

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:ChevroletPeriod of Original Manufacture:1968CAMS Historic Group:NcDate 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 framesPeriod of Manufacture:Jan 1968 to Dec 1968Manufacturer:ChevroletChassis no. from:124378N – 300001Chassis no. location:Left hand side of dashMaterial:Steel

1.2 FRONT SUSPENSION

Description:	Independe	ent, wishbo	ones	
Spring Medium:	Coil			
Damper Type:	Telescopio	2	Adjustable:	No
Anti-sway bar:	Fitted		Adjustable:	No
Suspension adjustable:	Yes	Method:	Shims for caster & can	nber, tie rod for toe

1.3 REAR SUSPENSION

Description:	Live rear a	axle		
Spring medium:	Semi-ellip	tical leaf		
Damper type:	Telescopi	С	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
Туре:		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

	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 сс	Max. allowed:	6677 сс			
Cooling method:	Fluid					
Identifying marks:	Block casting number,	3916323 & 3955272 d	only			

2.2 CYLINDER HEAD

	•••••••••••••••••••••••••••••••••••••••			
GM				
	Inlet:	One	Exhaust:	One
	Inlet:	Four	Exhaust:	Four
One	Location:	Block	Drive:	Chain
Pushrod	& rockers			
One				
Head cas	sting number	r 3919842	only	
	One Pushrod One	Inlet: Inlet: One Location: Pushrod & rockers One	Inlet: One Inlet: Four One Location: Block Pushrod & rockers One	Inlet:OneExhaust:Inlet:FourExhaust:OneLocation:BlockDrive:Pushrod & rockersVickersVickers

2.3 LUBRICATION

Method:	Wet sump
Oil cooler standard:	No

2.4 IGNITION SYSTEM

Type:Coil & distributorMake:Delco Remy

2.5 FUEL SYSTEM

Carburettor Make:	Rochester or	Model:	<u>Quadrajet</u>
	Holly		4150
Carburettor number:	One		

SECTION 3 - TRANSMISSION

3.1 CLUTCH

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

3.2 TRANSMISSION

Туре:	Synchro-mesh		
Make:	GM Muncie, Model M2	20	
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	Model:	12 bolt
Туре:	Live rear axle		
Wheel drive method:	Rear		
Ratios:	Various		
Differential type:	LSD		

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 r	atio, refer approved t	yre 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:12Battery Location:Engine bay

Alternator: Fitted

4.3 BODYWORK

Type:CoupeMaterial:SteelNo. of seats:FourNo. doors:TwoComment: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.

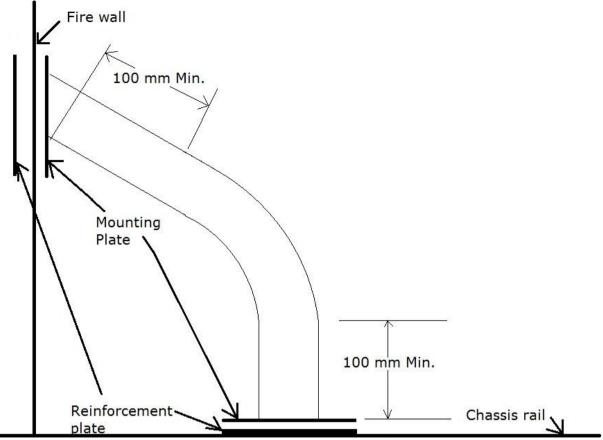
No cowl induction hood.

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 in 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.