minimum racing ground clearance – 0.40 millimetres
- 4.5. The guide and braids are the only components exempt from the track clearance rule.

5. MOTOR & LEAD WIRE

- 5.1. Only the Plafit FOX2 motor may be used.
- 5.2. All Plafit motor markings must be clearly visible. It is suggested that entrants place a piece of clear tape over the motor markings to preserve them.
- 5.3. Any lead wire may be used and any device to control lead wire movement and routing may be used as long as it doesn't add to, or detract from the normal operation of the chassis or extend beyond the chassis footprint.

6. GEARS

- 6.1. Any M50 pitch pinion may be used.
- 6.2. Any M50 pitch spur gear may be used.

7. CHASSIS

- 7.1. Any PLAFIT 1700 series chassis may be used with the exception of the SLP-2.
- 7.2. The chassis must be assembled according to the manufacturers intended design using nuts and bolts.
- 7.3. Only parts manufactured by Plafit for the 1700 series chassis may be used except as may be specifically allowed in this rule set. Parts unique to the SLP-2 chassis may not be used.
- 7.4. No modifications may be made to any chassis parts with the following exceptions – components may be lightly sanded as part of the blueprinting process; existing screw holes may be enlarged to accommodate larger head screws.
- 7.5. Any guide, nut, braids and guide clips may be used. Only one guide may be used with a maximum blade length of 27millimetres and the entire guide must be located behind the inside front edge of the body shell.
- 7.6. Magnets may only be present in the motor and may not be used on any part of the chassis.
- 7.7. Any nuts, bolts and washers may be used.
- 7.8. Carbon fibre parts may be used but are restricted to the subframe, T-Plate, guide tongue and alignment plate. Only carbon fibre parts manufactured by Plafit, or aftermarket parts functionally equivalent to the Plafit carbon fibre or aluminium parts are permitted.



- An example of permitted carbon fibre parts supplied by ACE Hobbies.

8. AXLES & BEARINGS

- 8.1. Only solid steel 3mm diameter axles may be used. Independent front axles are permitted.
- 8.2. Any 6mm diameter sintered bronze or ball bearing may be used.

9. WHEELS

- 9.1. Any rear wheel with a minimum outside diameter of 21mm may be used.
- 9.2. Any black sponge rear tyre with a minimum diameter of 26.5mm and a maximum width of 16mm.
- 9.3. Any front wheel with a minimum width of 7mm may be used. Front wheel diameter must be chosen to match the scale diameter of the 1:1 car.
- 9.4. Any black sponge front tyre with a minimum diameter of 23mm and a minimum width of 7mm.
- 9.5. All 4 wheels must be centred in their wheel arches and covered by the body so that they cannot be seen when looking down on the body from above.
- ~~9.6. All 4 wheels must be fitted with 3 dimensional wheel inserts approximating the appearance of the 1:1 car.~~
- 9.7. All 4 wheels must touch the track when the car is at rest and rotate when the car is pushed by hand.
- 9.8. Front wheels must contact the track over a minimum width of 5mm.
- 9.9. Front tyres may be coated and polished.
- 9.10. Rear tyre dressing is not permitted. Tyres may only be cleaned using Shellite or tape.

10. LIGHTS – NIGHT RACING

10.1. Lights are required for any races designated as night races.

10.2. A minimum of 4 lights, 2 white or yellow headlights and 2 red taillights, must be fitted in the same location as the original 1:1 car.

10.3. Headlight and taillight lenses may be modified to accommodate lights.

11. REPAIRS AND PROCEDURES

11.1. As a general rule once a car has been submitted for Technical Inspection service may only be performed under green flag racing conditions.

11.2. The race director may choose to allow braid adjustment and/or oiling and/or tyre cleaning during lane changes at his/her discretion.

11.3. The following repairs must be carried out within 5 laps of when the damage first occurred -

- (a) replacing or refitting the windscreen and side windows
- (b) refitting the rear wing
- (c) refitting the front wing
- (d) replacing or refitting wheel inserts
- (e) any part of the body shell larger than 25mm x 25mm becomes detached
- (f) during night racing non-functioning front and/or rear lights (i.e. both front or both rear lights not working)

11.4. The following repairs must be made immediately they become apparent -

- (a) any part of the car other than the guide, braid or wheels, touching the track

11.5. The body shell and the main chassis plate are the only parts which may not be replaced from spares during an event. The body shell may be repaired or patched if damaged, however if more than 25% of the original shell is lost the car will be deemed to be damaged beyond repair and black flagged.

11.6. No part of the car, other than electrical connections to the motor and lighting components, may be soldered. All other components must be assembled with nuts and bolts, tape or glue. This also applies to racing repairs.

Amendment History –

- 4/2/2010 – Sections 7.1. and 7.3. - SLP-1 chassis added as ineligible chassis due to availability issues.
- 5/2/2010 – Sections 7.1. and 7.3. - SLP-1 chassis added as eligible.
- 7/2/2010 – Section 9.6. – Wheel insert rule struck out.