



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:	Holden	Model:	HR
Period of Original Manufacture:	1966 - 1967		
Date of issue of this document:	August 2019		



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

SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description: Unibody four door sedan
Period of Manufacture: 1966 - 1967
Manufacturer: General Motors Holden
Chassis no. from: HR??????
Chassis no. location: Plate on centre of fire wall
Material: Steel

1.2 FRONT SUSPENSION

Description: Independent with upper & lower wishbones
Spring Medium: Coil
Damper Type: Telescopic **Adjustable:** No
Anti-sway bar: Fitted **Adjustable:** No
Suspension adjustable: Yes **Method:** Caster & camber by shims

1.3 REAR SUSPENSION

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

1.4 STEERING

Type: Recirculating ball **Make:** Holden

1.5 BRAKES

	Front	Rear
Type:	Disc	Drum
Dimensions:	254 x 9.53 mm	229 x 44.4 mm
Material:	Cast iron	Cast iron
No. cylinders/pots per wheel:	Two	One
Actuation:	Hydraulic	Hydraulic
Master cylinder make:	Girlock / PBR	Type: Single
Adjustable bias:	No	
Servo Fitted:	Yes	

SECTION 2 - ENGINE

2.1 ENGINE

Make: Holden
Model: 161 or 186
No. cylinders: Six **Configuration:** In Line
Cylinder block material: Cast iron **Two/Four Stroke:** Four
Bore - Original: 161 – 85.72 mm
186 – 92.075 mm **Max. allowed:** 161 – 87.225 mm
186 – 93.575 mm
Stroke - original: 76.2 mm
Capacity - original: 161 – 2639 cc
186 – 3044 cc **Max. allowed:** 161 – 2732 cc
186 – 3144 cc
Cooling method: Water
Identifying marks: N/A

2.2 CYLINDER HEAD

Make: Holden
No. of valves/cylinder: Two **Inlet:** One **Exhaust:** One
No. of ports total: Nine **Inlet:** Three **Exhaust:** Six
No. of camshafts: One **Location:** Block **Drive:** Gear
Valve actuation: Pushrod & rockers
Spark plugs/cylinder: One

Comments:

For the 186 Red motor the Ian Moodie XU1 Cylinder Head casting No 2815843 is allowed. The cylinder head may be modified as permitted in the Group N regulations. When install you must include an MSD Soft Touch rev limiter Part No 8728 that controls the engine to a maximum of 7500 RPM.

This rev limiter must be mounted in a visible, easily accessible position in the engine bay. The operation of this MSD Soft Touch rev limiter will be subject to tests at race meetings.

2.3 LUBRICATION

Method: Wet sump
Oil cooler standard: No

2.4 IGNITION SYSTEM

Type: Coil & distributor
Make: Bosch or Lucas

2.5 FUEL SYSTEM

Carburettor Make: Stromberg **Model:** BXUV – 2 or BXV – 2
Bendix BXV
Carburettor number: One **Size:** N/A

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: Holden
Type: Diaphragm
Diameter: 219 mm **No. of Plates:** One
Actuation: Hydraulic

3.2 TRANSMISSION

Type: Synchromesh
Make: Opel
No. forward speeds: Four **Gearbox location:** Behind engine
Gear change type and location: Remote lever, Floor
Case material: Cast iron **Identifying marks:**

Comments:

Holden three speed was optional

3.3 FINAL DRIVE

Make: Holden **Model:** EH
Type: Live axle, banjo type, semi floating
Wheel drive method: Rear
Ratios: 3.36:1 and 3.55:1
Differential type: Open / free

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: One

Description: One piece open drive shaft with two Hardy Spicer type U joints

3.5 WHEELS & TYRES

Wheel type - Original:	Disc	Material - Original:	Steel
Allowed:	Cast	Allowed:	Alloy
Fixture method:	Studs	No. studs:	Five
Wheel dia. & rim width:	FRONT		REAR
Original:	13 x 4.5 inch		13 x 4.5 inch
Allowed:	13 x 7 inch		13 x 7 inch
Tyres allowed:	60% minimum aspect ratio, refer approved tyre list.		

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank Location:	Boot	Capacity:	51 litres
Fuel pump type and location:	Mechanical, engine	Make:	AC

4.2 ELECTRICAL SYSTEM

Voltage:	12	Alternator:	Fitted
Battery Location:	Engine compartment		

4.3 BODYWORK

Type:	Closed	Material:	Steel
No. of seats:	Five	No. doors:	Four

4.4 DIMENSIONS

Track - Front:	1394 mm	Rear:	1394 mm
Wheelbase:	2963 mm	Overall length:	4597 mm
Dry weight:	1182 kg		

4.5 SAFETY EQUIPMENT

Refer applicable Group Regulations