



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.

Make of Car:	Volvo	Model:	140 Series 142S/144S
Period of Original Manufacture:	1967 – 1971		
Motorsport Australia Historic Group:	Nc		
Date of Issue of this Document:	30 September 2021		



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

Update Log

SECTION 1 - CHASSIS

1.1. CHASSIS

Description:	Unitary construction
Period of Manufacture:	1956 – 1970
Manufacturer:	Volvo
Chassis Number From:	Prefix 1423342***, 1443342***
Chassis Number location:	Bulkhead – engine bay
Material:	Steel
Comments	None

1.2. FRONT SUSPENSION

Description:	Independent – upper and lower wishbones		
Spring Medium:	Coil		
Damper Type:	Telescopic	Adjustable:	No
Anti-sway bar:	Yes	Adjustable:	No
Suspension adjustable:	Yes	Method:	Caster, camber and toe
Comments:	None		

1.3. REAR SUSPENSION

Description:	Live rear axle		
Spring Medium:	Coil		
Damper Type:	Telescopic	Adjustable:	No
Anti-sway bar:	No	Adjustable:	No
Suspension adjustable:	No	Method:	N/A
Comments:	None		

1.4. STEERING

Type:	Worm and peg	Make:	Volvo
Comments	None		

1.5. BRAKES

	Front	Rear
Type:	Disc, solid	Disc, solid
Dimensions:	272 mm x 12.8 mm	295 mm x 9.6 mm
Material of drum/disc:	Cast iron	Cast iron
No. cylinders/pots per wheel:	Four	Two
Actuation:	Hydraulic	Hydraulic
Caliper make:	Volvo	
Caliper type:	Fixed	
Material:	Cast iron	
Master cylinder make:	Volvo	
Type:	Tandem	
Adjustable bias:	No	
Servo Fitted:	Yes	
Comments:	None	

SECTION 2 - ENGINE

2.1. ENGINE

Make:	Volvo		
Model:	B18, B20		
No. cylinders:	Four	Configuration:	In line
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four
Bore – Original – B18:	84.14 mm	Max allowed:	85.64 mm
Stroke – original – B18:	80 mm	Max allowed:	80 mm
Capacity – original – B18:	1780 cc	Max allowed:	1842 cc
Bore – Original – B20:	88.9 mm	Max allowed:	90.4 mm
Stroke – original – B20:	80 mm	Max allowed:	80 mm
Capacity – original – B20:	1986 cc	Max allowed:	2052 cc
Identifying marks:	Left side of the engine block		
Cooling method:	Liquid		
Comments:	B20 engine introduced in 1969		

2.2. CYLINDER HEAD

Make:	Volvo		
No. of valves/cylinder:	Two	Inlet: One	Exhaust: One
No. of ports total:	Eight	Inlet: Four	Exhaust: Four
No. of camshafts:	One	Location: Block	Drive: Gear
Valve actuation:	Pushrod and rocker		
Spark plugs/cylinder:	One		
Identifying marks:	N/A		
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:	No	Location:	N/A
Comments:	None		

2.4. IGNITION SYSTEM

Type:	Points, distributor & coil		
Make:	Bosch		
Comments	Breakerless electronic ignition permitted		

2.5. FUEL SYSTEM

Carburettor Make:	SU	Model:	HS6
Carburettor Make:	Zenith Stromberg	Model:	175CD-2SE
Carburettor Number:	Two		
Size:	Various		
Fuel injection Make:	N/A	Type:	N/A
Supercharged:	No	Type:	N/A
Comments:	None		

SECTION 3 - TRANSMISSION

3.1. CLUTCH

Make:	Volvo
Type:	Diaphragm
Diameter:	216 mm
No. of Plates:	One
Actuation:	Hydraulic
Comments:	None

3.2. TRANSMISSION

Type:	Synchromesh
Make:	Volvo Volvo (Laycock overdrive)
Gearbox location:	Behind engine
No. forward speeds:	Four (plus overdrive if fitted)
Gearchange type and location:	Floor - direct
Case material:	Cast iron
Identifying marks:	N/A
Comments:	Overdrive optional

3.3. FINAL DRIVE

Make:	Volvo	Model:	M40
Type:	Live rear axle		
Ratios:	Various		
Differential type:	Hypoid bevel/LSD		
Comments:	None		

3.4. TRANSMISSION SHAFTS (EXPOSED)

Number:	One
Location:	Gearbox to final drive
Description:	Open tail shaft with twin uni joints
Comments:	None

3.5. WHEELS & TYRES

Wheel type - Original:	Pressed disc	Material - Original:	Steel
Wheel type - Allowed:	Steel Alloy (period style)	Material - Allowed:	Steel Alloy
Fixture method:	Stud and nut	No. studs:	Five
Wheel dia. & rim width	FRONT		REAR
Original:	4.5" x 15"		4.5" x 15"
Allowed	7" x 15"		7" x 15"
Tyre Section:			
Allowed:	Refer approved tyre list.		
Aspect ratio - minimum:	60% minimum aspect ratio.		
Comments:	None		

SECTION 4 GENERAL

4.1. FUEL SYSTEM

Tank Location:	Rear	Capacity:	58 litres
Fuel pump, type:	Mechanical on block	Make:	Volvo
Comments:	None		

4.2. ELECTRICAL SYSTEM

Voltage:	12	Alternator fitted:	Generator
Battery Location:	Engine bay		
Comments:	None		

4.3. BODYWORK

Type:	Coupe or Sedan	Material:	Steel
No. of seats:	Four	No. doors:	2 or 4 door
Comments:	None		

4.4. DIMENSIONS

Track - Front:	1350 mm	Rear:	1350 mm
Wheelbase:	2600 mm	Overall length:	4640 mm
Dry weight:	1120 kg – 142 1180 kg - 144		
Comments:	None		

4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix