



5TH CATEGORY - HISTORIC RACING

GROUP Nb

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: Chevrolet **Model:** Chevy II Nova
Period of Original Manufacture: 1965
CAMS Historic Group: Nb
Date of issue of this document: May 2018



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: Uni Body with Sub frames
Period of Manufacture:
Manufacturer: GM Chevrolet
Chassis no. from:
Chassis no. location: On plate on left side door hinge pillar
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: Mono plate leaf
Damper type: Telescopic **Adjustable:** No
Anti-sway bar: Fitted
Suspension adjustable: Yes

1.4 STEERING

Type: Recirculating ball **Make:** Chevrolet

1.5 BRAKES

	Front	Rear
Type:	Drum	Drum
Dimensions:	241 x 63 (9.5" x 2.5")	241 x 50 (9.5" x 2")
Material:	Cast Iron	Cast Iron
No. cylinders/pots per wheel:	One	One
Actuation:	Hydraulic	
Calliper Make:	N/A	
Calliper Type:	N/A	
Calliper Material:	N/A	
Master cylinder make:	GM	Type: Duel
Adjustable bias:	No	
Servo Fitted:	Optional	

SECTION 2 - ENGINE

2.1 ENGINE

Make: Chevrolet
Model: Small Block - 327
No. cylinders: 8 **Configuration:** Vee
Cylinder block material: Cast Iron **Two/Four Stroke:** 4
Bore - Original: 101.6 **Max. allowed:** 103.1
Stroke - original: 82.55 **Max. allowed:** 82.55
Capacity - original: 5359 **Max. allowed:** 5513
Cooling method: Water
Identifying marks: Refer Appendix for allowed casting numbers

2.2 CYLINDER HEAD

Make: Chevrolet
No. of valves/cylinder: Two **Inlet:** One **Exhaust:** One
No. of ports total: Eight **Inlet:** Four **Exhaust:** Four
No. of camshafts: 1 **Location:** Block **Drive:** Chain
Valve actuation: Pushrod & Rocker
Spark plugs/cylinder: One
Identifying marks: N/A

Comments:

Conditional upon individual application.

- Approved cast iron cylinder heads are: **Dart Iron Eagle 180 SBC 23 Degree cast iron part no 10120010**, or the RHS "Pro Action" 23 degree Cast Iron SBC head – (180cc Intake Runner/64cc chamber). Part No. 12317 straight plug or part No. 12318 angled plug
- 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
- **Dart Iron Eagle require the use of a MSD Soft Touch rev limiter Part No 8728 with a 7500 RPM limit. The limiter will be subject to testing at race meetings. The limiter will be located in an easily accessible position within the engine bay.**
- **Engine to be sealed as per procedure in the appendix**

Once approval, endorsement and the engine seal numbers will be recorded in the log book.

2.3 LUBRICATION

Method: Wet Sump

Oil cooler standard: None

2.4 IGNITION SYSTEM

Type: Coil, Points & distributor

Make: Delco

2.5 FUEL SYSTEM

Carburettor Make: Rochester

Model: Quadrajets

Carburettor number: One

Size: 750

Comments:

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: Chevrolet

Type: Diaphragm

Diameter: 264

No. of Plates: 1

Actuation: Hydraulic

3.2 TRANSMISSION

Type: 4 Speed all Synchronesh

Make: GM, Muncie M20
(Wide ratio) or M21
(close ratio)

No. forward speeds: Four

Gearbox location: Behind engine

Gear change type and location: H Pattern, remote floor shift

Case material: Cast Iron or Alloy

3.3 FINAL DRIVE

Type: Live Rear Axle

Make: Chevrolet

Model: Salisbury 10 or 12 bolt

Wheel drive method: Shaft

Ratios: Various

Differential type: Limited Slip

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: One

Description: Open tail shaft

3.5 WHEELS & TYRES

Wheel type - Original:	Disc	Material - Original:	Steel
Allowed:	Cast	Allowed:	Alloy
Fixture method:	Stubs	No. studs:	Five
Wheel dia. & rim width:	FRONT		REAR
Original:	14" x 5"		14" x 5"
Allowed:	15" x 6"		15" x 6"
Tyres original:	14" x 6.95"		14" x 6.95"
Tyres allowed:	60% minimum aspect ratio, refer approved tyre list.		

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank Location:	Boot	Capacity:	61 litres
Fuel pump type and location:	Engine Compartment	Make:	AC

4.2 ELECTRICAL SYSTEM

Voltage:	12	Alternator or Dynamo:	Alternator
Battery Location:	Engine Compartment		

4.3 BODYWORK

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

4.4 DIMENSIONS

Track - Front:	1438	Rear:	1430
Wheelbase:	2794	Overall length:	4138
Dry weight:	1202 kg		

4.5 SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix

Spare part 10066034 GM performance parts replacement small block 305, 327 & 350, four bolt design with split rear seal.

BLOCK CASTING IDENTIFICATION

3959512	3852174	3903352	3791362	3955618	3782870	3858180
3789817	3970010	3858190	3789817	3892657	3858174	3914678
3866657	3794460	3782870	3892657	3932386	3876132	

Chevrolet small block sealing procedure for engines using the substitute cylinder head

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.
9. Fit sump and fit seal. Seal timing case.
10. Fit heads and drill holes in appropriate positions in the corners of the block and heads to enable wire and seals to be fitted.
11. Seal heads to block. Note seal numbers. Competitor gets a signed sealers document.

Note: If the heads are removed they must be re-sealed following the above points 4, 5, 10 and 11.

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 and to recondition to standard size from excessive wear. required
3. Port matching in the cross hatched area for the inlet and ports to manifold to a maximum of the 12 mm from the face. Inlet and exhaust ports must be left completely from under the valve seats to within allowed depth from manifold face. exhaust manifold untouched the
4. Machining is allowed of the valve spring pad and valve outside diameter and length as well as pushrod holes. enable spring locators, valve springs, stem seals, valve installation height and pushrod clearance to be correctly fitted. guide This will spring set up and
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.