

5TH CATEGORY - HISTORIC RACING GROUP S 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.

Make of Car:	Chevrolet	Model:	Corvette – 454ci
Period of Original Manufacture:	1968		
Motorsport Australia Historic Group:	Sb		
Date of Issue of this Document:	31/12/2024		
IMPORTANT	This Specification Sheet relates only to the LS6 model.		
	To be eligible, a candidate car must be an original		
	factory built LS6 model		



	Update Log		
May 2020	GM Motorsport block Part #88962516 added		
30/6/2022	Document layout		
31/12/2024	Inclusion of kerb and minimum racing weights		

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1.1. CHASSIS

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Description:	Box section ladder frame	Box section ladder frame		
Period of Manufacture:	1971	1971		
Manufacturer:	GM/Chevrolet	GM/Chevrolet		
Chassis Number:	Convertible	194671S100001 - 194671S121801		
	Coupe	194371S100001 - 194371S121801		
Chassis Number location:	LH Windscreen pillar, inn	LH Windscreen pillar, inner vertical surface		
Comments	Only genuine LS6 vehicles	Only genuine LS6 vehicles with correct ID are permitted		

1.2. FRONT SUSPENSION

Description:	Independent by upper and lower wishbones			
Spring Medium:	Leaf			
Damper Type:	Telescopic Adjustable: Optional			Optional
Anti-sway bar:	Fitted		Adjustable:	No
Suspension adjustable:	Yes Method:		Shims	
Comments:	Spring rates and ride heights are free			

1.3. REAR SUSPENSION

Description:	Independent	Independent by transverse leaf and trailing arms			
Spring Medium:	Leaf	Leaf			
Damper Type:	Telescopic	Telescopic		Optional	
Anti-sway bar:	Fitted	Fitted		No	
Suspension adjustable:	Yes	Yes Method:			
Comments:	None				

1.4. STEERING

Туре:	Recirculating ball	Make:	Saginaw
Comments	None		

1.5. BRAKES

	Front	Rear	
Туре:	Disc, vented	Disc, vented	
Dimensions:	299 mm x 31.75 mm	299 mm x 31.75 mm	
Material of drum/disc:	Cast iron	Cast iron	
No. cylinders/pots per wheel:	Four	Four	
Actuation:	Hydraulic	Hydraulic	
Caliper make:	GM Delco	GM Delco	
Caliper type:	Fixed	Fixed	
Material:	Cast iron	Cast iron	
Master cylinder make:	GM Delco		
Туре:	Tandem		
Adjustable bias:	No		
Servo Fitted:	Yes		
Comments:	Dual or tandem master cyl	inders permitted.	

2.1. ENGINE

Make:	Chevrolet		
Model – Small block:	LS6 – 454 ci		
No. cylinders:	Eight	Configuration:	Vee
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four
Bore - Original:	108 mm	Max allowed:	109.5 mm
Stroke - original:	101.6 mm	Max allowed:	101.6 mm
Capacity - original:	7446 cc	Max allowed:	7654 cc
Identifying marks:	Casting numbers		
Cooling method:	Liquid Aluminium radiators not permitted		
Comments:	Genuine LS6 engine carries block casting number 3963512 and engine number carries suffix "CPW" LS7 engine not permitted as this engine was sold as after-production fitment.		

Z.Z. CILINDER HEAD					
Make:	Chevrole	Chevrolet (Aluminium)			
No. of valves/cylinder:	Two	Inlet:	One	Exhaust:	One
No. of ports total:	Sixteen	Inlet:	Eight	Exhaust:	Eight
No. of camshafts:	One	Location:	Block	Drive:	Chain
Valve actuation:	Pushrod	Pushrod and rocker			
Spark plugs/cylinder:	One				
Identifying marks:	Aluminium cylinder head must carry casting number 3946074.				
Comments:	None				

2.3. LUBRICATION

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

2.4. IGNITION SYSTEM

Туре:	Points, Coil and Distributor			
Make:	Delco K66			
Comments	No change	No changes to ignition permitted. Electronic rev limiters permitted		
2.5. FUEL SYSTEM				
Carburettor Make:	Holley	Model:	Four barrel 4150-R 4803	
Carburettor Number:	One			
Size:	Various			
Fuel injection Make:	N/A	Туре:	N/A	
Supercharged:	No	Type:	N/A	
Comments:	Carburettor bore is free			

SECTION 3 - TRANSMISSION

3.1. CLUTCH

Make:	Delco
Туре:	Diaphragm
Diameter:	254 mm
No. of Plates:	One
Actuation:	Mechanical
Comments:	None

3.2. TRANSMISSION

Туре:	Synchromesh
Make:	Muncie
Model	M21
Gearbox location:	Behind engine
No. forward speeds:	Four
Gearchange type and location:	Floor -remote
Case material:	Cast iron or Aluminium alloy
Identifying marks:	N/A
Comments:	Internal components are free.
	Muncie M22 'Rock crusher' gearbox not permitted.

3.3. FINAL DRIVE

Make:	GM	Model:	
Туре:	Spin resistant		
Ratios:	3.36:1		
Differential type:	GM Posi traction		
Comments:	Internal components are free		

3.4. TRANSMISSION SHAFTS (EXPOSED)

Number:	Three	
Description:	Open tail shaft, transmission to Sprung unit. Half shaft, sprung unit to	
	wheels	
Comments:	None	

3.5. WHEELS & TYRES

Wheel type - Original:	Disc	Materia	I - Original:	Steel
				Alloy
Wheel type - Allowed:	Disc	Materia	l - Allowed:	Steel
	Cast			Period Alloy
Fixture method:	Studs and nuts	No. stud	ls:	Five
Wheel dia. & rim width	FRONT	FRONT		REAR
Original:	8" x 15"	8″ x 15″		8" x 15"
Allowed	8" x 15"		8" x 15"	
Tyre Section:	Refer approved tyre list.			
Aspect ratio - minimum:	60% minimum aspect ratio.			
Comments:	Fitment must meet tyre manufacturer's prescriptions			

4.1. FUEL SYSTEM

Tank Location:	Under rear floor	Capacity:	75 litres
Fuel pump, type:	Mechanical, on engine	Make:	AC Delco
Comments:	Safety fuel tanks permitted – refer Group S regulations		

4.2. ELECTRICAL SYSTEM

Voltage:	Twelve	Alternator fitted:	Alternator
Battery Location:	Rear compartment		
Comments:	None		

4.3. BODYWORK

Туре:	Convertible or Fixed Head	Material:	FRP
	Coupe		
No. of seats:	Two	No. doors:	Two
Comments:	None		

4.4. DIMENSIONS

Track - Front:	1490 mm	Rear:	1509 mm
Wheelbase:	2490 mm	Overall length:	4635 mm
Approved Manufacturer's	1533 kg		
kerb weight:			
Approved minimum racing	1418 kg		
weight:			
Comments:	None		

4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix A