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: Holden **Model:** HQ Kingswood (V8)

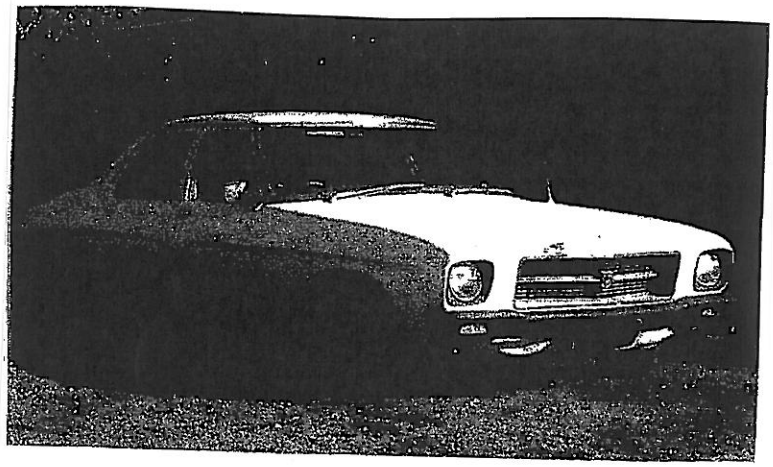
Period of Original Manufacture: 7/1971 - 1974

CAMS Historic Group: Nc

Date of Issue of this Document: May 2004

Updated: 30th July 2009

Note : For the purposes of this document and the usage of non original componentry, it should be noted that the manufacturer is regarded as being General Motors - Holden's Pty Ltd, not General Motors.



SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description: Unitary Construction **Period of Manufacture:** 7/1971 - 1974

Manufacturer: General Motors - Holden's P/L
VIN/Chassis no. from: Vin. No. HQ80469
Chassis no. location: Firewall
Material: Steel
Comments: Modifications permitted. Refer Group Nc regulations.

1.2 FRONT SUSPENSION

Description: Wishbone Independent
Spring medium: Coil
Damper Type: Hydraulic **Adjustable:** Optional
Anti-sway bar: Yes **Adjustable:** Optional
Suspension adjustable: Yes **Method:** Shim
Comments: Modifications permitted. Refer Group Nc regulations.

1.3 REAR SUSPENSION

Description: Live Axle – Radius Rods
Spring medium: Coil
Damper type: Hydraulic **Adjustable:** Optional
Anti-sway bar: Optional **Adjustable:** Optional
Suspension adjustable: No **Method:** -
Comments: Modifications permitted. Refer Group Nc regulations.

1.4 STEERING

Type: Recirculating Ball **Make:** GMH
Comments: Power Steering may be rendered inoperable or removed.

1.5 BRAKES

	Front	**Rear**
Type:	Disc – Ventilated	Drum
Dimensions:	279 mm	254 mm
Material of drum/disc	Cast Iron	Cast Iron
No. cylinders/pots per wheel:	2	1
Tandem Repair		
Actuation:	Hydraulic	Hydraulic
Caliper: Make, Material, Type:	Cast Iron, PBR, Girling	

Master cylinder make: OEM **Type:** Tandem
Adjustable bias Optional
Servo Fitted Yes
Comments: Dual circuit braking permitted. Servo may be rendered inoperable or removed.Refer Group Nc regulations for further permitted modifications.

SECTION 2 - ENGINE

2.1 ENGINE

Make:	General Motors Holdens		
Model:	V8 5 Litre (308 c.i) HC		
No. cylinders:	8	**Configuration:**	Vee
Cylinder Block-material:	Cast Iron	**Four Stroke**	
Bore - Original:	101.6	**Max. allowed:**	103.1
Stroke - original:	77.7	**Max. allowed:**	77.7
Capacity - original:	5045 cc	**Max. allowed:**	5190cc
Cooling method:	Water		
Identifying marks:	Prefix QT		

Comments: 4 Bolt Engine Blocks not permitted. Refer Group Nc regulations for permitted modifications.

2.2 CYLINDER HEAD

Make:	GMH				
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:		"HC"			

Comments: Refer Group Nc regulations for permitted modifications.

2.3 LUBRICATION

Method:	Wet	**Oil tank location:**	N/A
Dry sump pump type:	N/A	**Location:**	N/A
Oil cooler standard:	No	**Location:**	N/A

Comments: Refer Group Nc regulations for permitted modifications.

2.4 IGNITION

Type:	OEM Distributor/Coil
Make:	Bosch

Comments: Refer Group Nc regulations for permitted modifications.

2.5 FUEL FEED

Carburettor: Make:	Carter	**Model:**	Dual Choke	**No:**	1	**Size:**	
Fuel injection Make:	N/A		**Type:**	**N/A**			
Supercharged:	No		**Type:**	**N/A**			
Make:	N/A						

Comments: Carburettor/s may be replaced by other units of period type and appearance. Refer Group Nc regulations.

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: Optional **Type:** Dry Plate **Diameter:** Optional
No. of Plates: Optional
Actuation: Hydraulic
Comments: Refer Group Nc regulations for permitted modifications.

3.2 TRANSMISSION

Make: GM **Type:** **Model:** Aussie M20/M21
No. forward speeds: 4 **Gearbox location:** Behind Engine
Gearchange type and location: Floor
Case material: Cast Iron Identifying marks:
Comments: Refer Group Nc regulations for permitted modifications.

3.3 FINAL DRIVE

Make: GM **Model:** **Type:** Salisbury or Banjo
Wheel drive method: Rear
Ratios: Optional
Differential: GM **Type:** Optional
Comments: Limited Slip Differential Optional. Refer Group Nc regulations for permitted modifications.

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: 1 **Location:** Gearbox to Final Drive
Description: Tubular Tailshaft
Comments: Refer Group Nc regulations for permitted modifications.

3.5 WHEELS & TYRES

Wheel type: Original: Steel **Material:** Steel
Fixture method: Bolt on **No. studs:** 5

	FRONT	REAR
Wheel dia. & rim width		
Original:	14 inch x 6 inch	14 inch x 6 inch
Allowed	15 inch x 8 inch	15 inch x 8 inch
Tyre section:		
Original:	ER70H14	
Allowed:	Up to P225 x 60	
Aspect ratio - minimum:	60%	

Comments: Period magnesium/alloy wheels permitted, 15 inch diameter wheels permitted. Refer Group Nc regulations.

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank Location: Rear **Capacity:** 74 Litres
Fuel pump, type and location: Mechanical Make: GMH
Comments : Alternate fuel pump/s permitted. Refer Group Nc regulations.

4.2 ELECTRICAL SYSTEM

Voltage: 12 Volt
Battery Location: Engine Compartment
Comments: Refer Group Nc regulations for permitted modifications.

4.3 BODYWORK

Type: 4 Door Sedan **Material:** Steel
No. of seats: 5/6 **No. doors:** 4
Commemts: Refer Group Nc regulations for permitted modifications.

4.4 DIMENSIONS

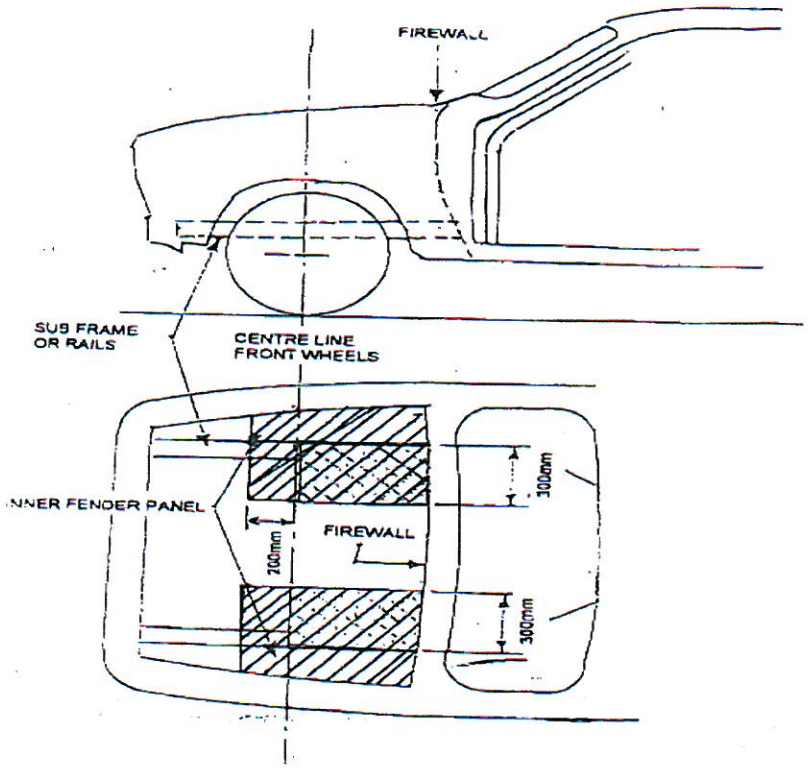
Track - Front: 1527 mm **Rear:** 1527 mm
Wheelbase: 2819 mm **Overall length:** 4763 mm
Dry weight: 1125 kg

4.5 SAFETY EQUIPMENT

Fire extinguisher : Required
Seat belt: Required
Rollbar: Required
Electrical cut off switch : Optional
Safety fuel tank : Optional

NOTE; Sports instrument group option, or normal instrument group are both acceptable. Refer HQ Owners Manual.

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 MEASURD FROM INSIDE THE INNER FENDER PANEL

LOCATION OF SUB-FRAME REINFORCEMENTS

SUB-FRAME REINFORCEMENT

SPECIFICATIONS

MATERIAL: Round mild steel tubing 38mm 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 tapped 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 setscrews to AS2465 or cap screws to AS1420 and nuts to AS1112 or better.

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

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.