

CAMS

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 an 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.

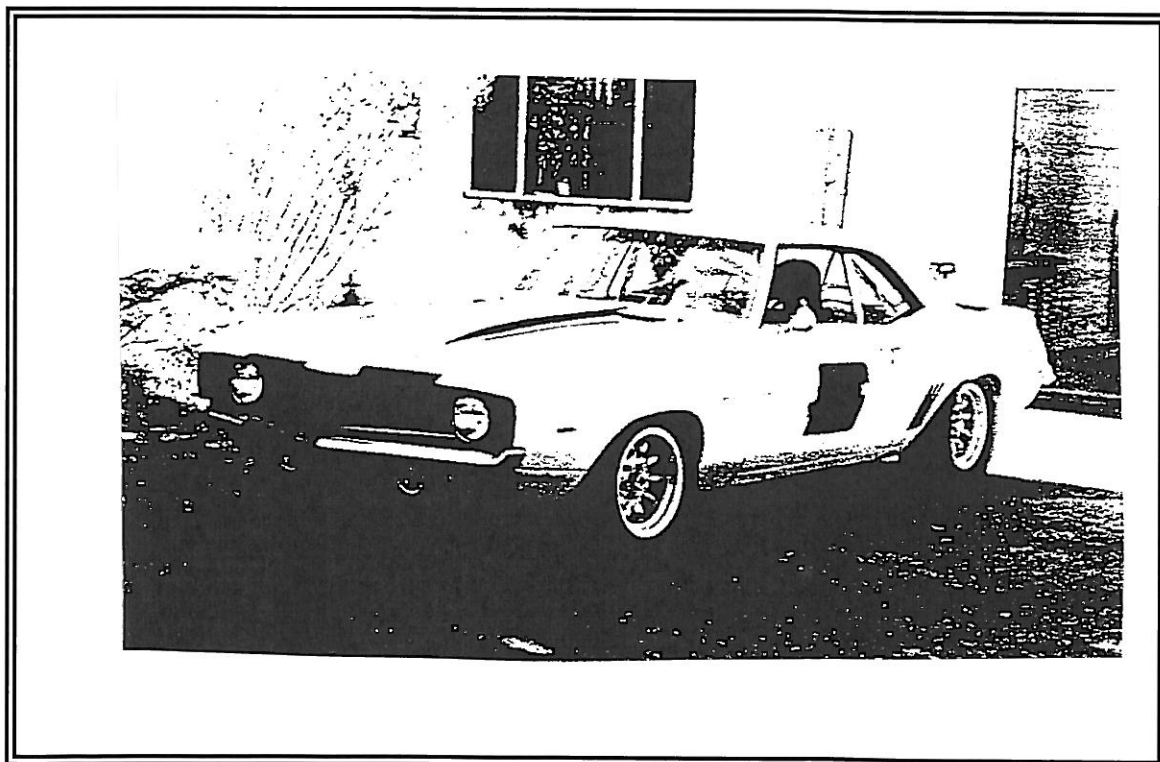
Make of Car: Chevrolet **Model:** Camaro Sport Coupe SS350

Period of Original Manufacture: 1969

CAMS Historic Group: Nc

Date of Issue of this Document: April 2002 (Version #3)

Updated: 30th July 2009



SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description: Unitary Construction **Period of Manufacture:** 1969
Manufacturer: General Motors
Chassis no. from: 12437-9N500001 - 12437-9N711000
Chassis no. location: Firewall
Material: Steel
Comments: -

1.2 FRONT SUSPENSION

Description: Independent - Upper & Lower Wishbone
Spring medium: Coil
Damper Type: Telescopic **Adjustable:** Optional
Anti-sway bar: Fitted **Adjustable:** Optional
Suspension adjustable: Yes **Method:** Shims
Comments: Spring rates and ride height free. Dampers are free subject to use of the original mounting points.

1.3 REAR SUSPENSION

Description: Live Axle
Spring medium: Semi Elliptic Leaf
Damper type: Telescopic **Adjustable:** Optional
Anti-sway bar: Fitted **Adjustable:** Optional
Suspension adjustable: No **Method:** N/A
Comments: Spring rates and ride height free. Axle location may be improved provided the original suspension system is not overridden. Body shell may not be cut to fit axle location components.

1.4 STEERING

Type: Recirculating ball **Make:** Saginaw/GM
Comments: Period GM power steering allowed

1.5 BRAKES

| | Front | Rear |
|---------------------------------------|---|---------------------|
| Type: | Disc (vented) | Drum |
| Dimensions: | 298x 25mm | 241 x 50mm |
| Material of drum/disc | Cast Iron | Cast Iron |
| No. cylinders/pots per wheel: | 1 | 1 |
| Actuation: | Hydraulic | Hydraulic |
| Caliper: Make, Material, Type: | Delco/Morraine - Cast Iron | |
| Master cylinder make: | Delco/Bendix | Type: Tandem |
| Adjustable bias | Yes - By Pressure Limiting Valve | |
| Servo Fitted | Yes | |
| Comments: | Alternative brake components from the period may be used provided there is no change to swept area. | |

SECTION 2 - ENGINE

2.1 ENGINE

Make: General Motors (Chevrolet)
Model: 350 (Small Block)
No. cylinders: 8 **Configuration:** Vee
Cylinder Block-material: Cast Iron **Four Stroke**
Bore - Original: 101.6 mm **Max. allowed:** 103.1 mm
Stroke - original: 88.4 mm **Max. allowed:** 88.4 mm
Capacity - original: 5736 cc **Max. allowed:** 5906 cc
Cooling method: Water
Identifying marks: See Annexure 'A' attached
Comments: Aluminium block/cylinder head engine **NOT** permitted as GM documented production was only 60 units. This does not meet the requirement of 1,000 units in 12 months.

2.2 CYLINDER HEAD

Make: General Motors
No. of valves/cylinder- **Inlet:** 1 **Exhaust:** 1
No. of ports total: 16 **Inlet:** 8 **Exhaust:** 8
No. of camshafts: 1 **Location:** Block **Drive:** Chain
Valve actuation: Pushrod
Spark plugs/cylinder: 1
Identifying marks: See Annexure 'A' attached
Comments: Refer comments under 2.1 above.

2.3 LUBRICATION

Method: Wet Sump **Oil tank location:** N/A
Dry sump pump type: N/A **Location:** N/A
Oil cooler standard: No **Location:** Optional
Comments: Oil Cooler permitted

2.4 IGNITION

Type: Coil & Distributor
Make: Delco Remy
Comments:

2.5 FUEL FEED

Carburettor: Make: Rochester **Model:** 4MV **No:** 1 **Size:** 1.38/2.25
Holley 4130 1 1.56
Fuel injection Make: N/A **Type:** N/A
Supercharged: No **Type:** N/A
Make: N/A
Comments: Carburettor/s may be replaced with other make/types available in period. Barry Grant reproduction carburettor not approved.

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: General Motors **Type:** Diaphragm **Diameter:** 254 mm
No. of Plates: 2
Actuation: Mechanical
Comments:

3.2 TRANSMISSION

Type: Four Speed Synchormesh
Make: Muncie **Model:** M20
No. forward speeds: 4 **Gearbox location:** Behind Engine
Gearchange type and location: Floor - Remote
Case material: Alloy **Identifying marks:**
Comments: M21/M22 Permitted. Ratios Free

3.3 FINAL DRIVE

Make: General Motors **Model:** Salisbury
Wheel drive method: Rear
Ratios: Various
Differential: Spin Resistant **Type:**
Comments: Ratios Free

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: 1 **Location:** Gearbox to Final Drive
Description: Tubular Tailshaft with Universal Joints
Comments:

3.5 WHEELS & TYRES

| | | | |
|-----------------------------------|--------------|----------------------------|-------------|
| Wheel type: Original: | Disc | Material: Original: | Steel |
| Allowed: | Cast | Allowed: | Alloy |
| Fixture method: | Bolt On | No. studs: | 5 |
| | FRONT | | REAR |
| Wheel dia. & rim width | | | |
| Original: | 14 x 7 | | 14 x 7 |
| Allowed | 15 x 8 | | 15 x 8 |
| Tyre section: | | | |
| Original: | | | |
| Allowed: | | | |
| Aspect ratio - minimum: | 60% | | 60% |
| Comments: | | | |

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank Location: Boot
Fuel pump, type and location: Mechanical
Capacity: 82 Litres
Make: General Motors
Comments:

4.2 ELECTRICAL SYSTEM

Voltage: 12
Battery Location: Engine Bay
Comments: Alternator fitted

4.3 BODYWORK

Type: Fixed Head Coupe
No. of seats: 4
Material: Steel
No. doors: 2
Comments:

4.4 DIMENSIONS

Track - Front: 1515 mm
Wheelbase: 2745 mm
Dry weight: 1410 kg
Comments: **Rear:** 1510 mm
Overall length: 4690 mm

4.5 SAFETY EQUIPMENT

Fire extinguisher required
Seat belt required
Rollbar required
Electrical cut off switch required
Safety fuel tank optional

GENERAL COMMENTS: Delete options are not permitted unless documentary evidence of production of 1,000 units in 12 months to 'delete option specification' is available.

RP:km-Chevrolet Camaro-nc.doc

CHEVROLET CAMARO SPECIFICATION SHEET

MODEL : SPORT COUPE - 12437

ENGINE BLOCK CASTING NUMBERS :

Identifying marks : Casting Numbers

| | | | | |
|----------|----------|----------|----------|----------|
| #3782870 | #3790721 | #3791362 | #3858174 | #3858180 |
| #3892657 | #3903352 | #3914660 | #3914678 | #3932386 |
| #3932388 | #3956618 | #3970010 | #3970014 | #3970016 |

or others by specific approval

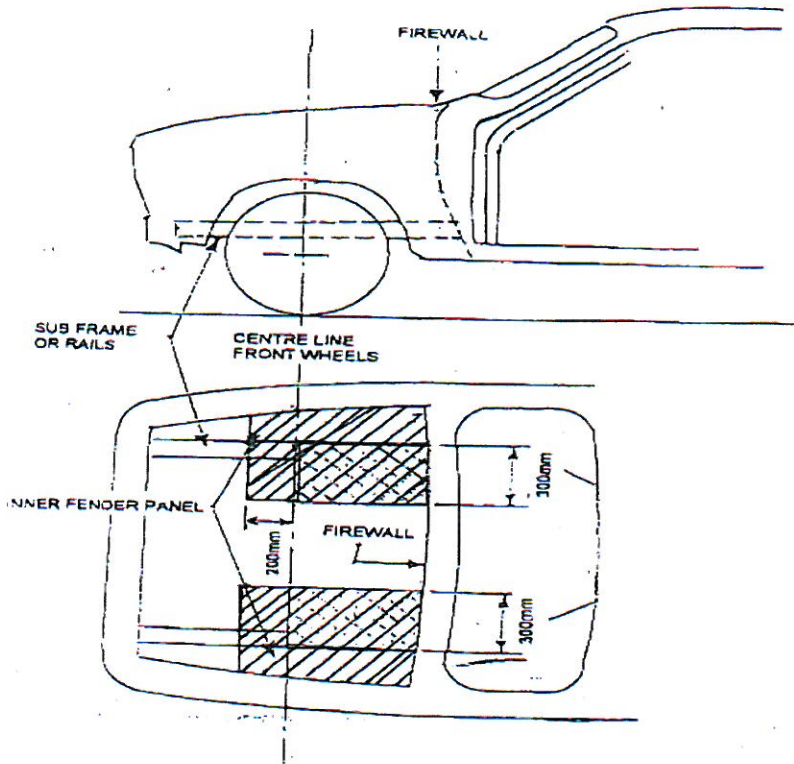
CYLINDER HEAD CASTING NUMBERS :

Identifying marks : Casting Numbers

| | | | | |
|----------|----------|----------|----------|----------|
| #3782461 | #3890462 | #3917291 | #3917292 | #3917293 |
| #3927185 | #3927186 | #3927187 | #3927188 | #3932441 |
| #3947041 | #3973414 | #3973487 | #3986316 | #3986339 |
| #3991492 | #3998916 | #3998993 | | |

or others by specific approval

SUB-FRAME REINFORCEMENT



IN PLAN VIEW ALL REINFORCEMENTS MUST BE WITHIN TWO RECTANGLES OF LENGTH BEING THE DISTANCE FROM 200mm IN FRONT OF THE FRONT WHEEL CENTRELINE TO FIREWALL AND THE WIDTH OF THE INSIDE OF THE BONNET OPENING TO 300mm MEASURED FROM INSIDE THE INNER FENDER PANEL

LOCATION OF SUB-FRAME REINFORCEMENTS

SPECIFICATIONS

MATERIAL: Round mild steel tubing 30mm diam. X 2.5mm wall thickness.

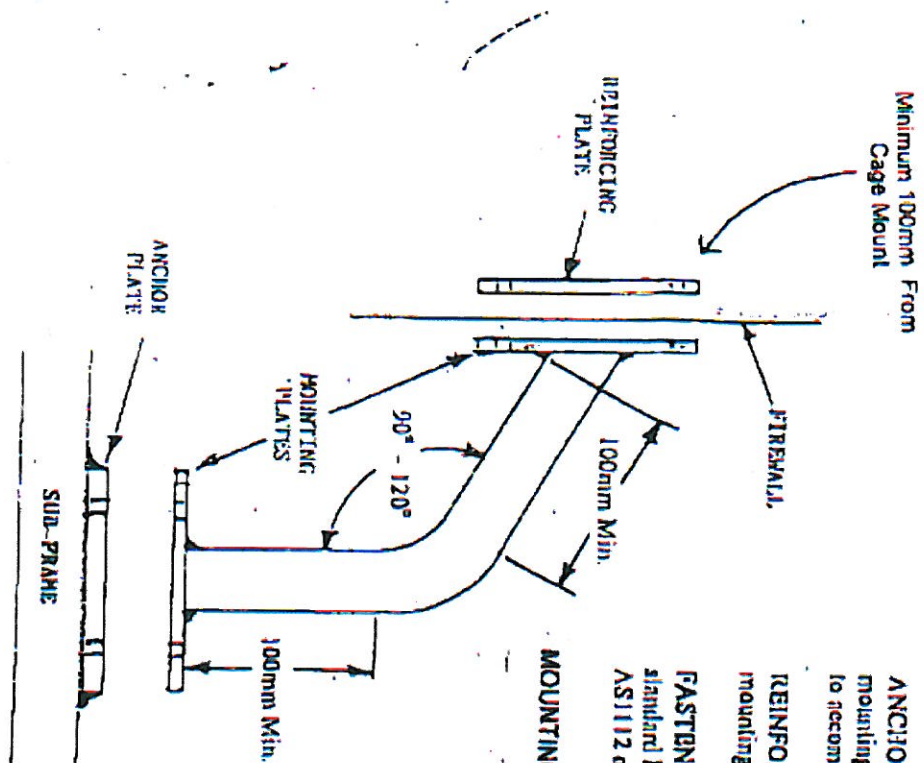
BEND - of included angle between 90° and 120° must be incorporated with not less than 100mm of straight tube on either side of bend.

ANCHOR PLATE: Mild steel of 8mm minimum thickness matching the mounting plate and welded to the sub-frame and incorporating lapped holes to accommodate fasteners.

REINFORCING PLATE (upper mounting): Mild steel 3mm thick to match mounting plate and attached by bolts (through firewall).

FASTENERS: Each mounting to incorporate at least two M8 size to ISO standard HT self screws to AS2465 or cap screws to AS1420 and nuts to AS1112 or better.

MOUNTING PLATES: Mild steel maximum dimension 75mm x 75mm



SUB-FRAME REINFORCEMENT

Eligibility officers be aware the main items are the bent brace and that the mount on the fire wall does not align with any part of the roll cage. The mounting plates can vary to incorporate a 90 degree plate at the top of the bulkhead.