

NEW ZEALAND SLOT CAR ASSOCIATION INC.



2013 32nd Hard Body Scale Rules.

**These rules to be read in conjunction with the 2013 NZSCA
General Rules.**

**Please note cars will need to have the LEFT braid
positive for this track!!**

Procedure

SCRUTINEERING

1. Prior to qualifying all cars must be scrutineered. NASCAR and Group C must be presented with the body off but on for other classes. Passed cars will be displayed for other racers to view (but not touch!). Concerns must be raised over legality directly with the Chief Scrutineer within the time period provided in the event schedule. The racer has the remainder of scrutineering and qualifying to rectify any problem found or confirmed by the Chief Scrutineer. If it is not rectified, the decision to be allowed to race will be in the hands of the Chief Scrutineer whose decision will be final. Fellow racers are encouraged to raise legality concerns of cars as soon as noticed to allow maximum time for rectification. Once cars have received final scrutineering approval they will be placed in parc ferme.
2. Cars may also be checked on the start line immediately before each race at the sole discretion of the Chief Scrutineer. A non-compliant car will have to be corrected 'on the green light' during racing.
3. At the completion of racing cars will be returned to parc ferme. The first three place getters in Group C will have one wheel from each axle removed to ensure they are using solid axles. Any car may be rescrutineered at the sole discretion of the Chief Scrutineer. This may involve car(s) being stripped down for inspection. Cars must remain in parc ferme until all placings have been confirmed.

QUALIFYING

4. Qualifying will be run using the SRT track control system. Each car will be placed on the track by the grid marshals prior to qualifying. At the end of the qualifying each car will be removed from the track and returned to parc ferme by the grid marshals.

5. Each racer will have a single run of not less than 1 minute on the designated lane. The best three lap times will be recorded with the best single lap time posted within the qualifying period determining qualifying order. Ties will be broken firstly by the number of equal best times a racer records, then by the next best time and so on. If a tie cannot be broken, all racers involved will have an additional qualifying run. Their fastest lap will determine qualifying positions relative to the other racer or racers tied for the position.

6. A racer may qualify only one car in each class that they have entered.

7. A racer whose car breaks down during qualifying will be given time for repairs and re-scrutineering at the discretion of the Chief Steward whose decision will be final.

RACING

8. Racing will be run using the SRT track control system. Each race will be of 18 minutes duration – 3 minutes on each lane. Lane rotation will be the 1/24th scale system of moving 2 lanes at a time.

Normal lane rotation is White – Orange – Yellow – Purple – Blue – Green

9. At the beginning of each race, cars will be placed on the grid by the grid marshals. Racers will have two minutes to warm up and may work on their cars during this time.

10. The interval between brackets will be 1 minute for the lane change, with computer controlled power on after the 1 minute interval.

11. During the lane change interval, racers (or assistant(s)) must move controllers to the next lane, change lane sticker, service their cars as provided for in 15 if they wish and move cars to their next lane. Cars to be placed in the same relative position on the track. Racers retain responsibility to replace their cars in the correct relative position on the track and be ready to drive when the power comes on again.

12. At the end of each race, each car's partial lap position on the track will be recorded and the cars will be returned to parc ferme by the grid marshals.

FORMAT OF FINALS

13. All races will be finals (i.e. no semis or round robins). The Chief Steward appointed by the NZSCA in consultation with the organising Clubs Race Controller/Organiser will determine the make-up of the finals depending on the number of entries in each class.

Every endeavour will be made to have equal numbers in each final with a maximum number of racers in the A Final.

The decision of the Chief Steward will be final.

14. The starting lane choice for finals is by order of qualifying time. The fastest qualifier in each final having first choice of lane, second qualifier second choice and so on. The order of racing shall be from slowest to fastest qualifiers.

WORKING ON CARS DURING RACING

15. During the lane change interval, racers may work on their cars at the track or in the pits as long as they do not interfere with any other racer.

16. If a racer including an assistant is still working on their car when the track power comes on, they must take care to replace the car on the track in a position where it will not be a hazard to other cars [*ie on a straight well away from the corner exit*]. Any accident caused during replacement may be penalised by the deduction of laps.

PROTESTS

17. Refer to Rule 'D' Protests in the 2013 NZSCA General Rules.

TRACK CALLS

18. Track calls may be made in the event of unfair or dangerous situations. These are:

- an un-marshalable car [eg under bridge, or on floor in a hard to reach place]
- debris in the slot
- riders [car in the wrong lane]
- track problems including braid up, lap-counter failure, and power failure

19. In any of these events, a racer may call "track" and the Race Controller will immediately turn off the power without questioning the call.

20. During a track call, cars may be marshaled but no work is permitted. A racer who was working on his car prior to the track call may continue to do so.

21. Decisions about what constitutes a real or spurious track call rest with the Race Controller whose decision shall be final. Repeated spurious calls may be penalised by deduction of laps.

BLACK FLAG

22. Any car may be black flagged by the Race Controller or Chief Scrutineer at any time if it is deemed to be at risk of damaging the track or other cars.

2013 NZ 32nd Hard Body - Car Specifications

Classes of cars covered by these specifications are:

- "Scalextric" NASCAR
- "Slot-it" Group C
- "Ninco" Sports Cars Pre-65
- Muscle Car
- GT

GENERAL CAR SPECIFICATIONS

these apply to all classes of cars unless variations are specified in individual class rules

1. DIMENSIONS

1.1 Width - wheels and tires must fit into the original arches looking from above.

1.2 Clearance- 0.5 mm ground clearance from chassis, gears or body at the start of the race. The Chief Scrutineer's decision on width and clearance is final.

2. GUIDE FLAG

2.1 One Guide - only one R.T.R type guide flag is allowed. The guide must be black or made of graphite for lap counting purposes

2.2 Spacers nut etc - guide nut, spacers, clips, lead-wire and lead wire stays are free.

3. WHEELS/TIRES

3.1 Four visible wheels - all cars must have a total of four visible wheels when viewed from the two sides. Wheels must fit within the original wheel arches when looking from the two sides.

3.2 Front Wheels-must have tires fitted and be able to rotate. Sticker wheels or wing car style front wheels are not permitted.

3.3 Wheel Inserts-original wheels OR matching 3D wheel inserts in both style and color, front and rear, from the time period the full size car raced in are required. Photographic evidence may be requested!! In cases where period inserts are not available, (e.g. Scalextric muscle cars) the original wheels may be made into inserts to fit other wheel brands.

3.4 Tires-hard tires only. No foam tires. O-rings and/or nail varnish on front tires not permitted.

3.5 Tire Treatment -use of tire goop or glue on the rear tires is not permitted but tires may be glued to rims. Tires may be treated prior to the event to soften or clean them but this is prohibited at any other time except as provided for in 3.6. No treatment used is permitted to adversely affect the running of any other car. The Chief Scrutineer may require excess treatment removed by the racer if adverse affect likely.

3.6 Tire Cleaning - only with sticky tape or fingers during course of event.

4. BODY

4.1 Interior – all cars must have a 3D interior driver (head and shoulders), steering wheel and seat/s and be sufficiently full so that no chassis or components can be seen through the windows.

4.2 Numbers – all cars must have at least two readable numbers of the same numeral.

4.3 Cover chassis –the chassis and guide must be completely covered by the body when viewed from above. The chassis and motor must be completely covered by the body when viewed from front, rear, left and right sides of car.

4.4 Clear Parts- lights and windscreens must be fitted. Windscreens must remain clear if the model car is supplied with a clear screen or screens – minor glue accidents accepted.

4.5 Internal- material may only be removed to facilitate wheel/tire and chassis installation, not to lighten the body.

4.6 Rear Wing-must be fitted for qualifying and the start of the race.

4.7 Resin (or lexan) Bodies and Resin (or lexan) Bodied Cars-not permitted.

4.8 White kits – these are allowed in all classes except Ninco Classic. Paint must adequately cover the body so no unpainted areas remain (no clear coat on white plastic). "Tear proof" substitute wings may be left unpainted.

4.9 Exterior- cannot be modified in any way except for paint/livery as per 4.8 and removal of wing mirrors, antennas and windscreen wipers. No external modification to wheel arches, wings, roof line is permitted. Reasonable repairs excepted.

5. CHASSIS

5.1 Chassis-must appear stock when viewed from the underside of the car. Slot.it chassis must have "filler pieces" fitted if not using the anglewinder motor.

5.2 Chassis Hacking or drilling is not permitted. Holes may be refilled & painted.

5.3 Traction Magnets-not permitted and must be removed.

5.4 Body/Pod Screws-free. Only screws may be used. Pins, clips or other means of body fixing are not allowed.

5.5 Ballast-where allowed it must be carried internally (i.e. cannot be visible from outside or underside of the car).

5.6 Matching-body to chassis as supplied with car or direct replacement.

5.7 TSRF and Plaffit-style chassis are not permitted.

5.8 Motors-may be glued or taped in position.

CLASS RULES

"Scalextric" NASCAR

6. CHASSIS

- 6.1 Stock**-chassis when viewed from both inside and outside. Pro-kits or parts thereof are not permitted.
- 6.2 Blueprinting**-straightening of chassis and minimal material removal from edges to ensure flush body fit is permitted. Body must not "float" on chassis or have any discernable movement when tested by the Chief Scrutineer.
- 6.3 Axle Bearings**-Stock
- 6.4 Ballast**-not permitted
- 6.5 Bracing**-not permitted
- 6.6 Guide Flag**-stock
- 6.7 Digital Plugs**-fitment Optional

7. BODY

- 7.1 Body**-must remain stock standard as per manufacturer except for white kits as provided for in 4.8.
- 7.2 Lightening**-of any description, including interiors is not permitted that does not comply with rule 4.5. Removal of any internal parts is not permitted.
- 7.3 Paint Livery**- white kits must have sufficient decals and other embellishments for the time period modeled to appear "semi scale".

8. WHEELS AND TIRES

- 8.1 Wheels** - stock plastic wheels only.
- 8.2 Tires** - stock rubber tires only. Front tires must have a diameter constant across the wheel's section. Minimum diameter of 20.0 mm

9. MOTOR

- 9.1 Type**-stock 18k Scalextric motor only. Motor must remain sealed with no modifications.

10. GEARS- stock plastic 11 tooth pinion and 36 tooth spur. Sidewinder layout only.

11. AXLES-stock axles only. No hollow axles.

"Slot-it" Group C

13. CHASSIS

13.1 Stock-when viewed from both inside and outside except as provided in 13.3

13.2 Blueprinting-straightening of chassis and minimal material removal from edges to allow free body and/or pod movement is permitted.

13.3 Upgrading-replacement of older style guides, chassis, motor pod, rear wheels or any combination thereof to match the latest box stock specification is permitted. No parts other than those found on a later production box stock Slot.it GpC car of the same or similar prototype may be used. No material may be added or removed to allow such fitment. Onus of proof is with racer.

Front axle grub screw height adjustment, EVO motor mounts and suspension systems are not permitted.

13.4 Axle Bearings-stock

13.5 Ballast-not permitted

13.6 Bracing-not permitted

13.7 Guide Flag-stock or upgraded per rule 13.3

14. BODY

14.1 Types - Group C cars as stipulated on the car list only. Must remain stock standard as per manufacturer except for white kits as provided for in 4.8.

14.2 Lightening- of any description, including interiors is not permitted that does not comply with rule 4.5. Removal of any internal parts is not permitted and all parts must be used when assembling white kits.

14.3 Interior-must be stock. No lightweight interiors permitted

14.4 Tear proof Parts-may be used. Must be genuine Slot.it parts.

15. WHEELS AND TIRES

15.1 Rear Tires-any Slot.it marked tires permitted but limited to 19X10, 20X10 or 20x10.5 (C1 or S2 only) sizes. Wider Slot-it tires made for GT cars are not permitted.

15.2 Front Tires-any Slot-it marked 19x10 tires including zero grip.

15.3 Rear Wheels-stock Slot-it SIPA 17 aluminium wheels. The only exception being as provided in 13.3 plus new models such as Toyota which must be fitted with stock SIPA 43 16.5mm aluminium wheels. Plastic/magnesium wheels not permitted.

15.4 Front Wheels - must be stock plastic with inserts to match rear wheel inserts (white discs fitted over base inserts on some cars are permitted if fitted ex-box).

15.5 Tyre alteration - front tire diameter may vary across section of tire. Minimum diameter at largest point must be 18.0 mm. No tire, front or rear, is to have less than 9.5mm tread width.

16. MOTOR

16.1 Type- Slot.it orange end bell 21,500 rpm or blue end bell 19,000 rpm in the stock inline configuration. Motor must remain sealed. No modifications permitted

17. GEARS-stock gears as supplied with car. No ratio changes permitted.

18. AXLES- solid axles. No hollow axles permitted.

Sports Cars Pre 1965

19. CHASSIS

19.1 Axle Bearings-any

19.2 Ballast-permitted

19.3 Bracing-permitted

19.4 Guide-Ninco

19.5 Motor Adaptors-free (to fit NC1 or NC8 motors)

20. BODY

20.1 Lightening-permitted

20.2 Original Interior-may be lightened. No lexan or "light weight" interiors.

20.3 - repainting or alteration of original paint/livery not permitted.

21. WHEELS AND TIRES

21.1 Wheels-stock Ninco plastic wheels as supplied with car or a direct replacement.

21.2 Tires-any combination of Indy Grip IG2002, MJK4214, SRS Grips SS303 or stock "Ninco Classic" rubber tires (80503 or 80504) with a minimum diameter of 20.5 mm.

22. MOTOR- only Ninco NC1 or NC8. Motor must remain sealed. No modifications permitted.

23. GEARS-free

24. AXLES-free

Muscle Car

25. Chassis

25.1 Axle Bearings-any

25.2 Ballast-permitted

25.3 Bracing-permitted

26. BODY

26.1 Lightening-permitted

26.2 Interior-lightweight and lexan interiors permitted

26.3 Exterior – must appear stock except for white kits as provided for in 4.8.

27. WHEELS AND TIRES-as per general rules

28. MOTOR

28.1 Strap Motors-not permitted

28.2 Magnetic downforce-maximum 30 Gms

29. Gears-any

30. Axles-any

GT

31.CHASSIS

31.1 Axle Bearings-any

31.2 Ballast-permitted

31.3 Bracing-permitted

31.4 Chassis Hacking-non podded cars may alter the chassis to allow fitment of pods, motors and or axle assembly (i.e. bearings, axle and gear). Body mounting holes and/or posts must remain in original position.

31.5 - any motor mount, motor, suspension combination permitted.

32.BODY

32.1 Lightening-permitted

32.2 Interior-lightweight and lexan interiors permitted

32.3 Exterior – must appear stock except for white kits as provided for in 4.8.

33. MOTOR

33.1 Strap Motors-not permitted

33.2 Magnetic Downforce-maximum 30 Gms

34. GEARS-any

35. AXLES-any

32nd Nationals Hard Body Car/Body List 2013

Any car omitted from the list due to being a new release, or from accidental omission, that is available for public sale may be considered by the NZSCA committee for inclusion into the appropriate category if notified before 31st December of the preceding year.

1) "Scalextric" NASCAR – original livery or white kits as provided in 4.8.

2) "Slot-it" Group C

- Lancia LC2/LC2-85
- Mazda 787B
- Porsche 956 all variants
- Porsche 962 all variants
- Sauber C9 Mercedes
- Jaguar XJR9
- Jaguar XJR12
- Toyota 88C

3) "Ninco" Classic Sports pre 1965

This is a classic sports race car that is based on a road going car

- AC Cobra
- Austin Healey
- Ferrari 166 MM
- Ferrari F-250 Testa Rosa
- Jaguar XK120
- Porsche 356
- Porsche 550 Spider
- Corvette Pre 1965

4) American Muscle Cars

Cars from the older era of American excess and love of the big car and big power. Cars between 1930 and 1980

Scalextric:

Ford Mustang

Chev Camaro

Chevrolet Corvette L88

Ford Gran Torino

SCX

Ford Stingray

Plymouth AAR Cuda

Carrera:

Chevrolet Camaro

Chevrolet Corvette Sting Ray 427

Dodge Charger 500

Dodge Charger Daytona

Ford Galaxie 500

Ford Mustang

Ford Thunderbird

Ford Torino Talladega

Plymouth Hemi 'Cuda

Plymouth Roadrunner

Plymouth Superbird

Pontiac GTO

Revell:

Greenwood Corvette

Ford Galaxie

Shelby Mustang GT-350R

Corvette Grand Sport

Shelby Cobra

Strombecker

Plymouth Fury

Pioneer:

Ford Mustang Notchback and fastback

Dodge Charger

Camaro

5) GT

As defined by the FIA GT1 Championship. Open to any brand. JGTC are omitted as they race in their own category (in full size)

Car	Brand	Year of original
Ascari KZ1	Ninco	2003
Aston Martin DBR9	Scalextric	2005
BMW M3 GTR	Fly	2001
BMW Z4 Coupe	Carrera	2006
Bugatti EB110	SCX	1991
Callaway C12	Ninco	2000
Corvette C5, C5R, C6, C6R	Fly / SCX / Carrera/ NSR	1999
Dodge Viper	Fly Scalextric Carrera	1997
Ferrari 355	Proslot	1994
Ferrari F360	SCX / Proslot	1999

		Scalextric / SCX / Ninco	
Ferrari F40		Fly/Slot.it	1990 >
Ferrari F430		Scalextric	
Ferrari F50		Ninco	1996
Ferrari 550 GTS Maranello		SCX	1996
Ferrari 575 GTC		Carrera	2002
		Scalextric/Autoart/Ninco	
Ford GT		/NSR	2003
Heuliez Pregunta		Proteus	1998
Jaguar XJ220		Scalextric	1992
Jaguar XKRS		Scalextric	2004
		Scalextric /	
Lamborghini Diablo		Autoart/Ninco	1990
Lamborghini Gallardo		Ninco/Scalextric	2003 >
Lamborghini Murcielago GSR		Proteus/Ninco	1999?
Lister Storm		Fly	2000
Lotus Elise GT1	Avant Slot		
Mclaren F1		Ninco	1994 >
Mclaren F1 GTR		Slot.it	1997>
Marcos LM 600		Fly	2000
Maserati Coupe Cambiocorsa		Scalextric	2003
Maserati MC12		Scalextric / Carrera	2005
Mercedes Benz CLK GTR		Ninco	1997
Mercedes Benz SLS GT3		Scaleauto	
Mosler MT900R		Ninco / NSR	
Nissan R390		Slot.it / Reprotect	1997
Peugeot 406 coupe silhouette		Spirit	1997>
Porsche 997		Ninco	
		Scalextric / Carrera /	
Porsche 911 GT3		SCX / Ninco / Proslot	1999
Porsche 996		Scalextric	
Porsche 911 GT2		Proslot	1995 >
		Fly / Ninco / Carrera /	
Porsche 911 GT1Evo		Artin	1996
Porsche GT1 98		Fly / Carrera	1998
Saleen S7R		Artin / Fly	2000 >
Seat Cupra GT		SCX	2003
Toyota GT1	Scaleauto 1998		
TVR Tuscan		Scalextric	1999 >
TVR Speed 12		Scalextric	1997
Venturi 400 - 600		Fly	1994