



5TH CATEGORY - HISTORIC RACING

GROUP Nc

APPROVED VEHICLE SPECIFICATION

This form details the approved specifications of individual vehicle models in the 5th Category Historic car group. To be issued with a Historic Log Book, cars need to comply with these specifications, the physical appearance shown in the illustrations and the general historic rules as detailed in the current CAMS Manual of Motor Sport.

Make of Car: Chevrolet
Period of Original Manufacture: 1968
CAMS Historic Group: Nc
Date of issue of this document: Dec 2013

Model: Camaro SS 396 big block



Refer to CAMS Manual of Motor Sport, Vehicle Eligibility, Historic Touring Cars,
General Requirements & Nc Regulations for permitted modifications.

SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description: Uni body, two door coupe with sub frames
Period of Manufacture: Jan 1968 to Dec 1968
Manufacturer: Chevrolet
Chassis no. from: 124378N – 300001
Chassis no. location: Left hand side of dash
Material: Steel

1.2 FRONT SUSPENSION

Description: Independent, wishbones
Spring Medium: Coil
Damper Type: Telescopic **Adjustable:** No
Anti-sway bar: Fitted **Adjustable:** No
Suspension adjustable: Yes **Method:** Shims for caster & camber, tie rod for toe

1.3 REAR SUSPENSION

Description: Live rear axle
Spring medium: Semi-elliptical leaf
Damper type: Telescopic **Adjustable:** No
Anti-sway bar: Fitted **Adjustable:** No
Suspension adjustable: Yes **Method:** Spring height

1.4 STEERING

Type: Recirculating ball & nut **Make:** GM

1.5 BRAKES

	Front	Rear
Type:	Disc, vented	Drum
Dimensions:	25.4 x 282 mm	50 x 241 mm
Material:	Cast iron	Cast iron
No. cylinders/pots per wheel:	Four	One
Actuation:	Hydraulic	Hydraulic
Caliper Make:	GM	
Caliper Type:	??	
Caliper Material:	Cast iron	
Master cylinder make:	GM	Type: Tandem
Adjustable bias:	No	
Servo Fitted:	No	

SECTION 2 - ENGINE

2.1 ENGINE

Make: Chevrolet
Model: Big block
No. cylinders: Eight
Configuration: Vee
Cylinder block material: Cast iron
Two/Four Stroke: Four
Bore - Original: 103.988 mm
Max. allowed: 105.488 mm
Stroke - original: 95.504 mm
Capacity - original: 6489 cc
Max. allowed: 6677 cc
Cooling method: Fluid
Identifying marks: Block casting number, 3916323 & 3955272 only

2.2 CYLINDER HEAD

Make: GM
No. of valves/cylinder: Inlet: One Exhaust: One
No. of ports total: Inlet: Four Exhaust: Four
No. of camshafts: One Location: Block Drive: Chain
Valve actuation: Pushrod & rockers
Spark plugs/cylinder: One
Identifying marks: Head casting number 3919842 only

2.3 LUBRICATION

Method: Wet sump
Oil cooler standard: No

2.4 IGNITION SYSTEM

Type: Coil & distributor
Make: Delco Remy

2.5 FUEL SYSTEM

Carburettor Make: Rochester or **Model:** Quadrajiet
Holly 4150
Carburettor number: One

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: GM
Type: Diaphragm
Diameter: 280 mm
Actuation: Hydraulic / Mechanical
No. of Plates: One

3.2 TRANSMISSION

Type: Synchro-mesh
Make: GM Muncie, Model M20
No. forward speeds: Four
Gearbox location: Behind engine
Gear change type and location: Remote on floor
Case material: Alloy
Identifying marks: N/A

3.3 FINAL DRIVE

Make: GM
Type: Live rear axle
Wheel drive method: Rear
Ratios: Various
Differential type: LSD
Model: 12 bolt

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: One
Description: One piece open tail shaft

3.5 WHEELS & TYRES

Wheel type - Original:	Disc	Material - Original:	Steel
Allowed:	Cast	Allowed:	Aluminium alloy
Fixture method:	Studs	No. studs:	Five
Wheel dia. & rim width:	FRONT		REAR
Original:	6 x 14 inch		6 x 14 inch
Allowed:	8 x 15 inch		8 x 15 inch
Tyres allowed:	60% minimum aspect ratio, refer approved tyre list.		

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank Location: Boot **Capacity:** N/A
Fuel pump type and location: Mechanical on engine block **Make:** GM

4.2 ELECTRICAL SYSTEM

Voltage: 12 **Alternator:** Fitted
Battery Location: Engine bay

4.3 BODYWORK

Type: Coupe **Material:** Steel
No. of seats: Four **No. doors:** Two
Comment: Rear tail light panel is black, not body colour. Factory fitted front air dam and rear spoiler allowed.

4.4 DIMENSIONS

Track - Front: 1498.6 mm **Rear:** 1496.0 mm
Wheelbase: 2743.2 mm **Overall length:** 4691.4 mm
Dry weight: 1410 kg

4.5 SAFETY EQUIPMENT

Refer applicable Group Regulations

ADDITIONAL INFORMATION

Vehicle fitted rectangular front indicators in grill and back up lights under rear bumper.

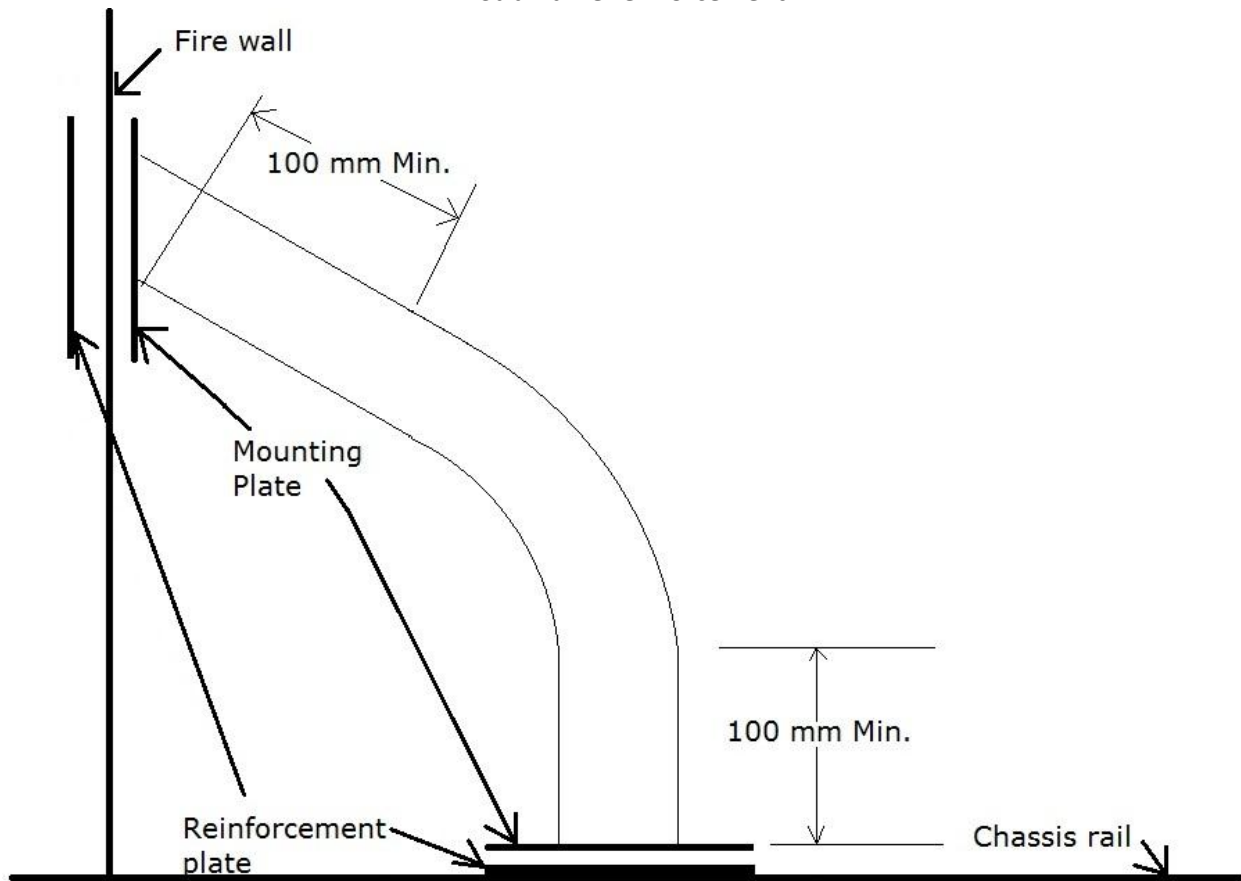
No cowl induction hood.

Deletion of heater/demister/air cond allowed.

Power steering allowed.

Must use 68 disc front hubs (67 are identical but not 69)

Sub frame reinforcement



Requirements of sub frame reinforcements

Reinforcement plates:

On chassis rail – minimum of 8 mm thickness. To be the same size of tube mounting plate.

Firewall plate - 3 mm mild steel plate same size of tube mounting plate.

Maximum size of each mounting & reinforcement plates is 75 x 75 mm or 56.25 cm².

Reinforcement tube:

To be round mild steel tube 38mm dia. With 2.5 mm wall thickness.

Minimum length of straight tube from the end of the bent to the mounting plate is to be 100 mm.

The bend in the reinforcement tube is to be a included angle between 90° and 120°.

Location:

Lower chassis rail mounting point is on the chassis rail. Location is allowed from the firewall to 200 mm forward of the front wheel centre line.

The upper mount on the firewall is not to be aligned with any part of the roll cage.

The locating area on the firewall is defined by a rectangle within the following parameters.

The vertical area is from the top of the chassis rail to the top of the firewall.

The horizontal area is from the outer edge of the chassis rail (where it contacts the firewall) to 300 mm towards the centre line of the vehicle.

Mounting:

Chassis reinforcement plate to be welded to chassis rail, drill & tapped to allow mounting plate attachment.

Firewall reinforcement plate is to be bolted through the firewall & tube mounting plate.

Each mounting point to incorporate at least two fasteners having the minimum diameter of M8 and minimum quality 8.8 (ISO standard), self-locking or fitted with lock washers.