AMCA Nationals - Technical Rules - Specifications

In the Event of any point arising, which is not covered by these rules, the Executive Board of AMCA NATIONALS shall have the power to decide it and any such decision shall be final.

IMPORTANT: Competitive Motor Racing may result in injury and/or death to participants.

These Rules are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to participants, spectators or others.

CHASSIS MATERIAL:

All components in fabricated chassis, including chassis out riggers and/or sub frames to be constructed from mild steel. Minimum specification is 1163 G.R 2.00

1. Chassis Specification:

A) Minimum weight - 2350LBS with driver.

B) Vehicle wheelbase must be no less than 2642mm (104") or more than 2743mm (108").

C) Vehicle track width must not exceed 78"/ 1982mm. As measured from right hand outside of tyre to left hand outside of tyre. Both front and rear.

D) As a base for chassis construction there are 2 x options:

Option 1 – GMH Holden/Kingswood/Premier/Statesman Front Chassis Stub (clip) from vehicle models HQ to WB

No modification is permitted to this component other than areas detailed under suspension relating to the upper control arms, shock absorber and front spring adjustment.
May be modified for fitment of radiator.

(1) The location and design of lower control arms will remain as per OEM.

(2) Upper control arms may be modified or replaced with tubular type to facilitate adjustment and replacement. May only be constructed from steel or aluminium.

(3) Upper control arm mounting points may be removed.

(4) Both top and bottom ball joints must remain as per OEM or replacement part number.
Must be fitted as per OEM in top arm.

(5) Front springs must remain in original location, but springs length and/or rates may be altered.
It is permitted to incorporate a simple spring adjustment in front spring location.

(6) Shock absorber type and mount may be altered. 1 x shock absorber per wheel

(7) Shock absorbers to mount from lower control arm to Chassis Frame.

(8) No adjustable Shock Absorbers permitted.

(9) No canter lever systems allowed.

(10) A coil over shock unit is now allowed as an option on the front end of the HQ - WB chassis clip and mandatory on the AMCA Nationals fabricated front clip.

(11) 1 x shock and 1 x linear rate spring per corner on front end.

1 x 1-inch bump stop allowed on shock absorbers for coil over units only

(12) OEM spring bucket may be altered to allow clearance for coil over unit on HQ-WB Clip
(It is recommended to reinforce chassis where altered to strengthen chassis with max 3mm plate.)

(13) Minimum width of HQ—WB cross member 1320mm measured at the rear of rail.

E) **Option 2 - AMCA Nationals supplied fabricated front chassis clip.**

(1) The AMCA Nationals front chassis clip is a controlled component and can only be purchased from AMCA Nationals Pty Ltd or a nominated dealer.

(2) The fabricated front clip can be retrofitted to any existing chassis,
N.B: Although the clip is designed to be multi fit, some fabrication may be required for it to fit.
(No alterations to AMCA fabricated front clip is allowed).

(3) Idler arm, Pitman arm, Drag Link, Stub axles, Steering arms, Tie rods and all ball joints are to be OEM or equivalent to GMH HQ - WB only.

(4) All lower control arms, and caster bars (radius rods) are a controlled component and can only be purchased from AMCA Nationals Pty Ltd or their nominated dealer.

(5) Coil over suspension allowed only. (refer to section 6 for guidelines).

(6) Repairs to AMCA Nationals fabricated clip are strictly controlled.
Please refer to section 23 of this rule book.

(7) 1 x shock and 1 x linear rate spring per corner on front end.

(8) Shock absorbers to mount from lower control arm to Chassis Frame.

(9) No adjustable Shock Absorbers permitted.
1 x 1-inch bump stop allowed on shock absorbers for coil over units only

(10) No canter lever systems allowed.

F) **STEERING**

(1) Steering must remain as per OEM.

(2) Steering box must be mounted in original location and pitman arm, idler arm and drag link remain as OEM on both HQ-WB Front Clip (right hand drive) and AMCA Fabricated Front Clip.

(3) RHD Saginaw steering boxes only permitted for right hand drive cars.

(4) Vehicle may be constructed with left hand drive steering.
If vehicle is constructed as a LHD vehicle, it is permitted to use a LHD steering box.

Mounting of steering box and idler arm must be a mirror image of RHD vehicle.

(5) Power steering and steering quickners are permitted.

(6) HQ-WB front Spindles and stub axles may not be modified in any manner.

(7) Aluminium steering components are not permitted.

(8) Rack and pinion steering is not permitted.

(9) Centre of the vehicle steering is not permitted.

(10) Cutting and welding of draglinks, steering arms, stub axles or any other OEM steering component is not permitted, except for installation of shock mounts or tack welding of bushes on HQ-WB OEM lower control arms. AMCA Fabricated tubular lower control arms must remain OEM.

(11) HQ – WB OEM steering arms, draglinks, tie rods and ball joints only.

(12) Left hand drag links permitted, must be a converted HQ-WB OEM Draglink only.

G) **Chassis Construction**

(1) Roll cage will be constructed from mild steel tubing spec 1163GE 200 minimum, 38mm OD X 3 WTCHS or alternatively minimum 42mm OD x 2.4mm WTCHS GR 350.

(2) Roll Cage must be frame mounted in at least six places.

(3) Brace bars forward of roll cage may not be higher than bonnet height and remain under bonnet line.
Roll cage may be no further forward than rear face of engine block.
Front & rear brace bars 34mm OD min.

(4) No high Bars.

(5) Battery must be mounted in a cradle (min 25x25mm angle) and located inside the chassis rail. Battery terminals must be insulated if battery is mounted within 300mm of fuel tank.
Battery to be suitably covered with rubber regardless of what type of battery used.
One 12-volt battery only allowed for AMCA Nationals. Maximum battery voltage must not measure more than 14.4 Volts. Step up transformers or any other devise designed to increase voltage is strictly prohibited.

(6) All cars from 2003/2004 must have a diagonal brace from chassis to top of roll cage hoop above driver's head.

(7) The roll cage must be fitted with driver protection bars (NASCAR Type) and be manufactured from the same tubing used for the roll cage.
The roll cage must be welded securely to the main 50mm x 50mm x 3mm or 75mm x 50mm x 2.5mm RHS chassis rail (min size).
All CHS joints must be correctly notched and welded securely.
Incomplete welds, slag inclusion, poor workmanship will not be permitted under any circumstances.
A wire mesh screen must be fitted to the roll cage in front of driver, 50mm mesh max 25mm min - wire size 2mm.

(8) Roll Cage Hoops - All cars registered must have a minimum 1 (one) diagonal bar from the bottom corner of the roll cage hoop and finishing in the opposing top corner behind the driver's head.
Diagonal bar dimension must be the same as roll cage tubing.
If utilising a crucifix or cross in hoop minimum tube spec is 32mm x 3mm OD minimum.

(9) 1/4 window bar on the driver side mandatory. Minimum spec 25mm OD x 2mm.
Mounted in line with the first NASCAR bar vertical or minimum 150mm from front leg of roll cage.

(10) Foot protection bar to be included in chassis.

(11) Chassis to utilize a fuel tank protection bar 50mm past the maximum width of fuel tank and to give protection 25mm below the fuel tank for under slung tanks and 25mm above the fuel tank for top mounted tanks and must be suitably braced to prevent rear intrusion. Fuel protection bars to also incorporate a vertical bar in the middle of bar. (refer diagram)

H) **Roof Plate**

(1) If a Roof Plate is incorporated into the roll cage as an option, then the following specifications apply:
Steel - 3mm minimum thickness
Aluminium - 5mm minimum thickness.
400 mm wide mounted by 10 x 50mm x 50mm mild steel tabs or 25mm x 3mm mild steel strip welded all around.
Plate to be mounted above using 10 x 5/16 or 8mm high tensile bolts.
Head of bolts downside - 3 each side - 2 front - 2 rear.

(2) Roof plate may be replaced with diagonal bar, 32mm x 3mm minimum welded in place from right front to left rear of roll cage above driver's head. Opposite for left hand drive cars.

2. PROTECTIVE BAR WORK.

A) Front bumper bars to be parallel with each other not set back.
Front bumper to be no wider than 50mm from the outside of the chassis rails.

B) Front bumper not to exceed 875mm measured from the centre of the stub axle to the furthest point of the bumper.

C) External protective bar work must not exceed the following dimensions:
Note: Side nerf bars are not to protrude past the outside of the tyre wall.

Front Bumper Bars	- 34mm x 3mm CHS Maximum
Side Nerf Bars	- 34mm x 3mm CHS Maximum
Rear Bumper Bars	- 42mm x 3mm CHS Maximum
Rear Quarter Nerf Bar	- 34mm x 3 mm CHS Maximum

D) Parallel side nerf bars not permitted.

E) Rear bumper to give protection at 520mm from ground level and have a maximum of four mounting points at chassis in corner bars.

F) All Vehicles are to run Side nerf bars, Rear and Front bumper bars.
Side nerf bars may be mounted on the inside or outside of the body.
Total body width to remain max 1630mm.

G) No bar work shall protrude past the front of the chassis rails with the exception of the front bumper.

(1) No welded bends permitted on nerf bars - ie: No steam pipe bends and the like welded in.
Nerf bar to be formed from one length of tube.

3. VEHICLE BODY

A) Vehicle body may be constructed from steel, aluminium or fibreglass only and be made to resemble a sedan or hatchback type of vehicle.
NB: Steel sheeting is not permitted for vehicle bodies after July 1st 2021

B) Roof must retain rounded shape and be made from aluminium or fibreglass only.
Flat roof panels are not permitted.

C) Painted roll bars will not be permitted to substitute for roof pillars.

(see diagram for suggested body design)

D) It is not permitted to use OEM factory manufactured fibreglass body shell.
Interior panelling and decking to window height is mandatory.

E) Engine compartment will remain open. No side panels. Bonnet may have a maximum drop of 100mm at sides. Chassis bar work to remain under bonnet line.

F) Side body panels to extend no further forward than 100mm past rear of engine block, Maximum body rake 75mm measured from the base of the chassis.

G) IMCA / MD3 style nose cones are not permitted in any form or made from any material.

H) Nose cone not to protrude past the front bumper.

I) Sail panels must extend to within 75mm of external panel.
Front pillar must extend to within 50mm of rear of bonnet edge and to within 75mm of external side panel.
Roof sail panels to extend to the rear of the rear wheel arch.
Rear end of sail not to be secured to rear wing end plates. Sail panel to not extend higher than roof.

J) Tyres must protrude a minimum of 100mm outside of bodyline of the vehicle on right-hand side.
Tyre on the left-hand side must be visible when sighting from the front to the rear and protrude past side nerf bars.

K) Rake on bonnet 50mm max. Break in bonnet to be between 440mm forward of centre of carburettor to centre line of front axles.

L) Nose cone must be inside of front wheels. Tyres must be fully visible at all times when steering turned from lock to lock. May have side fin/tip extend 25mm max above nose cone surface.
Nose cone must be mounted in a secure manner and can extend no higher than the front of bonnet.

M) Bonnet scoop height maximum 125mm, Remainder of bonnet surface to remain flat.

N) If Side Skirts fitted to base of door panels, they are not to protrude any more than 75mm from door Panel. Maximum width left to right 1750mm.

O) Maximum Body height 1080mm with 15psi per tyre all round. Measured from the ground to top of body.
Maximum car height 1500mm measured with 15lb per tyre all round. Measured from ground to top of roof.
Roof to have no fins, lips above roof surface.

High density polyurethane may be used on side panels.

4. FIREWALLS

A) Firewalls must be fitted to protect driver from fire, mechanical, fuel and exhaust components that may enter the cockpit.
   (1) Firewalls may be constructed from: aluminium or steel
   (2) Cockpit floor must be a minimum of 3mm aluminium or 1.6mm steel and cover the entire floor area.

5. AERODYNAMICS

A) No aerodynamic aids or devices are permitted anywhere outside or inside the vehicle except for a rear spoiler which may be fitted.
Rear spoiler and blade are to fall within the box measurement at the rear of this rule book ie: 400mm x 250mm and no wider than the body.
Spoiler not to extend beyond rear bumper bar. Air is not permitted to pass under spoiler.

6. REAR SUSPENSION

As of 1 July 2020, Rear suspension will consist of 2 x options:

A) **OPTION 1 - MULTI - LEAF SPRING REAR SUSPENSION**

Only one shock absorber per wheel is permitted.
Traction Control devises such as third arm/fifth arm torque control units are not permitted.
An adjustable panhard bar may be used to locate rear axle. Panhard bar must be straight.

(1) Cockpit adjustable panhard bars not permitted. Panhard Bar not permitted on Quick Change Rear End.

(2) Leaf spring mount behind driver to be enclosed at top of mount.

(3) Diff housing must be solidly and securely mounted to the rear leaf springs with the use of U bolts only. No other devices allowed.
NB: The only items permitted between diff tube spring pad and leaf spring is a standard or adjustable lowering block/s in steel or aluminium

B) **OPTION 2 - MONO LEAF COIL OVER REAR SUSPENSION**

Steel Mono leaf springs only. (No Parabolic or Fibreglass Springs permitted)

1 x coil over unit per rear wheel. 1 x linear rate coil over spring per coil over unit.
1 x 1-inch bump stop allowed per shock.

(1) 1 x Pull Bar (Torque Absorber) Part # Speedway Motors 910-45509 is the only Pull Bar permitted for rear end, minimum length 20 inch-maximum length 30 inches measured from centre of rod end to centre of rod end .

(2) Option of 1 x Dampening Shock allowed for rear end. (existing shock absorber rules apply)
Pull Bar Extension tubes/bar to be steel only (no Aluminium)

(3) Pull bar and Dampening Shock must be mounted in between the diff mounting plates,
Pull Bar chassis mounting brackets must be double shear with a minimum of 5/8" high tensile mounting bolts.

(4) Pull Bar and Dampening Shock must be mounted forward of rear axle.

(5) Diff mounting plates for Pull Bar assembly and Dampening Shock are a controlled item for both the Quick Change Rear Ends and Borg Warner rear ends and are only available from AMCA Nationals or their nominated Dealers.

(6) Leaf spring mount behind driver to be enclosed at top of mount.

(7) Diff housing must be solidly and securely mounted to the rear leaf springs with the use of U bolts only. No other devices allowed.

NB: The only items permitted between diff tube spring pad and leaf spring is a standard or adjustable lowering block/s in steel or aluminium

7) SHOCK ABSORBERS

A) One non-adjustable, shock absorber per wheel only. All shocks must completely compress at all times.

B) No external or internal bumpers or stops. No Schrader valves or bladder type valves allowed.
(Exception is 1 x 1-inch bump stop on shock absorber shaft allowed on coil over units only)

C) Coil over spring and shock units are permitted on the front and on Mono Leaf Spring Rear Suspension only.

D) Gas Monotube shock absorbers are allowed. If using a gas monotube shock absorber it must comply to the following:
   (1) No Schrader valves, no caps, no bungs, no plugs are permitted.
   (2) Non-adjustable gas shocks absorbers only permitted.
   (3) Standard plain or threaded body shock absorbers only.
   (4) No gas pressure adjustments allowed.
   (5) Oil bleed screw is permitted on a gas shock absorber. Oil bleed screw must be located on the rod guide end of the shock absorber only.

8. REAR AXLE AND DIFFERENTAIL HOUSING

Option 1 – GMH or Borg Warner Manufacture

A) Rear axle housing may not be altered except to relocate spring saddles and to fit shock absorber and brake mounts.

B) It is not permitted to cut, modify, offset differential or change axle length in any manner.

C) Rear axles and housing must be of GMH or Borg Warner manufacture and removed from a sedan, station wagon or utility type vehicle only.

D) Diff ratios must be GMH or Borg Warner factory OEM ratios.

E) No machining of internal differential components or housing.

F) The only machining acceptable is for the fitment of wheel studs or for the purpose of changing wheel stud patterns.

G) Rear diff must be locked by means of either welding, mini spool or full spool, must be made of steel only.

H) Diff housing must be solidly secured to the rear springs with the use of U bolts only. No other devices allowed.

Option 2 – Quick Change Rear End

A) Quick Change Rear End must use steel Tubes. (no alloy, chrome molly etc)

B) Quick Change Rear End must use a 10” Ring Gear with a steel or Aluminium spool. Full Spool only.

C) Quick Change Rear End must use minimum 1.25” wide spur gears and bolt on rear cover. (no lightened gears)

D) Safety hubs allowed. (floater)

E) Solid steel axles and pinion (lower) shaft only. (no gun drilled shafts)

F) No torque dividing differentials, scalloped or lightened ring gears or cambered rear ends.

G) One-inch inspection hole required in housing. (Oil Filler hole is acceptable)

H) Any additional components must be steel except for lowering blocks, axle caps, uni joint caps, brake calliper bolt on mounts.

I) Hubs to be Holden or Ford stud pattern.

J) No Bird cages or torque control devices permitted.

K) Steel Brake rotors only. Wilwood rotors may be used on Quick Change Rear End only.

9. BRAKES

A) Operating brakes must be fitted to three wheels.
Right hand front calliper may be removed – Complete brake rotor must remain in position
Must be able to lock all three wheels at time of inspection.

B) A brake tap may be fitted to delete operation of the right-hand front brake if fitted.

C) **Front Brakes**
Option 1 - HQ-WB OEM brake callipers and rotors

Option 2 - The only aftermarket race type brake calliper permitted is a Wilwood Brake Calliper.
Wilwood brake calliper must bolt directly to the OEM HQ - WB front stub axle.
Flat washers or spacers are permitted to be used to aid in centralising the calliper to the OEM HQ - WB front brake rotor if required.
Adaptor plates or extra brackets are not permitted.

D) **Rear Brakes**
Option 1 - OEM Brake callipers and rotors from GMH Holden or Ford Motor Company

Option 2 - The only aftermarket race type brake calliper permitted on the rear of the car is a Wilwood Brake Calliper.
If a competitor chooses to run a Wilwood calliper on the rear of the car it must be of the same 3.5 inch lug mount as per the front calliper.

NB: Wilwood Brake Rotors are only permitted on Quick Change Rear End

E) Sports car/ exotic or special vehicle callipers/ discs not permitted.
No drilled, cross drilled, scalloped or slotted rotors allowed.

10. WHEELS AND TYRES

A) This class of vehicle will only be allowed one wheel size and one type of tyre.
The wheels will be 15" x 8" steel and the centres will be welded to the rim.
"Bolt in" centres are not permitted.

B) The only type of tyre permitted is the 84" x 8" x 15" diameter hard compound tyre approved for use by AMCA Nationals.
The tyre will bear the moulded AMCA Nationals logo on the tyre sidewall.

C) Recapping, grooving or cutting of tyre tread is not permitted.

D) ½" wheel studs to be fitted to all axles and hubs as a minimum. 5/8" Wheel Studs are permitted

E) It is permissible to weld an 8mm max diameter steel ring to the outside edge of the rim. All rim outer edges to be kept free from sharp edges.

F) If using mud covers, you may use a supporting ring type cover or a minimum 3 mounting plates welded to the rim. Self- tappers / tech screws not permitted.

* Please refer to individual track requirements regarding the mounting of wheel covers.

G) Mud Covers - 2mm maximum alloy covers or plastic covers only.

H) Bead Lock Rim is permitted on Right Rear wheel only. Steel construction only 15" x 8"
Maximum rim width is 8 inches including any beadlock

Weld on steel beadlock kits are permitted, however maximum rim size is 8 inches including beadlock.
Ie: If using beadlock kit then you will need to machine or cut down outer edge of rim to suit.

I) Tyres must protrude a minimum of 100mm outside of bodyline on the right-hand side of vehicle, Tyres on the left-hand side must be visible when sighting from front of vehicle.

J) Tyres may only be inflated with the use of compressed air only.

K) The buffing of tyres is allowed. Tyres may only be buffed with the use of a tyre grinding / sanding disc.

L) The use of any form of tyre softening agents is illegal.

11. FUEL AND FUEL TANK.

A) The only fuels permitted are Pump Petrol (Including E85 available at pump only), AV gas or Methanol fuel. No exotic unleaded or race blend fuels allowed.

B) Performance fuel additives of any kind are not permitted.

C) Approved race fuel cells permitted and recommended. Maximum capacity 120 litres.
Tanks may be constructed from 3mm aluminium or 2mm steel, limited to 70 litres capacity and must be mounted securely in the rear of the vehicle behind the roll cage and the rear fire wall.

D) Fuel tank to be mounted 250mm minimum distance from inside of rear bumper bar. All Cars built after 1/7/2014 measurement to be 330mm.

E) Electric fuel pumps must have automatic shut off (e.g. LPG safety switch) if engine stops.

F) Fuel pick-ups not to be mounted in bottom of tank. Tank must have a one-way valve in vent line.

G) All plastic fuel cells are to have an earth wire from the filler neck to the chassis.

12. ENGINE SPECIFICATIONS

The only 2 x engine options that can be fitted to this class of vehicle are:

OPTION – 1

General Motors Holden cast iron V8 known as the "253".
The engine must remain as per General Motors Holden Specifications.
The only modifications permitted to a 253 engine are the following items:

A) The standard 2 - barrel carburettor may be replaced by a Holley 350 or 500 cfm two-barrel carburettor.
The use of after-market metering blocks, e.g. those with external main jet adjusters are allowed.

B) Carburettor - choke housing must remain, venturis not to be reshaped. Annular dishchargers not permitted.

C) Maximum base plate opening 42.8mm. The only other modifications permitted is for the tuning or conversion to methanol or E85 Fuel

D) The carburettor must be fitted with external return springs, minimum of 2, anchored in separate locations.
1 x forward and 1 x backwards

E) Carburettor adapter and spacer for OEM 253 2 barrel manifolds must not exceed a combined height

of 45mm maximum including restrictor plate (if fitted) and gaskets.

F) The camshaft grind may be modified but must remain flat tappet. Lifters can be solid or hydraulic. Adjustable pushrods are permitted.

G) Conrods and Crankshaft must be OEM 253, and cannot be lightened other than to accommodate normal balancing procedures. Ie: no removal of material from main journal centre line to big end crank pin.

(1) Conrods maybe shot peened, resized, side clearance and after-market rod bolts permissible.

H) All 253 engines are to have a min 15mm inspection hole in top part of the sump above any sump baffles and oil level, Oil drain back fitting acceptable if it meets the requirement. Must be in an assessable position.

I) Cylinder heads - No after-market heads (e.g. Yella Terra or Brock). Standard OEM 253 cylinder heads only. The ONLY modifications permissible are –

(1) Valve springs and retainers may be replaced with stronger type.
Maximum outside diameter of spring 33mm. No tapered valve springs permitted.

(2) Valves may be renewed with standard after-market valves. Oversize stems permissible.
Valves may be refaced and back cut.
(a) Inlet valve part no 1911 or equivalent 1.765 head size.
(b) Exhaust valve part no 1910 or equivalent 1.490 head size

(3) Cylinder Head may be modified to assist oil drain back. Cylinder head must remain visually standard.

(4) Head gasket face may be machined for compression and inlet face for inlet manifold fitment only.
No match porting. Valve seat faces may be machined.

(5) No machining of valve throats deeper than 11mm from the floor of the combustion chamber.

(6) Rockers - Only OEM 253 rockers may be used. Lash caps permitted.

(7) Cylinder head maybe modified to fit ½' (.500") bronze guides and/or fitment of valve stem seals.

J) Standard distributor may be replaced with an aftermarket HEI type but must remain visually standard and contain ignition module in or on the distributor housing.

K) High volume mechanical fuel pumps permitted. Electric Fuel Pumps permitted.

L) Max bore size of 253 engine .060" = 3.690 oversize.

M) Piston to be flat top and no higher than cylinder block.

N) Cylinder block may be decked and modified in valley to assist oil drain back.

O) Head stud and main bearing stud kits allowed. No machining or alterations to engine block or bearing caps to accommodate fitment.

P) Eye browing of pistons permitted.

Q) The oil pump may be modified. Dry sump systems are not permitted. The sump - oil pan may be modified.

Inlet Manifold Options

The following Inlet Manifold options will apply to all OEM 253 powered AMCA Nationals:

Option 1- OEM 253 two-barrel inlet manifold. Inlet manifold throat holes to be no more than 42.80mm. AMCA restrictor plate optional.

Option 2 - Redline Performance Manifold (Part #12-114) 4bbl 253/308 manifold with Redline Performance adaptor plate (Part # 10-515AMCA). Both items can be purchased directly from Redline Auto Performance in Sydney Ph: 02 87238888.
These items are not to be modified in any manner

a) Part #10-515AMCA is the only adaptor plate allowed with the Redline Manifold.
The use of any other spacer block or adaptor plate is illegal.
b) Both inlet manifolds are to remain as per OEM spec. Gasket surfaces mating to cylinder head may be machined to accommodate cylinder head machining for higher compression. No other modifications or machining is permitted.

THE FOLLOWING ITEMS ARE NOT PERMITTED.

Porting and polishing, roller rockers, roller cams, roller cranks, high compression pistons, after market connecting rods, aftermarket crankshafts, stroking or de stroking, port-matching and electronic management systems of any description. No CDI or DSI ignitions or similar permitted. Any other modifications or parts not listed as permissible under engine specifications.

Option – 2

CT350 GM Crate Engine - factory sealed crate engine

A) The only Chevrolet 350 crate engine to be used is the Chevrolet Performance Parts (Formerly known as GM Performance Parts) Part #88869602, #19258602 or #88958602, also known as the CT350/350 Crate Engine.

B) The engine must use a maximum rev-limiting chip of 6000RPM.

C) Rebuilding, balancing, blue printing or any other alterations to the engine in an attempt to gain a performance advantage is NOT PERMITTED.

D) The engine and all its components must remain as per OEM, as manufactured by GM Performance.

E) The only distributor permitted is the HEI distributer supplied with the engine from GM Performance Part #1104067 or part # GM-93440806
No other distributers allowed.

F) The distributor vacuum and mechanical advance may be made inoperable if desired.
Distributor may be locked

G) MSD D.I.R.T Spec Soft Touch Rev Control Box must be used. The MSD D.I.R.T Spec soft touch rev control box, part number #87286 is the only option allowed.
The #87286 soft touch rev control box is specifically made for this engine and plugs directly into the distributor of the engine.

(1) MSD Rev control boxes must be mounted under the bonnet in clear view at all times. (not enclosed or placed behind the firewall) and easily removed if required.
Wiring harness from the control box to be clearly visible and able to be traced easily. Earth wire from control box to be visible and earthed in the engine bay or to the engine.
The RPM rev limiting chip must face up or out to either side, be in clear view at all times and be securely fastened (ie: taped in position).

(2) The rev control box and the chip must remain in working condition, prior to, during and after all AMCA events / races.

H) A crankshaft belt driven water pump mounted in the stock location must be used. (no electric or other style pumps permitted).

I) Electric or manual fuel pumps are permitted. Manual pumps are to be of the factory pushrod type, mounted in the stock location. (NO belt driven fuel pumps).

J) AMCA spec flywheel is the only flywheel permitted for use on this engine. These are available from AMCA Nationals.
AMCA controlled spec clutch is highly recommended and are available from AMCA Nationals.
Holden heavy duty 6 Cylinder clutch kit #RPM89 or RPM89-SC are the only other clutch kits permitted.
Clutch kit must remain OEM with no lightening or modifications to permitted. AMCA flywheel is machined to accept this clutch.

K) Engine fan is compulsory and is to be mounted to the belt driven water pump as per normal practice.

L) The only carburettor permitted on this engine is the Holley 2 Barrel 500CFM carburettor.
Please refer to existing AMCA engine rules for carburettor rules and specifications

M) The only carburettor adaptor plate permitted on this engine is the Redline 4bbl to 2bbl adaptor plate Part #10-515AMCA. (Only available direct from Redline Auto Performance on Ph: 02 87238888.)
Must remain OEM, modifications are strictly prohibited.

N) The only fuels permitted for this engine – please refer section 13 A) earlier in this rule book.

O) All engines must have intact and undamaged the factory GM Performance tamper proof bolts and or seals in the correct locations.
In the case of a repaired engine the AMCA Nationals approved seals must be in place.
Any AMCA Nationals engine seal numbers (from an engine repair) must be recorded in the race cars log book and on file at AMCA Nationals for identification purposes.

P) Only one 12 volt battery allowed for this engine. Maximum battery voltage must not measure more than 14.4 Volts. Step up transformers or any other devise designed to increase voltage is strictly prohibited.

Q) <u>Exhaust.</u>

(1) 4 into 1 Header pipes (extractors) only. Try - Ys not permitted.
Maximum specifications are : 1-3/4, can be a stepped header (e.g.: 1-5/8 to 1-3/4) 3-1/2 collector and 36 inches total length to end of collector.

(2) OEM cast exhaust manifolds permitted. Block hugger type headers are permitted.

R) Any competitor found to have tampered with, damaged or altered in any way the following items:
· Factory sealed bolts or AMCA Nationals engine seals.
· MSD rev limiter box or chip.
· GM Performance HEI Distributor.
Other than stated in these rules will be subject to an instant disqualification from all events for that race season, incur a minimum 12-month suspension and a min $2000.00 fine. Suspension will not commence until fine has been paid.

13. <u>ENGINE SETBACK AND OFFSET</u>

A) Engine setback to be measured from centre line of rear axle to the rear face of engine block.
Maximum engine set back 1710mm. (Ie: no less than 1710mm)

B) It is permitted to offset the engine to the left of vehicle centre line a maximum 75mm on right hand drive vehicles. Left hand drive vehicles may offset engine a maximum 50mm to the left side of vehicle.

14. <u>EXHAUST</u>

A) The exhaust system may be modified by the use of extractors but must be able to meet 95 DBA noise limits or local EPA/COUNCIL regulations. Please check with State Rep for this information.

NB: Individual track requirements for local council noise restrictions supersede AMCA Nationals noise level limit

15. COOLING SYSTEM

A) Radiator must be mounted in front of engine.
Cooling system to have 1 x lever pressure release radiator cap fitted.
HQ - WB sub frame may be relieved to help facilitate radiator fitment.

B) No electric water pumps.

16. TRANSMISSIONS

A) The only transmission permissible will be OEM automatics and manual gearboxes as listed below:
Holden 6 CYL or V8 three or four speed
Ford Borg - Warner three and four speed.
Ford single rail three and four speed.
Ford top loader three and 4 speed

B) Manual transmissions must be clutch operated (with the motor running and vehicles still in position, driver must be able to engage gear and move forward then backward). Internal gears and ratios not to be altered from OEM.

C) Steel tail shafts only.

D) Clutch pressure plate to remain as per OEM for 6CYL or V8. Clutch plate (disc) open and may be modified to suit gearbox input shaft.

E) Automatic transmissions must retain torque converter
Bypass transmissions (i.e. tap type operation) are not permitted.

F) A scatter shield of minimum 3mm steel or 5mm aluminium must be fitted in the area of the driver's feet and lower legs.

G) Tail shaft loops of a minimum 50mm x 5mm steel or 25mm OD steel tube to be fitted no more than 150mm to rear of front universal joint.

H) AMCA Nationals spec flywheel available and recommended for 253 engines, AMCA Spec Flywheel only for CT350 engines. Contact AMCA Nationals to purchase

I) Holden STD flywheel can be used on 253 Engines
Holden flywheel may not be drilled or excessively lightened, minimum Holden flywheel weight 15KG.

J) Driver responsible for the removal of flywheel and clutch for inspection.

K) No quick gear change devices allowed.

17. SAFETY/SEAT/SEAT BELTS

A) All safety gear is to meet current SFI or FIA minimum standards.
(1) Approved 1piece race suit only, minimum standard.
(2) Approved fireproof underwear compulsory. Balaclava to be worn and/or approved helmet skirt.
(3) Approved gloves and footwear to be worn.
(4) Approved helmet only, to meet current AS standards or SNELL standards. Full face helmet mandatory.
(5) You must use either a neck brace or an approved helmet restraint system or both.

B) Full window net is mandatory. Must be quick release, detachable from top.

C) Minimum SFI 16.1 standard 5 or 6 point restraint are mandatory. If using a Hans device you may use SFI 16.5 restraint.
2 year rule applies to all belts. Restraint systems must use a lever/ latch style buckle and cannot be the

plastic camlock buckle.

D) Only approved type racing harness must be fitted, using a minimum of four major belts and four mounting points, plus one or two anti-submarine / crutch straps.
Seat belt mounting point minimum 3.2mm steel plate and must be gusseted where required.

E) High back aluminium racing seats only. Full Containment seat (aluminium) is recommended
Minimum of four mounting points. Rear of seat to be incorporated in mounting.
Minimum 3/8 high tensile steel bolts.
Seat mount washers minimum OD 32mm.

F) Each pit crew shall have in its possession, in working order, in its pit during a race meeting a fire extinguisher with a minimum capacity of 2KG. Dry chemical is the most effective.

G) Roof access hatch permissible contact AMCA Nationals for details.

H) Roll cage padding to be installed to roll cage bar work within 300mm of drivers head forward of the seat.

I) The use of raceceivers one-way communicators where applicable is mandatory.

18. SWITCHES AND FUEL TAP

A) All vehicles must be fitted with a battery isolation switch that is within reach of the driver and/or track officials and must be painted in a contrasting colour to vehicle. It must be clearly marked on/off.

B) Battery location to be marked on external body work with solid blue triangle or contrasting colour 75mm x 75mm.

C) All interior switches are to be clearly marked as to their purpose and on/off positions will be clearly marked.

D) Fuel supply tap will be painted in a contrasting colour and be clearly marked on/off.

19. SIGN WRITING

A) State Prefix on car to be as follows:
Victoria – V, New Sth Wales – N, Tasmania – T, Queensland – Q, Northern Territory – NT,
Sth Australia – SA, Western Australia – WA.
Minimum Size for prefix 100mm x 75mm high

B) Minimum number size 450mm high x 400mm wide.
Numbers must be placed on both sides of vehicle and roof.

C) Drivers name to be clearly visible on roof, minimum height 80mm.

D) Roof plate numbers may be optional to use when using transponders. Roof plate numbers must be used at all other times if directed by track officials.
All cars are to carry roof plate numbers with them at all times.
Roof plate numbers must have a white number on a black background.
Roof plate to measure 300 x 250 mm and must have your state prefix on it. E.g. Vic 10 becomes V10.

E) All cars to be presented in a clean and professional manner.
Any car not presented clean and with clear professional signwriting may be removed from the event.

F) All sign writing should be a contrasting colour to the general paint scheme of the car so that it is readable under all conditions.

G) Car numbers are to be displayed and clearly visible on the rear of each vehicle, minimum size of number

150mm x 150mm and to carry state prefix as per roof number.

F) Tail shaft to be painted white or bright yellow with state prefix and car number in contrasting colour.

G) All lead ballast to be painted white and have State prefix and number affixed.

20. AMCA NATIONALS reserves the right to inspect any engine at any time.

21. ENGINE PROTEST

A) Within 5 minutes after a feature/final has been completed a driver can pay $500.00 to protest any 253 engine that finishes in the top four positions. The protesting driver will also be subject to an additional fee of $100.00 per hour per person to cover the costs of the AMCA Official and required expert person to be present for inspection.

(1) Under this test the following may be inspected:
Inlet Manifold and cylinder head removed at which time valve sizes, combustion chambers and inlet & exhaust parts may be inspected. Bore and stroke may also be checked.

(2) The $500.00 protest fee will be returned to protester if the engine is found to be illegal. If the engine is found to be legal then the $500.00 protest fee will be paid to the car being protested.
An illegal engine carries a minimum 6 months suspension for car and driver.

22. AMCA Fabricated Front Clip Repairs.

Repairs to Fabricated front end are classified into 2 areas:

A) Minor Repairs:

(1) Any repairs that do not involve the replacing of the side rails, front horns or cross member.
(2) Cutting out and replacing front spreader / intrusion bar is permitted by owner / competitor.

B) Major Repairs:

(1) It is deemed to be a major repair if the side rails, front horns or crossmember need replacing. These items are critical to the ongoing compliance and consistency of the front end. It is illegal to fabricate your own or have these components fabricated for you.

(2) To guarantee the consistency and compliance of all controlled fabricated items, these items must be purchased from AMCA Nationals Pty Ltd or their nominated dealer.

Any competitor who is found to be in breach of these repair specifications will incur an immediate 12 month suspension

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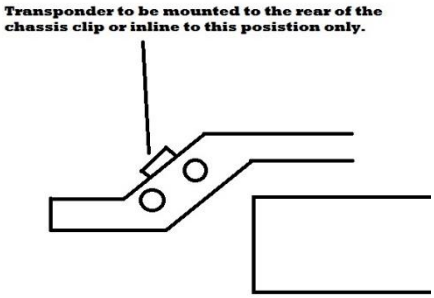
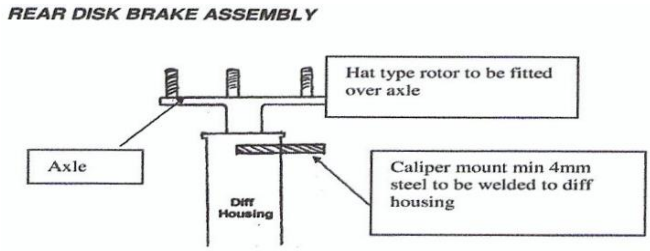
AMCA NATIONALS 253 FLYWHEELS $280.00
AMCA NATIONALS CT602 FLYHEELS $395.00
AMCA NATIONALS CT602 Clutch Kits $485.00
For all enquiries please contact:
Michael Reidy : 0430 540379
amcanationals@gmail.com

All transponders must be fitted in the designated area shown below.
Transponder Location:
(a) 160mm from short fold in clip.
(b) 565mm measured from centre of front axle to transponder.



Vertical bar on fuel protection bar.
Top and or Bottom Bars.

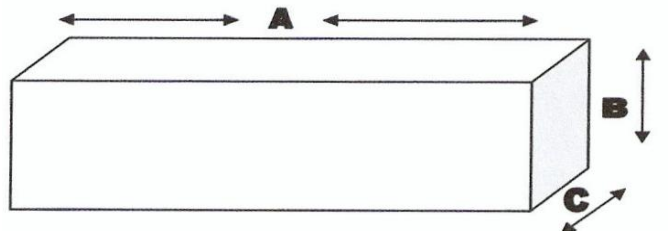


Rear Spoiler specifications:

A. No wider than body
B. Max Height 250mm
C, Max Length 400mm

NOTE - Rear spoiler not to extend past nerf bar. Air not permitted to pass under spoiler.

REAR SPOILER TO FIT INSIDE DIMENSIONS SHOWN.
NO EXCEPTIONS



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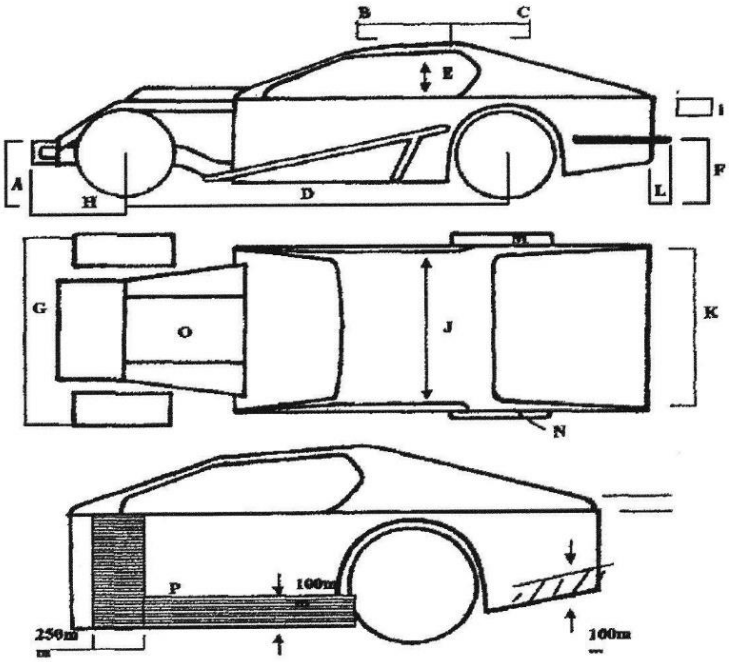

SPECIFICATIONS

A	Max Height 720mm
B	Max Rake 100mm
C	Max 50mm
D	Max Wheel Base 2743mm (108") Min 2642mm (104")
E	Min Window Height 300mm
F	Max Height 620mm to give protection from 520mm
G	Max Track 1982mm
H	Max Length 875mm
I	Max Body Rake 75mm
J	Max width 1250mm Min Width 1100mm
K	Max Body Width 1630 Min Body Width 1500
L	Max Length 220mm (measured from rear of decking to Outside of rear bar)
M	Min tyre 100mm outside of body
N	Left Tyre outside of body and side nerf's
O	Shaded area no longer applicable for AMCA sponsors decals
Q	Max drop of 50mm
R	Max Height 1080mm