



Specifications

DIVISION 1

Fender Benders

These specifications will remain in force until September 2022
with no alterations except for SAFETY items.

September 2019

HARDNOSE FENDER BENDERS – CONTACT PERMITTED

Notwithstanding anything contained in these specifications or any other supplementary regulations that have been approved by the Restricted Sedan Association, the SCRUTINEER shall have the right to exclude any vehicle if it is not track worthy, fails to meet specifications in relation to SAFETY or performance advantage, or could become a danger to the other competitors or the public or is not constructed in an acceptable manner.

The Scrutineer will make a full report in the vehicle's logbook, and all defects noted **MUST** be rectified before the car is presented for scrutineering again or the vehicle may be excluded from the event.

Any panel, part or component not specifically mentioned to be modified **MUST** remain standard as per production base model.

These specifications will remain in force until September 2022 with no alterations except for SAFETY items.

This book supersedes all others and no reference is to be taken from any previous books regardless of their content.

The contents of this book may **NOT** be copied or reproduced in any way without written authority of Racing Sedans Australia Inc.

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1. GENERAL

Prime consideration must be given where any doubt exists, to safety of Drivers, Crew, Officials and Spectators. All race cars are subject to engine and general measurement before and after any race at the discretion of the Chief Steward, Technical Officer or Disputes Committee.

Any question of legality of a race car or the eligibility of a race Driver, must be settled before the commencement of a race meeting. It is recommended, wherever possible, that all race cars under construction, be inspected by the licenced Club Scrutineer before painting.

It is the responsibility of all Drivers to ensure their race cars have all sharp protrusions removed when presenting them for any race. The Scrutineer may at any time, direct a Driver to remove sharp protrusions, and this must be carried out before entering the track.

Race cars must maintain a neat and presentable appearance, so as not to bring disgrace to the Association. All body panels, bumpers, exhaust systems etc., must be securely mounted. Any Driver who continually loses components on the racetrack will be liable to a fine and/or suspension. Any Driver found with debris in the cabin, boot or pockets etc., (i.e.; broken glass, bolts, tools etc.) will be refused race clearance to enter the track until the offending items are removed.

Race cars, when presented for scrutineering, must be in full race condition – i.e.; tyres to be used for racing, battery secured, helmet and full race clothing

2. DRIVERS RACING APPAREL

Note: These are the safety standards for racing apparel which may be subject to change at any time. Refer to your local club and/or Speedway Australia for current up to date regulations and notification of any changes.

RACE SUITS

Race Suit must be a one (1) piece suit and comply with either:

- SFI 3.2A/1 or above (i.e. 3.2 A/5)
- FIA 8856-2000 or a higher standard of apparel.

GLOVES/BOOTS/UNDERWEAR/BALACLAVA

Must comply with either:

- SFI3.3
- FIA 8856-2000

Note: Full underwear and balaclava are compulsory REGARDLESS of helmet or race suit type. Must comply with SFI 3.3 or FIA 8856-2000

NECK BRACE (HORSE COLLAR)/ HEAD & NECK RESTRAINT

A neck brace (or horse collar) must be worn if the driver chooses not to wear a head and neck restraint. Must comply with SFI 3.3 and be labelled.

OR

Head and Neck Restraint approved by either:

- SFI38.1
- FIA approved

3. HELMETS

Note: This safety standard may be subject to change at any time. Refer to your local club and/or Speedway Australia for current up to date regulations and notification of any changes.

All drivers must wear a full faced helmet with a visor that must be closed whilst competing (no goggles) in all divisions. No Open Faced or Modular (flip- up) helmets allowed. All helmets must comply with either:

- Snell SA-2015
- Snell SA-2010
- FIA 8858-2010
- FIA 8859-2015
- FIA 8860-2010
- AS1698 (AS/NZS Standard 1698:2006) or BS 6658-85 Type A/FR- no older than 5 years from the manufacturer date printed in/on helmet (please check the manufacturer date prior to purchase).

However, if a helmet is misused, neglected or damaged, it may be rejected and impounded by the Chief Steward or Technical Committee at any time and rendered unserviceable before being returned.

CHIN CUPS ARE NOT PERMITTED

Any glasses worn are to be of non-splinterable material.

4. IDENTIFICATION NUMBERS

All race cars must carry the correct identification number as issued by their club. The numbers must be displayed on **BOTH** front doors **ONLY**. Numbers are to be 45cm (18in) high by 7cm (3in) wide in a contrasting colour and easily read by Officials.

Drivers will use upright roof plate for numbers of body thickness material – 300mm x 300mm in size. Drivers name is to be placed above the driver's door minimum height 7cm. Current registration decal must be affixed to the roll cage within easy view.

5. SEAT BELTS

Note: This safety standard may be subject to change at any time. Refer to your local club and/or Speedway Australia for current up to date regulations and notification of any changes.

All race cars must be fitted with a 5 or 6 mounting point racing harness of the lever latch style, which must be certified by an authoritative body (such as SFI) and must conform to all of their policies including fitment and care/maintenance. Any worn, frayed, rotten or weld spotted holed seat belts are not acceptable, and race cars will not be allowed to enter the track until the seat belts are replaced.

Seat belts must be no older than 2 years from the date of manufacture. Certification labels may indicate either the date of manufacture or the expiry of the 2-year period.

Belts must be a minimum width of 75mm. Crotch strap may be 50mm. Shoulder straps may be 50mm across the shoulder area (must be 75mm at each end) only if a Hans device (or similar) is used.

Shoulder belts must have separate mounting points and adjusters.

All seat belts must be mounted in such a manner to allow their removal between race meetings or when working on the car.

6. SEATS

A purpose built, one-piece steel or aluminium bucket type seat head rest must be used. All seats must have ample padding with the cover securely attached. The seat must be mounted directly to the roll cage material and/or 50mm x 50mm x 3mm angle iron or stronger.

All cut-outs for seat belts to be suitably grommeted. NO sharp protrusions allowed. Seats must be suitably supported by a minimum of 50mm backing plate or washers (to prevent bolts pulling through seat). A minimum of 6 x 8mm bolts must be used (4 in base + 2 in back). All seat bolts must be of cup head design.

7. SEAT BELT MOUNTINGS

Because of the difference in competition vehicles and the size of drivers, a standard method of six impractical. Good judgement and common sense are needed. The lap belt should be positioned so as it rides across the solid pelvic area and not in the soft stomach area or down the thigh. Seats belts must be mounted to the roll cage.

Mounting brackets must be welded to the roll cage or roll cage cross braces only. Mountings to be equivalent or stronger than the roll cage material or 50mm x 50mm x 3mm angle iron. Any race car found with bolts through the seat webbing will be immediately given an order to replace their seat belts. Rear anchorage must be mounted so to prevent movement sideways by belts. Scrutineers may require the fitting of a rear harness loop.

Seat belt mounting brackets (anchor points) must be on roll cage and sub frame or substantial bar work, not on sheet metal.

8. WINDOW NETS

All race cars must be fitted with a propriety type window net from a race wear manufacturer or store that sells race wear. NO steel window nets allowed. Window net should, as near as practicable, cover the driver's side window opening. NO triangular window nets will be permitted. NO ocky straps permitted.

Maximum size of holes to be 75mm x 75mm. Mounting points are to be to the Scrutineers satisfaction. Window nets must be mounted using brackets welded to the roll cage and mounted so that it cannot be pushed outwards.

The purpose of a window net is to stop heads and arms coming outside of the car in an accident or roll-over. Window net must be easy to remove in case of an accident, all window net mounting brackets to remain in window and door frames

9. BATTERY

Battery must be securely fastened in a steel frame in the engine bay or mounted in a steel frame secured to the roll cage in the cabin area. NO PLASTIC BRIDGES.

Battery must have rubber covering the top to prevent acid spilling in the event of a roll-over. Rubber grommets must be fitted where battery cable passes through metal firewalls. A battery triangle is to be placed on the car body to show battery location.

10. STARTER MOTOR

At the commencement of the meeting, race cars must be capable of starting with the starter motor.

11. MIRRORS

Standard type interior car mirrors only permitted. To be fitted in the centre of the roll cage. MIRRORS ARE OPTIONAL.

12. ELECTRICAL WIRING

All switches are to be grouped together and clearly marked ON/OFF within easy reach of the Driver with seat belts fastened. If model comes with an electric fuel pump, it must be connected to the ignition ON/OFF switch.

A "KILL SWITCH" must be fitted outside the windscreen in the centre of the cowl panel or on the front of the roll cage windscreen centre pipe to control

all electrical circuits and must be clearly marked ON/OFF in a contrasting and distinctive colour.

Dipper switched may be used, and it is highly recommended that a “FAIRY LIGHT” be used to tell when power is ON/OFF. Electrical wiring must be suitable grommets where it passes through metal firewalls etc., and wires should be taped to prevent chaffing.

13. CAR BODIES

NO V8 or full chassis cars or convertibles permitted. NO panel vans or utilities with wooden tray floors permitted. Body of the vehicle must be in sound condition. All glass, exterior mirrors, grilles, door mechanisms, ornamentation, bull bars, helper springs and all flammable material must be completely removed together with manufacturer’s fuel tank, unless the top is cut out.

Sedans, station wagons and utilities permitted up to and including: Fords Cortina’s, XA, XB, XC, XD, XE, XF, EA, EB – Holden’s Torana’s, HQ, HJ, HX, HZ, Commodore up to VN, VP, Centuras and Valiant’s up to and including 1981 models. All models up to 1998 – Ford EL – EF and Holden VR - VS.

Doors, bonnets and lids may have inner skins removed. The boot floor may be removed to enable room to straighten rear guards. Wheel arched front and rear remain intact. Tops of doors may be cut off. DRIVER’S DOOR MUST NOT BE CUT BELOW ORIGINAL HEIGHT.

Engine bay and inner guard must remain intact. Instrument panel, gauges and lights allowed inside vehicle ONLY and must be standard car size. Doors must be welded shut. In case of cutaway bonnets, they must secure at the four (4) corners with pins and clips. Hinged bonnets must be secured at both corners with pins and clips.

If plated, underpins fitted, maximum 100mm x 100mm must be welded or bolted. If bolted, must have spot welds on nuts. Hinges must be standard for vehicle. Welded boot lid must be only welded to the bend on the back guard, just above the taillights at rear of vehicle. Boots must have pins and clips.

Light and body holes may be filled in with 1.6mm sheet steel (maximum) body metal. A protective mesh grille must be fitted to the driver's side of the windscreen. Mesh to be a maximum 5mm thick x 50mm x 50mm. A 10mm flat bar to be welded down centre windscreen driver's side.

NO fibre glass panels permitted. Vehicle must be the same dimension and appearance as per model. NO ballast permitted. No tech screw or self-tappers to be used in the construction of the vehicle. Pop rivets are not to be used on exterior of vehicle. All plates are to be welded or at least spot or tack welded.

14. BUMPER BARS

Bumper bars are compulsory and are not to be reinforced but must stay as close as possible to original position. The length and width of original vehicle not to be exceeded. NO EXTERNAL BAR WORK.

Bumpers are to be welded to body at ends and spot welds along top of bumper to car body. Any car fitted with tow bar must only be type of "under bumper bar fittings" and must not extend to rear of diff.

Vehicles manufactured with plastic front and rear bumper bars are permitted to run with these.

15. FIREWALL

Drivers must be isolated from mechanical, fuel, electrical and exhaust components by a firewall – 1.6mm body thickness. Holes in firewall and front floor section must be filled with 1.6mm metal sheet, secured with bolts, pop rivets or welded.

16. FUEL

Petrol from bowsers only. Unleaded pumped fuel only. **NO ADDITIVES ARE PERMITTED**

17. EXHAUST SYSTEM

Extractors are permitted. Exhaust pipe size allowed is 2 ½ inch. Car must have standard engine pipe which must run at least to behind seat area. Muffler (hot dog acceptable), must be welded to the engine pipe and “U” bolted to floor of vehicle with “U” bolt welded to hot dog or muffler. Fumes to be directed away from the driver, tyres and fuel tank. Cars must comply with track noise pollution specifications (95dba).

18. RADIATORS

Maximum of two (2) radiators permitted. Radiators may be mounted inside the cabin area provided they are mounted as low as possible to the rear of the vehicle. The top tank must protrude above parcel tray.

The radiator must be isolated from the driver by suitable means and the top, bottom and/or side tanks must be suitably shielded to prevent injury to the driver in the event of a tank or cap blowing.

Pipes leading to the radiator must be steel, aluminium or copper. NO POLY PIPE or REINFORCED PRESSURE HOSE PERMITTED. Pipes are to securely be fastened inside roll cage area in such a manner that they cannot be flattened or punctured in the event of a collision.

All internal pipes and radiator hoses from front of firewall to the tank of radiators MUST be shielded to prevent injury from steam in case of pipes, hoses or radiator failing. Hoses are to be as short as possible, and radiator outlet pipes must face rear of vehicle. Approved hose clamps must be used and there are to be no joins in front of the radiator between it and the firewall. Radiator mounted in the cabin area must have overflow hose going through the floor. If used, overflow bottles are to be a maximum capacity of 2 litres. NO OVERFLOW BOTTLE IS TO BE MOUNTED INSIDE THE CABIN AREA.

Fans are optional – plastic or steel. Steel blade fans must have a shroud or suitable guard. Utilities with rear mounted radiators must add additional

shields around radiator to ensure other drivers and other persons are protected in the event of a cooling or radiator failure.

It is compulsory that all cars must have a pressure release cap fitted to all radiators to release pressure before loosening or removing radiator cap.

If radiators are in the engine bay they must be in the original position. NO cutting out of body to make it fit.

OPTIONAL – reinforcement of front rails in front of radiator 5mm x 300mm long, no wider than 50mm of plate, pipe or angle iron welded on top of inside of front rail. NOT TO BE GUSSETED.

19. FUEL TANKS

Vehicle manufactured fuel tanks are not permitted. Suitable manufactured fuel tanks of Australian Standard with a minimum of 16g steel. Maximum capacity of 26 litres.

Fuel tanks must be mounted in an upright position. Tanks are to centrally be located in the boot area as far back as possible. Tanks must be isolated from drivers by a steel firewall. Tank to mounted in a cradle with rubber buffer on all contact surfaces. Tanks must be securely fastened.

Boot lid must have no holes. Boot and fuel tank covers, including wagons and utilities must be able to be opened for scrutineering and inspection of the fuel tank area. Area beneath the fuel tank must have adequate ventilation in the event of spillage during refuelling. Filler cap must have a tight seal.

A breather pig tail pipe with three (3) curls is to be fitted to fuel tank and passed through the boot floor. Pick up and breather pipes are to be soldered or braised into fuel tank or a one-way valve.

Fuel lines must be first grade fuel line or original system securely fastened. Screw clamps only are to be used on fuel line connections.

All fuel lines and electrical wiring must be separated and not taped together and must be fitted with grommets when passing through metal firewall etc. and must be taped and secure where chaffing can occur.

Fuel lines are permissible through the cab of the vehicle.

20. ROLL CAGE

(A) Definition of material:

- CHS circular hollow section
- RHS rectangular hollow section
- WT wall thickness
- ID inside diameter
- OD outside diameter
- Body Metal 16g (1.6mm)

All material sizes are nominal minimum unless a maximum is stated.

All welds must be of a professional standard – free of slag.

All material must be of good quality.

NO butt welds are permitted on any pipes in construction of race car.

Bolts are not to be used in construction.

(B) The vehicle must be fitted with a full roll cage. The roll cage to be constructed of section black or steam pipe. NO galvanised pipe to be used anywhere in the vehicle. Minimum ID 32mm, with a minimum WT of design. Where crucifix meets in centre a 150mm x 150mm plate or gussets of equal size to be welded to crucifix.... minimum thickness 3.2mm.

Optional bar work may be fitted front and rear of roll cage but must conform to the specification below.

Gussets are to be maximum 125mm. All roll cages to have one (1) piece main hoop. A steel plate must be fitted to the driver's door, welded to the roll cage, cover full door and be a minimum of 5mm thick. Anti-protrusion bar work or NASCAR bar works are allowed. These bars must be covered by 3mm plate.

(C) OPTIONAL NASCAR bar work – down bars 150mm to 225mm apart and (2) crossbars. No plate permitted on passenger door.

(D) A full head protection plate of 3mm minimum thick steel plate must extend from rear roll cage to top windscreen bar and from driver's side outer roof bar to centre roof bar and must be welded to roll cage. When sitting and belted in seat, there must be a minimum of 50mm clearance between helmet and head plate.

(E) All cars to be fitted with a 3mm steel plate to go under driver's seat. It must go from centre bar of roll cage to door plate and from rear of roll cage to finish at least 225mm in front of seat. If seat is mounted to floor plate, plate to be fully welded.

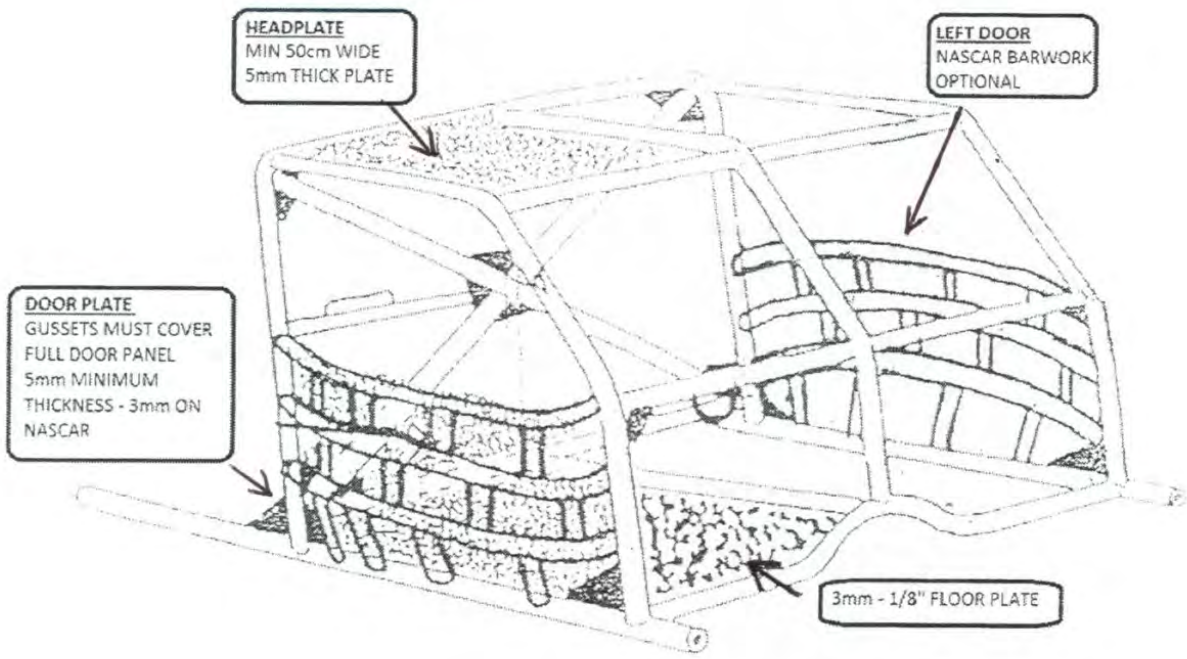
The roll cage must be bolted to the floor at four (4) points. All head plates, door plates and floor must be fully welded (100%) – 48mm maximum OD round pipe may be used inside sub frame lines. Outside these maximum 32mm WT may be used.

(F) Front push bar must finish as close as possible to the radiator, 25mm left hand side and 50mm right hand side. Front push bars to be gusseted both sides.

(G) Rear push bars joining back of roll cage to angled away from the driver and no higher than 300mm from floor, both sides must have gussets. All front and rear bar work which has been cut, must have at least 150mm outside sleeve. Under no circumstances is there to be any butt or sleeved welds in the main roll cage. No angle iron in car except fuel tank, seat or radiator support 30mm, also front sub frame support 50mm x 50mm x 5mm.

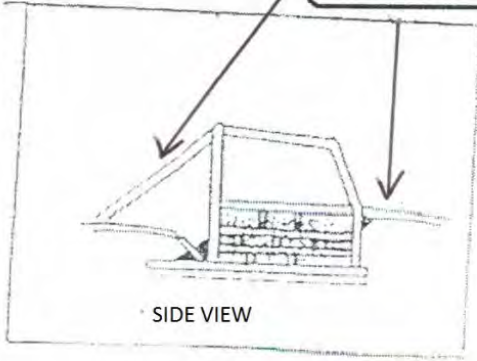
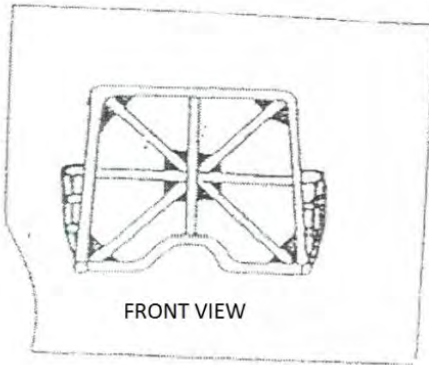
All welding to 100% where possible. Roll cage as diagram. NO OPTIONAL BAR WORK PERMITTED UNLESS STATED.

50mm x 6mm flat plate may be used along sub frame at front but can only be 9 inches in length. QUARTER WINDOW BAR COMPULSORY ON DRIVER'S SIDE. Front grille is to be catwalk mesh between middle front bars or body thickness steel plate.



ROLL CAGE PIPE
MUST BE...
38mm OUTSIDE DIAMETER - 48mm
MAXIMUM
MINIMUM WALL THICKNESS - 3mm

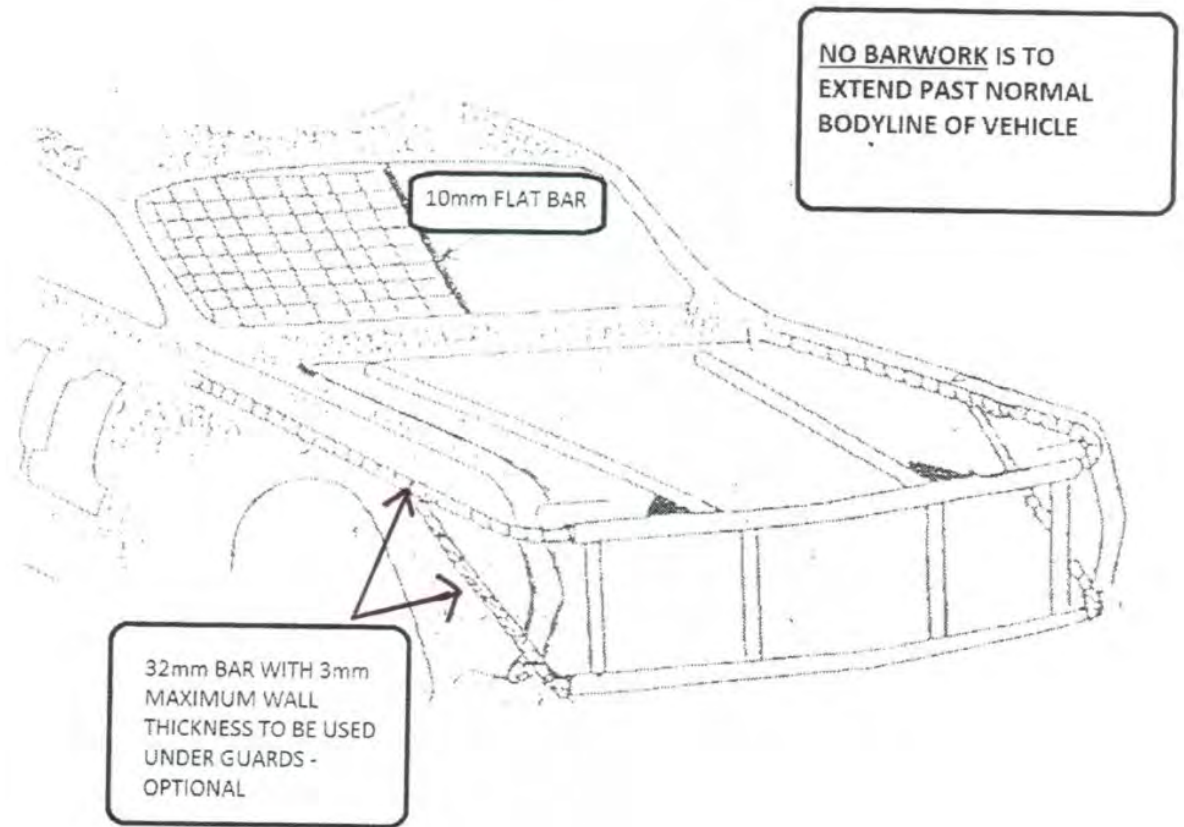
NOTE:
NASCAR DOOR BARS AND FRONT
AND REAR BARWORK OPTIONAL



ALL PIPE USED IN ROLL CAGE MUST
BE BLACK PIPE OR STEAM PIPE - NO
GALVANISED PIPE TO BE USED
ANYWHERE



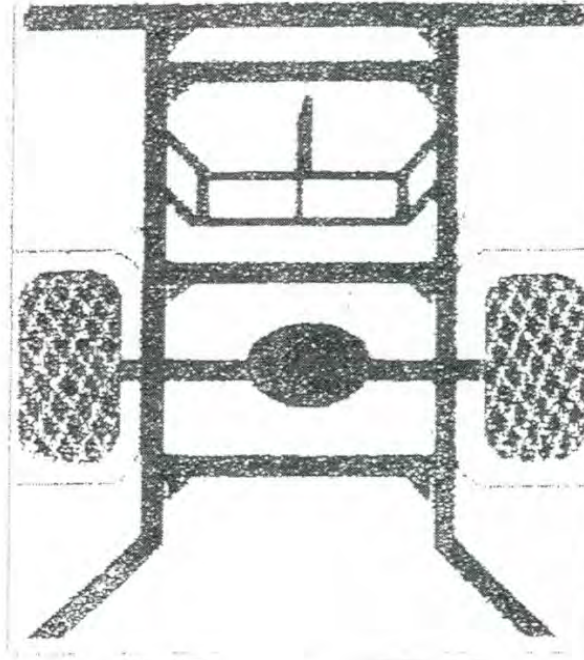
OPTIONAL BARWORK REGULATIONS



STANDARD REAR BARWORK

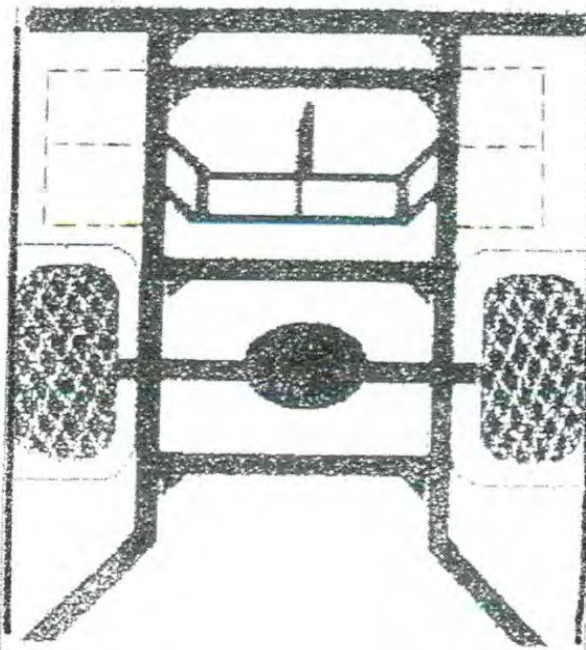
MAXIMUM 48mm
3mm WALL THICKNESS

NOTE:
GUSSETS MUST BE
WELDED INTO ALL
CORNERS OF THE FUEL
TANK CRADLE



REAR BARWORK - OPTION 1

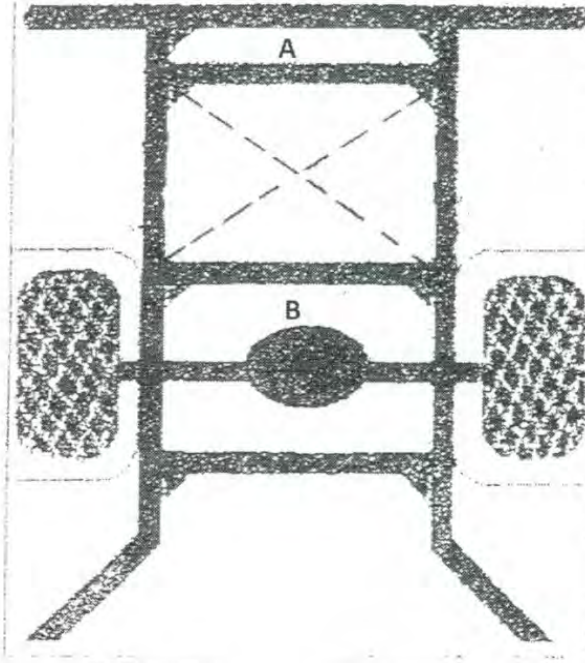
OPTIONAL BARWORK
MAXIMUM 32mm OR 1
1/4 OUTER DIAMATER -
3mm WALL THICKNESS



REAR BARWORK - OPTION 2

CRUCIFIX BARS ARE
ALLOWED A and B

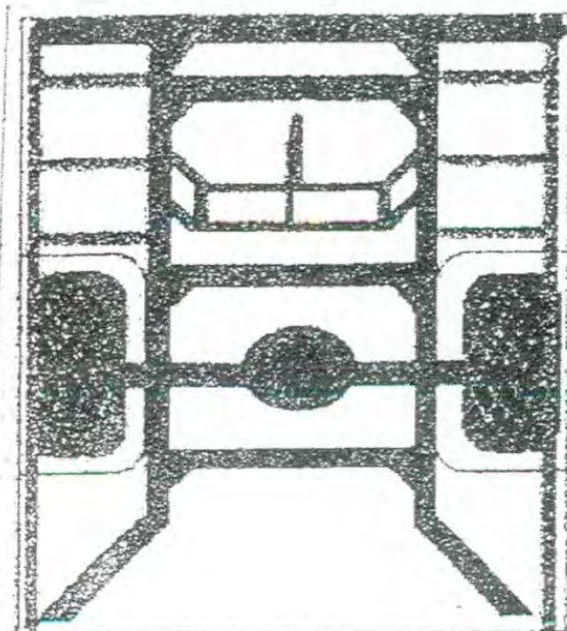
OPTIONAL BARWORK
MAXIMUM 32mm OR 1
1/4 OUTER DIAMETER -
3mm WALL THICKNESS



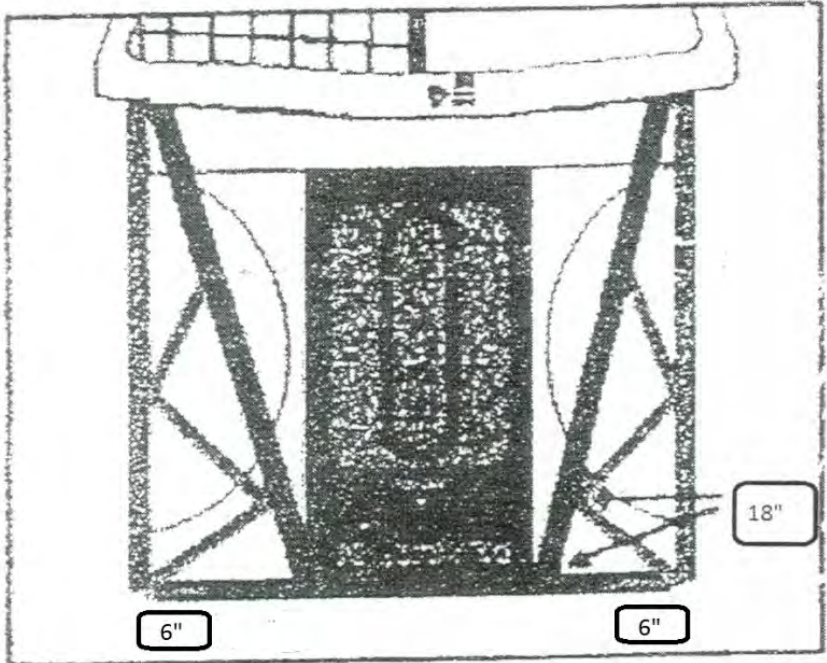
REAR BARWORK - OPTION 3

RUNS IN OVER
WHEELARCH AND JOINS
NASCAR BARWORK

IF NO NASCAR BARWORK,
CAN RUN STRAIGHT
THROUGH TO FRONT OF
CAR



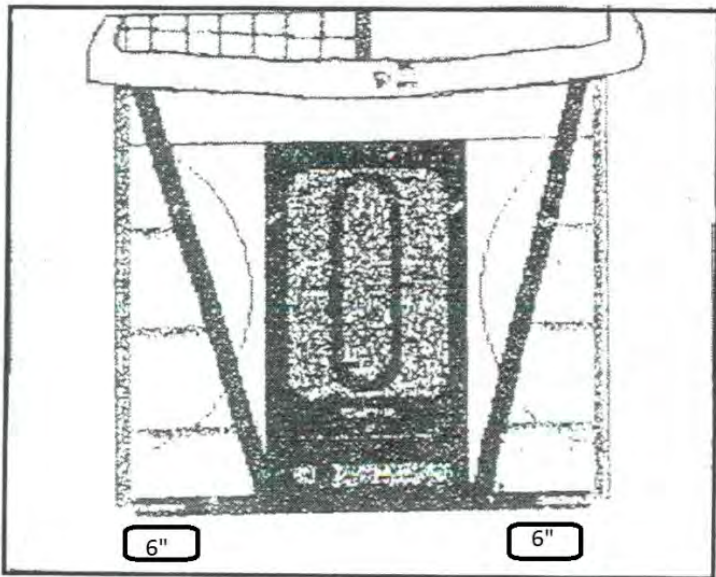
FRONT BARWORK - OPTION 1



MAXIMUM 48mm
3mm WALL THICKNESS

OPTIONAL BARWORK
MAXIMUM 32mm
3mm WALL THICKNESS

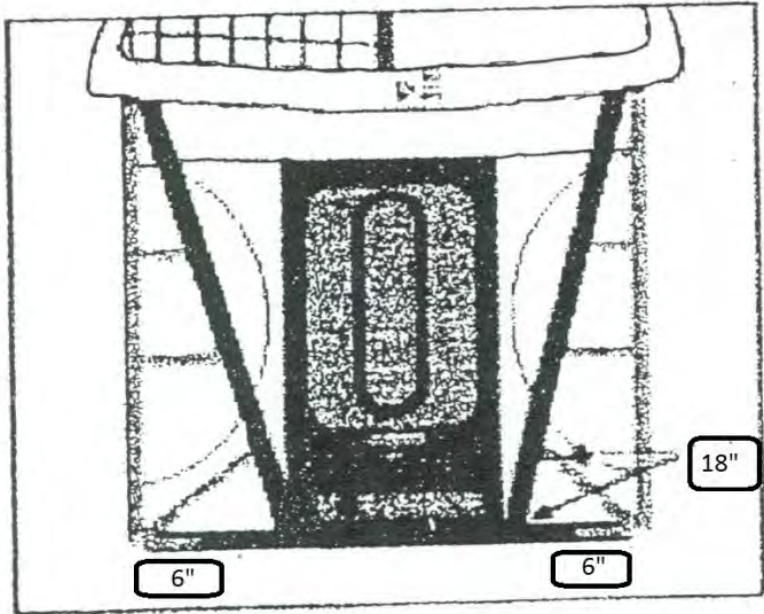
FRONT BARWORK - OPTION 2



MAXIMUM 48mm
3mm WALL THICKNESS

OPTIONAL BARWORK
MAXIMUM 32mm OR 1 1/4
OUTER DIAMATER - 3mm
WALL THICKNESS

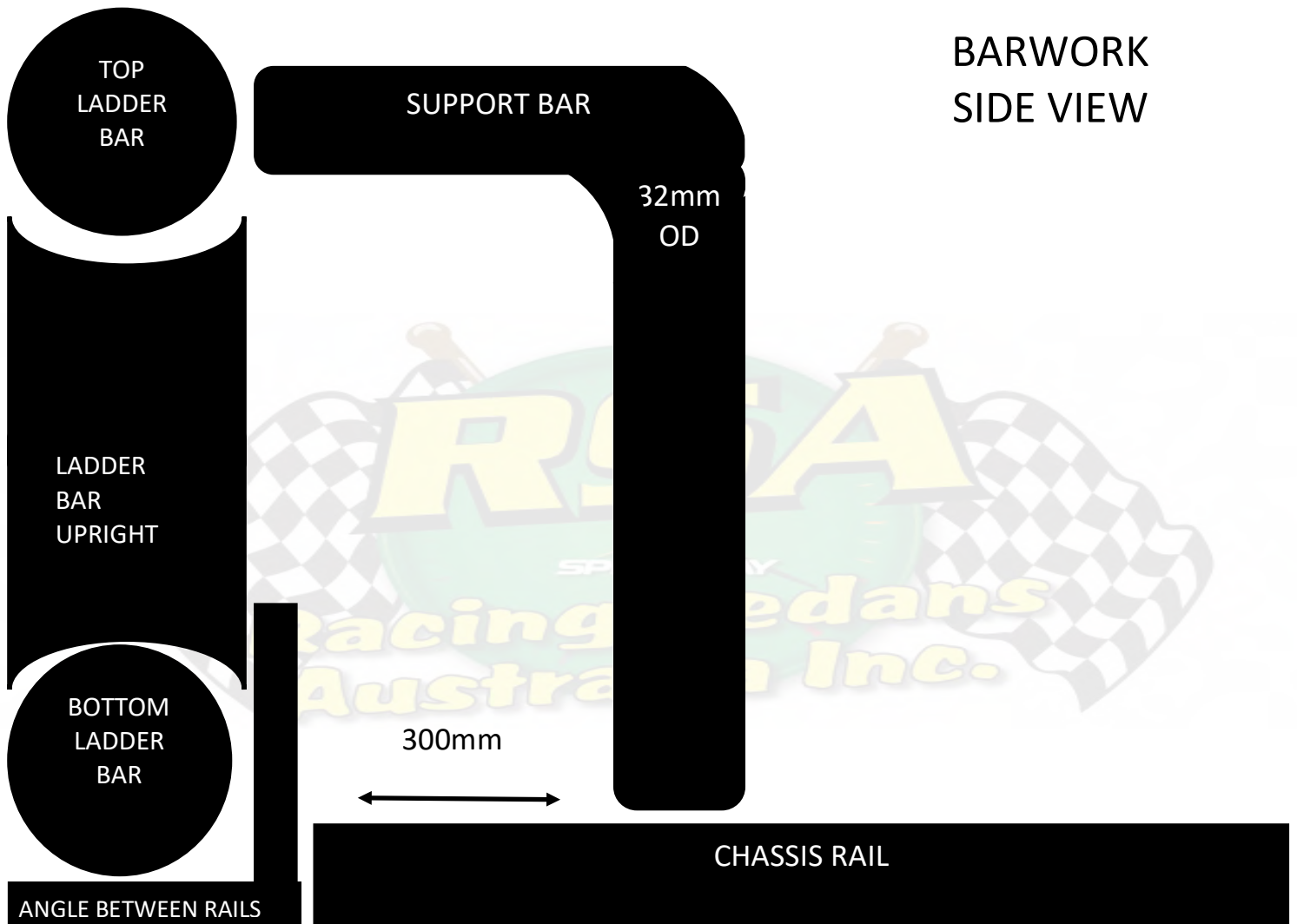
FRONT BARWORK - OPTION 3



MAXIMUM 48mm
3mm WALL THICKNESS

OPTIONAL BARWORK
MAXIMUM 32mm OR 1 1/4
OUTER DIAMATER - 3mm
WALL THICKNESS

NEW OPTIONAL BARWORK PASSED IN 2017 BY RSA



21. SCATTERSHIELD

An optional 3mm scatter shield to cover upper 180 degrees of bell housing securely attached to be fitted to protect driver from a clutch explosion.

22. SUSPENSION

Front and rear suspension can have heavy duty springs & shock absorbers. No coil-over, air filled, or oversized shocks allowed. Standard height restrictions for all models.

All cars which have rear coil springs must have a piece of chain or bracket to secure them.

Panhard bar chassis mounting may be strengthened but must remain in the original position.

23. WHEELS/TYRES

Wide wheels are not to go beyond 250mm (10"). Wheel rims must cover backing plate on all four (4) wheels. 25mm (1") extra diameter each way of standard for model rims allowed. Oversize wheel hubs permitted. Wheel weights are not permitted.

24. BRAKES

Race cars must be fitted with effective brakes on all four (4) wheels. NO taps permitted.

25. STEERING

Left hand drive cars are not permitted. Modifications are not permitted to steering which must remain standard and in sound condition.

- (A) Original or sports type steering wheel are permitted. Wire spoke or wood rim or rivet steering wheels are NOT PERMITTED
- (B) Quick release steering wheel can be used but must be pin type.
- (C) Steering box or rack must be chained or plated to the sub frame.
- (D) Steering column must be welded to the roll cage at dashboard level with a large "U" bolt (not exhaust clamp) or chain.
- (E) HEIME JOINTS are allowed but shaft must remain collapsible and only on vehicle that have collapsible steering.

26. TRANSMISSION

The engine, gearbox and rear axle assembly must stay standard as manufactured. NO optional extras. All model cars are permitted to use a hydraulic or mechanical clutch.

- (A) Steel strap or chain is to be secured on the front of the tail shaft 15cm to the rear of the front universal joint.
- (B) Four (4) speed gearbox may be used. Race vehicles must have at least two (2) forward gears and one (1) reverse gear.
- (C) Gear levers shall be rendered harmless by the use of a suitable gear knob, handle etc. Holes cut out for floor shift lever are to be covered with a rubber boot.

27. DIFFERENTIAL

(A) Locked differential are OPTIONAL on all models.

(B) Differentials are to be open size for all models.

(C) Rear axle bearing retaining collar to tack welded to the axle in three (3) places. If axle is lost and is found that it was not welded the driver will be fined.

28. DIFF HAT PIVOT PIN STRENGTHENER

a) The purpose of this bracket is to strengthen the diff hat pivot pin only, NOT any other part/component of the diff hat or pan arm bar assembly.

b) No welding or cutting or modifying on any part of the differential. No welding or cutting or modifying of original diff hat, diff hat pivot pin, diff hat pan arm bars and connecting assembly.

c) Diff hat pivot strengthener must be of STEEL construction only. Diff hat pivot pin strengthener must only be attached by bolts to the ORIGINAL DIFF HAT LOCATION ONLY on diff housing. NO EXCEPTIONS.

d) Longer mounting bolts must be used into diff housing to include the extra thickness of the material used in the bracket. (No original length bolts to be used). Mounting bolts to be loctited or equivalent firmly into place.

e) Design of diff hat pivot pin strengthener must be of an open (skeletal) design, not an enclosed (bowl) design.

29. ENGINE

Engines to remain visually standard as per model. Manufacturer's markings to remain on engine block casting. Engine position to remain standard as per model. ALL ENGINES MUST BE SEALED.

(A) Fords are allowed to run with 60 thou on all 200 motors and 40 thou on all 221 motors and 60 thou dish on all 250 (4.1).

(B) Valiants allowed 40 thou on all 215 motors and on 245 motors.

(C) Holden allowed 60 thou on all 186 and 202 motors.

(D) HQ and above models may run with a red 3.3 motor.

(E) LOW or HIGH compression heads only permitted.

30. EFI ENGINES

EFI engines maybe used in late model bodies "only" carburettor engines (optional) VN-VS for Holden's

EA-EL for Fords

Holden's to run Buick engines "only" – no eco-tech engines allowed.

Fords to run 4.0lts up to EL engines with EA-ED intake manifolds.

Engines to remain standard, with standard exhaust manifolds no extractors permitted. Automatic gearboxes "only"

MUST RUN RSA SEALED COMPUTER.

Engine must be mounted in original position without modification using solid engine mounts, or resilient engine mounts with minimum 6mm chain restraints.

EFI engines are to be standard with only modifications / additions and clarifications as mentioned in this current spec book and any other

subsequent RSA approved and club notified revisions regarding EFI engines
The only car and engine combinations permitted to use Fuel Injection (EFI) are
as follows:

HOLDEN

1) Commodore S1 and S2 Buick type 3.8lt engines may be used in VN to vs
models. Must use VN-VP computer and wiring loom, DFI module and coil
pack. Valve sizes: Inlet 43.4mm, Exhaust

37.8mm Throttle butterfly size 60mm Injector part numbers permitted: 0280
150 901 / 0280 150 960 / 0280 150 973 / 0280 150 917 / 0280 155 777

2) no eco tech engines

FORD

All Ford EFI engines must use EA-EB pre-smartlock computer, EA-ED
multipoint (log type) injection manifold and standard or aftermarket standard
equivalent distributor and coil. Early model motors and heads may come
forward to a later model car – unless otherwise mentioned. standard exhaust
manifold and engine pipe after engine pipe open

Falcon EA 3.9lt to EI 4.0lt engines may be used in EA to ei model Valve sizes:

Inlet 47mm, Exhaust 39mm Throttle butterfly size 64mm Injector part

numbers permitted: 0280 150 736 / 0280 150 790 / 0280 155 844 2) Falcon EF

4.0lt to EL 4.0lt engines may be used in EF too Current Model Valve sizes: Inlet

47mm, Exhaust 39mm Throttle butterfly size 64mm Injector part numbers

permitted: 0280 150 736 / 0280 150 790 / 0280 155 844

Fuel Injected Engines are permitted using the following restrictions:

1) All computers must be standard OEM, purchased and sealed by a RSA

approved organization, currently either EFI Spares or Automotive Service Solutions. Owner supplied approved standard OEM computer for RSA testing and approved sealing permitted. No approved or damaged seal etc. = no racing. Possible re-inspection, re-testing and re-sealing of 'damaged' ECU will be the owner's responsibility including costs if applicable. Computers / ECU units may be interchanged with a sealed replacement unit by a RSA / club official for a race meeting at any time. Failure to comply will result in minimum exclusion from that race meeting and other penalties may apply.

2) Any person found to have altered or added to any component of a computer / ECU will face a suspension of up to 2 years or as mentioned and determined under the applicable rules in the current (at point in time) version of Speedway Australia Racing Rules.

3) All ECUs are to be fitted and protected in such a way as to limit ECU damage and the sun / water / dirt deterioration of the ECU seals. Suitable encasing of the ECU is not only acceptable but recommended as long as ease of inspection and removal is still possible at any time.

4) Standard sized OEM injectors are to be used for make and model of engine or fuel injection system used. Inside diameter not to be increased or decreased.

5) Rev limiter must remain OEM and must not exceed OEM limit. The maximum revs attainable (peak revs) by engine may be checked at any time by a Scrutineer using any current (at point in time) method, technology and procedure as approved by the RSA.

6) All standard sensors except oxygen and cooling sensors must be fitted and operating.

- 7) Electric fuel pumps must automatically shut off when engine stops running.
- 8) Base model engines only (i.e. No Turbocharged, Supercharged, VCT, XR6 or Tickford engines or heads). No forced induction.
- 9) Engines must remain externally visually standard with all components fitted unless otherwise mentioned. Exceptions are air conditioning equipment and air cleaner assembly.
- 10) Engine must be positioned in the engine bay with the rear face of the block in the same position as the original engine.
- 11) All casting marks must remain.
- 12) Crankshaft must be standard OEM for the engine. No offset grinding.
- 13) Conrods must be standard OEM for the engine. No lightening or polishing.
- 14) Pistons must not be machined or lightened. No additional fly-cuts/valve reliefs permitted, noting that standard Falcon pistons have a valve relief on the inlet side.
- 15) Rocker gear must remain standard OEM type for the engine.
- 16) Sump must be OEM and remain externally visually standard.
- 17) All pulleys must remain OEM for the engine block and all fan belts must remain the same type and profile as OEM for the engine block. Exception: EA-ED EFI may run the single serpentine belt configuration the same as EF-EL.
- 18) Return springs must be fitted to each butterfly shaft. OEM inbuilt type is acceptable.
- 19) Fuel pump must be passenger car type.
- 20) Fuel Tank must be professionally made with high pressure line and return

line fitted into top of fuel tank. Breather pipe as per normal specifications.

21) A flexible fuel line section must be fitted within 75mm of fuel tank, and all fuel lines to be securely fixed in position. Barbed fittings of the correct size must be used in conjunction with screw type clamps when connecting flexible fuel line. (Genuine SAE R6 fittings and hose accepted).

22) Appropriately rated high pressure reinforced fuel Injection hose and fittings are to be used only. Securely fixed flexible fuel hose or OEM type 'Bundy' steel tubing may be used through the car or under the car.

23) Flywheels, pressure plates and clutch plates must remain OEM or standard replacement type. 25) Any engine component or ancillary item not specifically mentioned is to be OEM for the engine block or standard aftermarket equivalent.

24) Any engine component or ancillary item not specifically mentioned is to be OEM for the engine block or standard aftermarket equivalent.

The following modifications are permitted for EFI engines:

(1) Protective wire gauze or air cleaner to be fitted over air intake to prevent entry of foreign objects to throttle body, and also to act as a flame trap.

(2) Ignition / spark plug leads up to 8mm outside diameter.

(3) 0.060" maximum oversize on standard bore.

(4) 0.060" maximum facing off head surface.

(5) Maximum 2-cylinder sleeves per engine block.

The following are not permitted for EFI engines:

- 1) No Porting or polishing of head /s or any inlet manifold component.
- 2) No Head studs.
- 3) No Lightened flywheels.
- 4) No Angle facing of head and/or block surfaces.
- 5) No Forced induction.
- 6) No Removal of any balance shaft.
- 7) No Performance type harmonic balancers.
- 8) No Performance enhancing ignition systems.
- 9) No Modification to throttle body or butterfly.
- 10) No Solid lifters.
- 11) No Balancing of the engine / components permitted

31. CARBURETTOR

One standard single throat carburettor only permitted and must be used with standard manifold for model. Carburettor sizes are as follows:

(A) Holden – $1\frac{5}{32}$ or $1\frac{3}{32}$. $1\frac{7}{32}$ carburettor only permitted.

(B) Ford – $1\frac{5}{32}$ or $1\frac{7}{32}$. $1\frac{9}{32}$ carburettor only permitted.

(C) Valiants – Single throat carburettor only permitted.

Two return springs MUST be fitted to all carburettor main throttle shaft.

Two throat carburettors

Holden – Stromberg WW

Ford – Weber

Valiant – Carter

To be used on standard manifold – NO AFTERMARKET MANIFOLDS

ENGINE SPECIFICATIONS

MAKE	BORE *	STROKE **	CAM *	DECK **	HEAD **	HEAD ALLOY
HOLDEN 186	3.700	3.00	0.230	0.020	2.830	
HOLDEN 202	3.700	3.625	0.230	0.020	2.830	
FORD 200	3.720	3.129	0.240	0.020	NO LESS 4.47 HIGH SIDE OF HEAD	3.41
FORD 250	3.740	3.910	0.240	0.020	NO LESS 4.47 HIGH SIDE OF HEAD	3.41
VALIANT 215	3.560	3.680	0.245	0.020	3.550	
VALIANT 245	3.760	3.680	0.245	0.020	3.550	

* = MAXIMUM

** = MINIMUM

PORT MODIFICATIONS ARE **NOT ALLOWED** /0.003 HAS BEEN ALLOWED ON WORN BORES