



5TH CATEGORY - HISTORIC RACING  
**GROUP N**  
 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 Motorsport Australia Manual.

<b>Make of Car:</b>	Chevrolet	<b>Model:</b>	Chevy Nova II
<b>Period of Original Manufacture:</b>	1965		
<b>Motorsport Australia Historic Group:</b>	Nb		
<b>Date of Issue of this Document:</b>	April 2021		



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

***Update Log***

May 2020	GM Motorsport Block Part # 88962516 added

## SECTION 1 - CHASSIS

### 1.1 CHASSIS FRAME

<b>Description:</b>	Uni body, with sub frames
<b>Period of Manufacture:</b>	1965
<b>Manufacturer:</b>	GM Chevrolet
<b>Chassis no. from:</b>	N/A
<b>Chassis no. location:</b>	On plate on left side door hinge pillar
<b>Material:</b>	Steel
<b>Comments:</b>	None

### 1.2 FRONT SUSPENSION

<b>Description:</b>	Independent - upper & lower wishbones	
<b>Spring medium:</b>	Coil	
<b>Damper Type:</b>	Telescopic	<b>Adjustable:</b> No
<b>Anti-sway bar:</b>	Fitted	<b>Adjustable:</b> No
<b>Suspension adjustable:</b>	Yes	<b>Method:</b> Caster, camber and toe
<b>Comments:</b>	Refer to Appendix A	

### 1.3 REAR SUSPENSION

<b>Description:</b>	Live rear axle	
<b>Spring medium:</b>	Mono plate leaf	
<b>Damper type:</b>	Telescopic	<b>Adjustable:</b> No
<b>Anti-sway bar:</b>	Fitted	<b>Adjustable:</b> No
<b>Suspension adjustable:</b>	No	<b>Method:</b> N/A
<b>Comments:</b>	Refer to Appendix A	

### 1.4 STEERING

<b>Type:</b>	Recirculating ball	<b>Make:</b> Chevrolet
<b>Comments:</b>	None	

### 1.5 BRAKES

	Front	Rear
<b>Type:</b>	Drum	Drum
<b>Dimensions:</b>	63 mm x 241 mm	241 mm diameter x 50 mm
<b>Material of drum/disc</b>	Cast iron	Cast iron
<b>No. cylinders/pots per wheel:</b>	One	One
<b>Actuation:</b>	Hydraulic	Hydraulic
<b>Caliper Make:</b>		
<b>Material</b>		
<b>Master cylinder make:</b>	GM	
<b>Type</b>	Tandem	
<b>Adjustable bias:</b>	No	
<b>Servo Fitted:</b>	Optional	
<b>Comments:</b>	None	

## SECTION 2 - ENGINE

### 2.1 ENGINE

<b>Make:</b>	Chevrolet				
<b>Model:</b>	Small block - 327				
<b>No. cylinders:</b>	Eight	<b>Configuration:</b>	Vee		
<b>Cylinder Block-material:</b>	Cast iron	<b>Two/Four Stroke</b>	Four		
<b>Bore - Original:</b>	101.6 mm	<b>Max. allowed:</b>	103.1 mm		
<b>Stroke - original:</b>	82.55 mm	<b>Max. allowed:</b>	82.55 mm		
<b>Capacity - original:</b>	5359 cc	<b>Max. allowed:</b>	5513 cc		
<b>Identifying marks:</b>	88962516 Engine Block Casting Numbers:				
	TBA				
	Or others by specific approval				
	10066034 Engine Block Casting Numbers:				
	3782870	3789817	3790721	3791362	3794460
	3858174	3858180	3858190	3868657	3876132
	3903352	3914660	3914678	3932368	3955618
	3970010	3970014	3970016		
	Or others by specific approval				
<b>Cooling method:</b>	Liquid				
<b>Comments:</b>	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

<b>Make:</b>	GM				
<b>No. of valves/cylinder:</b> Two	<b>Inlet:</b>	One	<b>Exhaust:</b>	One	
<b>No. of ports total:</b> Eight	<b>Inlet:</b>	Four	<b>Exhaust:</b>	Four	
<b>No. of camshafts:</b> One	<b>Location:</b>	Block	<b>Drive:</b>	Chain	
<b>Valve actuation:</b>	Pushrod and rockers				
<b>Spark plugs/cylinder:</b>	One				
<b>Identifying marks:</b>	N/A				
<b>Comments:</b>	None				

### 2.3 LUBRICATION

<b>Method:</b>	Wet sump	<b>Oil tank location:</b>	N/A		
<b>Dry sump pump type:</b>	N/A	<b>Location:</b>	N/A		
<b>Oil cooler standard:</b>	None	<b>Location:</b>	N/A		
<b>Comments:</b>	None				

### 2.4 IGNITION SYSTEM

<b>Type:</b>	Points, coil & distributor				
<b>Make:</b>	Delco				
<b>Comments:</b>	None				

### 2.5 FUEL SYSTEM

<b>Carburettor Make:</b>	Rochester	<b>Model:</b>	Quadrajets		
<b>Carburettor Number:</b>	One				
<b>Size:</b>	750				
<b>Fuel injection Make:</b>	N/A		<b>Type:</b>	N/A	
<b>Supercharged:</b>	No		<b>Type:</b>	N/A	
<b>Comments:</b>	None				

**SECTION 3 - TRANSMISSION**

**3.1 CLUTCH**

<b>Make:</b>	Chevrolet
<b>Type:</b>	Diaphragm
<b>Diameter:</b>	264 mm
<b>No. of Plates:</b>	One
<b>Actuation:</b>	Hydraulic
<b>Comments:</b>	None

**3.2 TRANSMISSION**

<b>Type:</b>	Four speed all Synchronesh
<b>Make:</b>	GM Muncie M20 (wide ratio) or M21 (close ratio)
<b>Gearbox location:</b>	Behind engine
<b>No. forward speeds:</b>	Four
<b>Gearchange type and location:</b>	H pattern Remote on floor
<b>Case material:</b>	Cast iron or Alloy
<b>Identifying marks:</b>	N/A
<b>Comments:</b>	None

**3.3 FINAL DRIVE**

<b>Make:</b>	Chevrolet	<b>Model:</b>	Salisbury 10 or 12 bolt
<b>Type:</b>	Live rear axle		
<b>Ratios:</b>	Various		
<b>Differential type:</b>	Limited slip		
<b>Comments:</b>	None		

**3.4 TRANSMISSION SHAFTS (EXPOSED)**

<b>Number:</b>	One
<b>Location:</b>	
<b>Description:</b>	Tubular and Open tail shaft with twin uni joints
<b>Comments:</b>	None

**3.5 WHEELS & TYRES**

<b>Wheel type - Original:</b>	Pressed disc	<b>Material - Original:</b>	Steel
<b>Wheel type - Allowed:</b>	Cast	<b>Material - Allowed:</b>	Aluminium alloy
<b>Fixture method:</b>	Studs	<b>No. studs:</b>	Five
<b>Wheel dia. &amp; rim width</b>	<b>FRONT</b>		<b>REAR</b>
<b>Original:</b>	5" x 14"		5" x 14"
<b>Allowed</b>	6" x 15"		6" x 15"
<b>Tyre Section:</b>			
<b>Original:</b>	14" x 6.95"		
<b>Allowed:</b>	Refer approved tyre list.		
<b>Aspect ratio - minimum:</b>	60% minimum aspect ratio		
<b>Comments:</b>	None		

## SECTION 4 - GENERAL

### 4.1 FUEL SYSTEM

<b>Tank Location:</b>	Boot	<b>Capacity:</b>	61 litres
<b>Fuel pump, type</b>	Mechanical on engine block	<b>Make:</b>	AC
<b>Comments:</b>	None		

### 4.2 ELECTRICAL SYSTEM

<b>Voltage:</b>	12	<b>Alternator fitted:</b>	Yes
<b>Battery Location:</b>	Engine compartment		
<b>Comments:</b>	None		

### 4.3 BODYWORK

<b>Type:</b>	Uni body, with sub frames	<b>Material:</b>	Steel
<b>No. of seats:</b>	Five	<b>No. doors:</b>	Two or four
<b>Comments:</b>	None		

### 4.4 DIMENSIONS

<b>Track - Front:</b>	1438 mm	<b>Rear:</b>	1430 mm
<b>Wheelbase:</b>	2794 mm	<b>Overall length:</b>	4138 mm
<b>Dry weight:</b>	1202 kg		
<b>Comments:</b>	None		

### 4.5 SAFETY EQUIPMENT

Refer applicable Group Regulations
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## **Appendix A**

### **Suspension**

#### **Front**

Spring height adjustment permitted.

#### **Rear**

Spring height adjustment permitted.

### **Carburettor**

Barry Grant reproduction carburettor not approved.

### **Cylinder Head**

Conditional upon individual application:

- Dart Iron Eagle 180 SBC 23 Degree cast iron part no 10120010
- RHS "Pro Action" 23 degree Cast Iron SBC head – (180cc Intake Runner/64cc chamber).
  - Part No. 12317 straight plug
  - Part No. 12318 angled plug

Where Dart Iron Eagle 180 SBC 23 Degree cast iron part no 10120010 is installed, 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.

The heads to be in the manufactured state, save for refacing the cylinder gasket face and matching the inlet ports by not more than 12mm from the port face.

The limiter will be subject to testing at race meetings.

Log book endorsed and the engine sealed are required.

1. Engine to be assemble to short motor without sump.
2. Heads to be assembled ready to be fitted to engine.
3. 2 sump bolts/studs to be drilled. 2 top timing case bolts/studs to be drilled.
4. The sealer will pick two valves from one cylinder of either head to be removed to check that under the valve head and the ports are unmodified and that the valve heads are 2.02" in diameter for the inlet, and 1.60" for the exhaust.
5. Check the inlet and exhaust ports are unmodified except for the allowance allowed, from the manifold faces, into the port for manifold alignment.
6. Combustion chambers are to be as per above.
7. Measure bore and stroke.
8. Note whether 2 bolt or 4 bolt block.

### **Allowances**

1. Surfacing of the head face is allowed to achieve required combustion chamber volume or restore the cylinder head from engine failure damage and/or overheating.
2. K Line .030" bronze valve guide inserts are allowed if required and to recondition to standard size from excessive wear.
3. Port matching in the cross hatched area for the inlet and exhaust ports to manifold to a maximum of the 12 mm from the manifold face. Inlet and exhaust ports must be left completely untouched from under the valve seats to within allowed depth from the manifold face.
4. Machining is allowed of the valve spring pad and valve guide outside diameter and length as well as pushrod holes. This will enable spring locators, valve springs, stem seals, valve spring installation height and pushrod clearance to be correctly set up and fitted.
5. Valve seat cutting/grinding is allowed, but the original valve sizes of 2.02" inlet and 1.60" exhaust must be retained. No machining is permitted under the valve seat.

6. No machining is permitted in the combustion chamber. Combustion chambers must be left completely untouched except for original machining by the manufacturer.

ie. No machining, no hard or soft wire brushing, no coarse or fine grinding either by hand, machine or high speed grinder etc, no shot peening, no sand blasting, no glass bead blasting, no water blasting, no hand scraping, no filing, no emery wheels or stones, no acid etching, no chiselling, no hammering or pneumatic peening, no flexi honing, no spark eroding, no removal of any metal by milling machine.

The only exception is the metal between the inlet valve head and the exhaust valve head which may be rounded in case it creates a hot spot.

