Date: 19/02/2014 Issue No 4a





SUPER TOURING CARS

(FIA Class 2 Touring Cars 1990-2002)

HISTORY

Super Touring Cars were based on production 4 door saloon cars with a maximum engine capacity of 2 litres.

They first raced in the British Touring Car Championship (BTCC) in 1990, and became the only class eligible in 1992.

The class was adopted by the FIA as Class 2 Touring Cars in 1993.

The class proved very popular and many championships were run for them all around the world between 1992 and 2002 including the following;

British Touring Car Championship (BTCC) 1990-2000

Championnat de France de Supertourisme 1993-1999

Italian Supertourismo Championship 1993-1999

Japanese Touring Car Championship 1994-1998

German Super Tourenwagen Cup (STW) 1994-1999

Belgian Procar Championship 1994-1997

Swedish Touring Car Championship 1996-2002

Campionato de Espania de Tourismo 1994- 1997

Portugese Touring Car Championship 1993-1994

Central European Touring Car Championship 1996-1998

South African Touring Car Championship 1996-1998

Asia-Pacific Touring Car Championship 1994

South East Asian Touring Car Challenge 1996-1998

Australian Super Touring Championship 1993-2001

New Zealand Touring Car Championship 1994-2000

North American Touring Car Championship 1996-1997

Touring Car World Cup 1993-1995

Copa de las Naciones 1997-2000

European Touring Car Championship (ETCC) 2000-2001

There were small variations in the rules in each championship, the Italian series in particular being much freer with their aero and wheel arch regulations, but in general Super Touring is the closest there has ever been to a truly worldwide Touring Car class.

<u>www.supertouringregister.com</u> has lists and pictures of most Super Touring Cars.

Date: 19/02/2014 Issue No 4a

The following is a list of Super Touring Cars produced by the major Slot Car manufacturers that would be eligible to race:-

SCALEXTRIC

Alfa Romeo 155 TS
Audi A4
B M W M3 (E30)
B M W 318i and 320i (E36)
Ford Mondeo
Renault Laguna
Vauxhall / Opel Vectra

SCX

B M W M3 (E30) Peugeot 406 Volvo 850 GLT

Ninco

Audi A4

Fly

B M W M3 (E30)

ProSlot

Alfa Romeo 156

Resin Bodies

Any resin body kit of a Super Touring Car will be eligible provided it is fitted to a commercially available plastic chassis complying with the rules below.

Note:

The Spirit Peugeot 406 Coupe is will not be permitted as it is not based on the Super Touring Car but is from a Silhouette class and therefore has much wider bodywork.

If you think any car should be added to or removed from this list please let us know.

In particular there may be a number of plastic kits for Super Touring Cars that could be added to increase the range of available cars, Honda and Toyota being obvious omissions.

Vacuum formed body shells will not be permitted.

The rules below are based on the CSCRA car standards for Super Touring Cars.

Any car built to these club rules would be eligible for any Super Touring Car event organized by the CSCRA (Classic Slot Car Racing Association).

Once a class has been selected for a mini series no alterations can be made to the rules for that class until after the conclusion of the mini series.

Super Touring Cars 070414.doc

3

Date: 19/02/2014 Issue No 4a

TECHNICAL REGULATIONS

1. Motors & Motor Mounts

- a. All eligible cars must be powered by a commercially available motor intended for use in a ready-to-run slot car and with a manufacturer's rating not exceeding 20,000rpm at 12volts.
 - If a motor is rated at a higher voltage a simple straight line graph will be used to determine the rpm at 12 volts.
 - E.g. a motor rated at 23,000rpm @ 14volts.
 23,000/14 = 1643×12 = 19,716rpm @ 12 volts.
 - Manufacturer's figures will be accepted as correct.
- b. Shortening the armature shaft is the only modification permitted to any motor.
- c. Motors must be mounted 'inline' (that is at right angles to the rear axle) and the armature shaft must be at the same horizontal centre line height as the rear axle.
- d. Front motored cars may be converted to rear motor but must remain 'inline'.
- e. When converting a front motored car or fitting a motor to a chassis intended for a different type of motor any of the following methods are permitted:
 - Any commercially available adaptors may be used.
 - The motor may be mounted to one of the original mounts and have single piece of plastic glued across the chassis to support the other end of the motor.
 - Any plastic 'inline' motor mount or motor pod intended for use in any ready-torun slot car may be used, and may be modified as desired. Any motor mount or pod used must not be visible outside the body when viewed from the side or from above.
- f. Offset motor mounts or motor pods are not permitted.
- g. Motor mounts and motor pods must be fixed rigidly to the chassis, loose fixing screws, rocking motor pods, sprung or magnetic suspension are not permitted.
- h. Motors and/or motor mounts may be glued into place.
- Rear-wheel drive only is permitted.

2. Gears

- a. Any brand of gears intended for use in any ready-to-run slot car may be used.
- b. All cars must be fitted with a standard 9 tooth pinion and 27 tooth crown gear.
- c. Offset crown gears or pinions are not permitted.
- d. Pinions may be glued to motor shafts and crown gears may be glued to axles.

3. Wheels

- a. Any wheels fitted as original equipment by the manufacturer to any eligible car may be used and may be fitted to any other eligible car.
- b. Any brand of 15×8 plastic or machined aluminium wheels may be substituted if desired.
- c. All wheels must be of a style that represents a real wheel as used on the real car or have suitable inserts fitted.
- d. Wheels may be glued to axles if desired.

4. <u>Tyres</u>

- a. Any brand of solid rubber tyre may be used subject to the following restrictions;
 - Front tyres: Minimum diameter 17mm, minimum width 8mm
 - Rear tyres: Maximum diameter 20mm, maximum width 10mm

Super Touring Cars 070414.doc

4

Date: 19/02/2014 Issue No 4a

Minimum diameter 18mm, minimum width 8mm

- b. Tyre treads must not protrude outside the car bodywork when viewed from above even if this means the overall width and/or tyre width must be less than the permitted maximum. See also Rules 5c and 6c.
- c. Front axles must have any side-to-side movement restricted to comply with Rule 4b.
- d. Tyres may be glued onto the wheels, and may be sanded true.
- e. Front tyres may be coated with nail varnish, super glue or similar.
- f. Any tyre dressing/cleaner used must not leave a residue on the tyres or track.
- g. Sponge tyres and tyre dressings (goop) of any kind are not permitted.
- h. Tyres made from, or containing, Silicone must not be used.

5. Rear Axle

- a. Any solid steel rear axle may be used but must not extend beyond the outer face of any wheel.
- b. Any type of <u>plain</u> rear axle bearings may be fitted and may be glued into place.
- c. The maximum width over the rear axle, wheels and tyres must not exceed 55mm but the tyres must not be visible outside the car bodywork when viewed from above even if the car body is narrower than 55mm. See also Rules 4 and 10i.

6. Front Axle

- a. Front axles are free choice but must not extend beyond the outer face of any wheel.
- b. Any type of plain front axle bearings may be fitted and may be glued into place.
- c. The maximum width over the front axle, wheels and tyres must not exceed 55mm but the tyres must not be visible outside the car bodywork when viewed from above even if the car body is narrower than 55mm. See also Rules 4 and 10i.

7. Slot Guide

- a. All cars must have one slot guide only.
- b. Any car may be fitted with any slot guide intended for use with any ready-to-run slot car.
- c. Any car may have an easy-fit guide replaced with a conventional wired guide, with the minimum necessary modification made to the chassis.
 - Only plastic materials polystyrene, abs, etc may be used in this conversion, no metal or composite materials are permitted.
- d. Guide to motor wires and pick up braids are free choice.
- e. Guides must be located behind the front splitter and must not be visible from above.

8. <u>Lights etc</u>.

a. Any car fitted with working lights may have the light bulbs, LED's, wiring, PC board, and any other internal fittings removed, but must retain all external lenses.

9. Ballast and Traction Magnets

- b. Traction magnets must be removed.
- c. Lead ballast weight may be added to any car as desired, provided that it is placed within the confines of the body and chassis and is firmly fixed in place.
- d. Scalextric cars may have ballast glued into the space under the chassis which normally holds the magnet provided it complies with the ground clearance rule. See also Rule 11a.

Super Touring Cars 070414.doc

5

Date: 19/02/2014 Issue No 4a

10. Body and Chassis

- a. Bodies must be used complete and unmodified except as detailed below.
- b. Bodies may be repainted provided that doing so does not distort the body.
- c. White body kits must be fully painted.
- d. All cars must have a realistic colour scheme and carry at least three racing numbers.
- e. Interiors must be fitted, be as complete as possible, include a driver minimum of head, shoulders, arms and steering wheel in 3D and may be glued in place.
- f. Vacuum formed interiors are permitted but must be 3 dimensional, realistic and painted.
- g. No part of the chassis or running gear may be visible through the cockpit/cabin area.
- h. Windscreen and window mouldings must be retained, and be complete and original.
- i. Wheel arches may not be enlarged in any way but moulding flash may be cleaned off.
- j. Rear view mirrors may be omitted but all other detail parts must remain fitted.
- k. Rear wings must be securely fitted at the start of each race.
- I. Chassis does not have to be the chassis originally intended for the body being used but the wheelbase must match that of the body, without modification to the body.
- m. The chassis must be made primarily from injection moulded plastic.
- n. After market plastic chassis such as PCS and Slot.It HRS are permitted.
- o. The chassis may only be modified as detailed in Rules 1, 5, 6, 7, 8, 9 and 10.
- p. When fitting an alternative motor to a chassis the minimum necessary modification may be made to the chassis in order to fit the new motor, motor mount or pod. See also Rule 1.
- q. When fitting a chassis to an alternative body the minimum amount necessary may be trimmed from the outer edges of the chassis to match the shape of the new body.
- r. New body mounting posts may be fabricated if necessary when fitting an alternative or modified chassis to a body and any unused original body posts may be removed.
- s. No part of the chassis may be visible outside the car body when viewed from above except where those visible parts represent parts of the real car.
- t. Any chassis which includes radiator grills and/or other parts which clip into the body may have these parts removed from the chassis and fixed to the body.
- u. Some bodies have the front splitter, radiator grill, door sills, rear floor, etc moulded as part of the chassis. If these bodies are fitted to an alternative chassis then these parts must be cut from the original chassis and fixed to the body in the correct position.
- v. <u>Minor</u> scraping or sanding of the body inner faces and/or chassis edges is permitted to allow the body to move freely on the chassis.
 - This includes removal of any internal pegs etc. that rest on the motor, axle bearings or chassis sides.
 - Removal of other parts of the body or chassis for this purpose is <u>not</u> permitted.
- w. Body fixing screws are free choice and may be left loose.
- x. Adhesive tape or 'blue tack' must be placed over the body fixing screw holes to prevent screws from falling out.

11. Ground Clearance

a. All cars must, at all times, have a minimum ground clearance of 1.5mm, under the body, chassis and motor, from the rear edge of the front wheels to the back of the car.

Date: 19/02/2014 Issue No 4a

- b. The crown gear may be below the minimum but must not touch the track in normal use.
- c. The front splitter may be below the minimum but must not touch the track in normal use.
- d. When the car, race ready, is placed on a slotted, flat surface, all 4 tyres must touch the surface and all 4 wheels must rotate when it is pushed forward.

12. Finally...

If the rules do not expressly say that you can do something then you cannot do it.

- The above rules will apply to our club night events.
- These rules are taken from the CSCRA (Classic Slot Car Racing Association)
 Car Standards and any car built to these rules should be eligible for any event
 run to CSCRA Super Touring Car rules, however, it is advisable to double check
 everything you do against the CSCRA standards and any 'local' rules that may
 apply to events at other clubs.

Index to amendments

Issue No	Date	Amendment
1	23/07/11	First draft (for CSCRA).
1a	21/06/13	Re-written in standard club format.
4	01/08/13	Simplify and clarify using standard wording for each section.
4 a	19/02/14	Add <u>www.supertouringregister.com</u> link