

CAMS

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 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 CAMS Manual of Motor Sport.

Make of Car:	Valiant Charger	Model:	VH	HEMI 215 HEMI 245 HEMI 265 E37 E38 E49 318 V8 340 V8
Period of Original Manufacture:	7/1971-3/1973			
CAMS Historic Group:	Nc			

Date of Issue of this Document: September 1999



SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description:	Unitary Construction	Period of Manufacture:
Manufacturer:	Chrysler Australia	7/1971 - 3/1973
Chassis no. from:		
Chassis no. location:	RH Fender - under bonnet	
Material:	Steel	
Comments:		

1.2 FRONT SUSPENSION

Description:	Independent - Torsion Bars	
Spring medium:	Torsion Bar	
Damper Type:	Telescopic	Adjustable: Optional
Anti-sway bar:	Yes	Adjustable: Optional
Suspension adjustable:	Ride height adjustable	Method: Torsion Bar Tension
Comments:		

1.3 REAR SUSPENSION

Description:	Live Axle	
Spring medium:	Semi Elliptic Leaf	
Damper type:	Telescopic	Adjustable: Optional
Anti-sway bar:	No	Adjustable:
Suspension adjustable:	No	Method:
Comments:		

1.4 STEERING

Type:	Recirculating Ball	Make: Chrysler
Comments:		

1.5 BRAKES

Type:	Front	Rear
	Disc	Drum
Dimensions:	280mm (ventilated)	229mm
Material of drum/disc:	Cast Iron	Cast Iron
No. cylinders/pots per wheel:	2	2
Actuation:	Hydraulic	Hydraulic
Caliper: Make, Material, Type:	Girlock	
Master cylinder make:		Type: Tandem
Adjustable bias	Yes - if twin circuit master cylinder fitted	
Servo Fitted	Yes	
Comments:	Twin Circuit Permitted. Servo may be changed or rendered inoperative.	

SECTION 2A - ENGINE - HEMI 215

2.1 ENGINE

Make:	Chrysler		
Model:	HEMI 215		
No. cylinders:	6	Configuration:	In line
Cylinder Block-material:	Cast Iron	Four Stroke	
Bore - Original:	89.4mm	Max. allowed:	90.9mm
Stroke - original:	93.47mm	Max. allowed:	93.47mm
Capacity - original:	3520cc	Max. allowed:	3637cc
Cooling method:	Water		
Identifying marks:			
Comments:			

2.2 CYLINDER HEAD

Make:	Chrysler				
No. of valves/cylinder-		Inlet:	1	Exhaust:	1
No. of ports total:	12	Inlet:	6	Exhaust:	6
No. of camshafts:	1	Location:	Block	Drive:	Chain
Valve actuation:		Pushrod			
Spark plugs/cylinder:	1				
Identifying marks:					
Comments:					

2.3 LUBRICATION

Method:	Wet Sump	Oil tank location:	N/A
Dry sump pump type:	Not Fitted	Location:	N/A
Oil cooler standard:	No	Location:	N/A
Comments:	Oil Cooler Permitted		

2.4 IGNITION SYSTEM

Type:	Coil and Distributor
Make:	Optional
Comments:	

2.5 FUEL SYSTEM

Carburettor: Make:	Model: Single	No: 1	Size:
	Barrel D/Draught		Size:
Fuel injection Make:	N/A	Type:	
Supercharged:	N/A	Type:	
Comments:	Carburettor/s may be replaced with other make/types available in period.		

SECTION 2B - ENGINE - HEMI 245

2.1 ENGINE

Make:	Chrysler	Configuration:	In Line
Model:	HEMI 245	Four Stroke	
No. cylinders:	6	Max. allowed:	97.00mm
Cylinder Block-material:	Cast Iron	Max. allowed:	93.47mm
Bore - Original:	95.5mm	Max. allowed:	4142cc
Stroke - original:	93.47mm		
Capacity - original:	4015cc		
Cooling method:	Water		
Identifying marks:			
Comments:			

2.2 CYLINDER HEAD

Make:	Chrysler		
No. of valves/cylinder-		Inlet:	1
No. of ports total:	12	Inlet:	6
No. of camshafts:	1	Location:	Block
Valve actuation:			
Spark plugs/cylinder:	1	Exhaust:	1
Identifying marks:		Exhaust:	6
Comments:		Drive:	Chain

2.3 LUBRICATION

Method:	Wet sump	Oil tank location:	N/A
Dry sump pump type:	Not fitted	Location:	N/A
Oil cooler standard:	No	Location:	N/A
Comments:	Oil Cooler Permitted		

2.4 IGNITION SYSTEM

Type:	Coil and Distributor
Make:	Optional
Comments:	

2.5 FUEL SYSTEM

Carburettor: Make:	Model : Single Barrel	Size:	1
	D/Draught		
Fuel injection Make:	N/A	Type:	
Supercharged:	N/A	Type:	
Comments:	Carburettor/s may be replaced with other make/types available in period.		

SECTION 2C- ENGINE - HEMI 265

2.1 ENGINE

Make:	Chrysler	Configuration:	In Line
Model:	Hemi 265	Four Stroke	
No. cylinders:	6	Max. allowed:	100.8mm
Cylinder Block-material:	Cast Iron	Max. allowed:	93.47mm
Bore - Original:	99.3mm	Max. allowed:	4474 cc
Stroke - original:	93.47mm		
Capacity - original:	4340cc		
Cooling method:	Water		
Identifying marks:			
Comments:			

2.2 CYLINDER HEAD

Make:	Chrysler	Inlet:		Exhaust:	
No. of valves/cylinder-	2	Inlet:	6	Exhaust:	6
No. of ports total:	12	Location:	Block	Drive:	Chain
No. of camshafts:	1				
Valve actuation:		Pushrod			
Spark plugs/cylinder:		1			
Identifying marks:					
Comments:					

2.3 LUBRICATION

Method:	Wet Sump	Oil tank location:	N/A
Dry sump pump type:	No	Location:	N/A
Oil cooler standard:	No	Location:	N/A
Comments:			

2.4 IGNITION

Type:	Coil & Distributor
Make:	Optional
Comments:	

2.5 FUEL FEED

Carburettor:	Make: Weber	Model: Two Barrel d/Draught	No: 1	Size:
Fuel injection Make:	N/A	Type:		
Supercharged:	N/A	Type:		
Make:				
Comments:	Carburettor/s may be replaced with other make/types available in period.			

SECTION 2E - ENGINE - E38

2.1 ENGINE

Make:	Chrysler	Configuration:	In line
Model:	E38	Four Stroke	
No. cylinders:	6	Max. allowed:	100.8mm
Cylinder Block-material:	Cast Iron	Max. allowed:	93.47mm
Bore - Original:	99.3mm	Max. allowed:	4474cc
Stroke - original:	93.47mm		
Capacity - original:	4340cc		
Cooling method:	Water		
Identifying marks:			
Comments:			

2.2 CYLINDER HEAD

Make:	Chrysler	Inlet:	1	Exhaust:	1
No. of valves/cylinder-	2	Inlet:	6	Exhaust:	6
No. of ports total:	12	Location:	Block	Drive:	Chain
No. of camshafts:	1	Valve actuation:	Pushrod		
Valve actuation:		Spark plugs/cylinder:	1		
Spark plugs/cylinder:	1	Identifying marks:			
Identifying marks:		Comments:			
Comments:					

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:	Oil Cooler Permitted		

2.4 IGNITION SYSTEM

Type:	Coil and Distributor
Make:	Optional
Comments:	

2.5 FUEL SYSTEM

Carburettor: Make:	Weber	Model :	DCOE 45 No. 3	Size:	45MM
Fuel injection Make:	N/A	Type:			
Supercharged:	N/A	Type:			
Comments:	Carburettor/s may be replaced with other make/types available in period.				

SECTION 2F - ENGINE- E49

2.1 ENGINE

Make:	Chrysler	Configuration:	In line
Model:	E49	Four Stroke	
No. cylinders:	6	Max. allowed:	100.8mm
Cylinder Block-material:	Cast Iron	Max. allowed:	93.47mm
Bore - Original:	99.3mm	Max. allowed:	4474cc
Stroke - original:	93.47mm		
Capacity - original:	4340cc		
Cooling method:	Water		
Identifying marks:			
Comments:			

2.2 CYLINDER HEAD

Make:	Chrysler	Inlet:	1	Exhaust:	1
No. of valves/cylinder-	2	Inlet:	6	Exhaust:	6
No. of ports total:	12	Location:	Block	Drive:	Chain
No. of camshafts:	1	Valve actuation:	Pushrod		
Valve actuation:		Spark plugs/cylinder:	1		
Spark plugs/cylinder:		Identifying marks:			
Identifying marks:					
Comments:					

2.3 LUBRICATION

Method:	Wet sump	Oil tank location:	NA
Dry sump pump type:	N/A	Location:	NA
Oil cooler standard:	No	Location:	NA
Comments:	Oil Cooler Permitted		

2.4 IGNITION SYSTEM

Type:	Coil and Distributor
Make:	Optional
Comments:	

2.5 FUEL SYSTEM

Carburettor: Make:	Weber	Model:	DCOE 48 No.3	Size:	48 mm
Fuel injection Make:	N/A	Type:			
Supercharged:	N/A	Type:			
Comments:	Carburettor/s may be replaced with other make/types available in period.				

SECTION 2G - ENGINE - 318 V8

2.1 ENGINE

Make:	Chrysler	Configuration:	Vee
Model:	318	Four Stroke	
No. cylinders:	8	Max. allowed:	100.81mm
Cylinder Block-material:	Cast Iron	Max. allowed:	84.1mm
Bore - Original:	99.31mm	Max. allowed:	5365cc
Stroke - original:	84.1mm		
Capacity - original:	5192cc		
Cooling method:	Water		
Identifying marks:			
Comments:			

2.2 CYLINDER HEAD

Make:	Chrysler	Inlet:	1	Exhaust:	1
No. of valves/cylinder-	2	Inlet:		Exhaust:	
No. of ports total:		Location:	Block	Drive:	Chain
No. of camshafts:	1	Pushrod			
Valve actuation:					
Spark plugs/cylinder:	1				
Identifying marks:					
Comments:					

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:	Oil Cooler Permitted		

2.4 IGNITION SYSTEM

Type:	Coil and Distributer
Make:	Optional
Comments:	

2.5 FUEL SYSTEM

Carburettor: Make:		Model:	Two Barrel Di/Draught No. 1
Size:			
Fuel injection Make:	N/A	Type:	
Supercharged:	N/A	Type:	
Comments:	Carburettor/s may be replaced with other make/types available in period.		

SECTION 2H - ENGINE - 340 V8

2.1 ENGINE

Make:	Chrysler	Configuration:	Vee
Model:	340	Four Stroke	
No. cylinders:	8	Max. allowed:	104.1mm
Cylinder Block-material:		Max. allowed:	84.0mm
Bore - Original:	102.6mm	Max. allowed:	5716cc
Stroke - original:	84.0mm		
Capacity - original:	5570cc		
Cooling method:	Water		
Identifying marks:			
Comments:			

2.2 CYLINDER HEAD

Make:	Chrysler	Inlet:	1	Exhaust:	1
No. of valves/cylinder-		Inlet:		Exhaust:	
No. of ports total:		Location:	Block	Drive:	Chain
No. of camshafts:	1	Pushrod			
Valve actuation:					
Spark plugs/cylinder:	1				
Identifying marks:					
Comments:					

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:	Oil Cooler Permitted		

2.4 IGNITION SYSTEM

Type:	Coil and Distributor
Make:	Optional
Comments:	

2.5 FUEL SYSTEM

Carburettor: Make:		Model :	Four Barrel D/Draught No. 1
Size :			
Fuel injection Make:	N/A	Type:	
Supercharged:	N/A	Type:	
Comments:	Carburettor/s may be replaced with other make/types available in period.		

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: **Type:** Diaphragm **Diameter:** 241mm
No. of Plates: Single or Twin Plate
Actuation: Mechanical
Comments:

3.2 TRANSMISSION

Type: Borg Warner
Make: Borg Warner **Model:** 3 or 4 Spd
No. forward speeds: 4 **Gearbox location:** Rear of Engine
Gearchange type and location: H pattern - Central location

Case material: Steel & Aluminium **Identifying marks:**
Comments: Ratios free

3.3 FINAL DRIVE

Make: Borg Warner **Model:** Hypoid Bevel
Wheel drive method: Rear
Ratios: Various
Differential: Limited Slip Optional **Type:** Cone Clutch LSD
Comments: Ratios Free

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: 1 **Location:** Gearbox To Final Drive
Description: Tubular Tailshaft with Universal Joints
Comments:

3.5 WHEELS & TYRES

Wheel type:	Original: Steel or "Peanut" Style Alloy	Material:	Original: Steel or Alloy
	Allowed:		Allowed: Period Alloy
Fixture method:	Tapered Nut	No. studs:	5
	FRONT		REAR
Wheel dia. & rim width			
	Original: 6.5 or 7 x 14		6.5 or 7 x 14
	Allowed: 8 x 14		8 x 14
Tyre section:			
	Original: ER70Hx14		ER70Hx14
	Allowed: 245x14		245x14
Aspect ratio - minimum:	60%		
Comments:	Replacement wheels of period style permitted		

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank Location: Under Boot Floor **Capacity:** 86 Litres
(Optional Long Range 160 litre Fuel tanks)

Fuel pump, type and location: Electric **Make:** Holley

Comments:

4.2 ELECTRICAL SYSTEM

Voltage: 12 **Alternator fitted:**

Battery Location: Engine Bay

Comments: Battery location may be changed

4.3 BODYWORK

Type: Coupe **Material:** Steel

No. of seats: 5 **No. doors:** 2

Comments:

4.4 DIMENSIONS

Track - Front: 1519 mm **Rear:** 1530 mm

Wheelbase: 2670 mm **Overall length:** 4570 mm

Dry weight: 1340kg - Kerb Weight

Comments:

4.5 SAFETY EQUIPMENT

Fire extinguisher required
Seat belt required
Rollbar required
Electrical cut off switch recommended
Safety fuel tank recommended