

# CAMS

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 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:** Plymouth **Model:** Valiant

**Period of Original Manufacture:** September / 1963 - 1964

**CAMS Historic Group:** Nb

**Date of Issue of this Document:** 10th April 2000



## SECTION 1 - CHASSIS

### 1.1 CHASSIS FRAME

Description:	Unitary Construction	Period of Manufacture:
Manufacturer:	Chrysler	September 1963 - 1964
Chassis no. from:	100001 - 135403	
Chassis no. location:	Left Front Door Hinge Pillar	
Material:	Steel	
Comments:		

### 1.2 FRONT SUSPENSION

Description:	Independent - Unequal Length Wishbones		
Spring medium:	Torsion Bar		
Damper Type:	Telescopic	Adjustable:	No
Anti-sway bar:	Yes	Adjustable:	No
Suspension adjustable:	No	Method:	N/A
Comments:			

### 1.3 REAR SUSPENSION

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

### 1.4 STEERING

Type:	Recirculating Ball	Make:	Chrysler
Comments:			

### 1.5 BRAKES

Type:	Front Drum	Rear Drum
Dimensions:	229 x 56mm	229 x 50mm
Material of drum/disc	Cast Iron	Cast Iron
No. cylinders/pots per wheel:	2	1
Actuation:	Hydraulic	Hydraulic
Caliper: Make, Material, Type:	N/A	N/A
Master cylinder make:	Girlock/PBR	Type: Centre Valve - Tandem
Adjustable bias:	No	
Servo Fitted:	No	
Comments:	Twin Master Cylinders Permitted	

## SECTION 2 - ENGINE (170 ci)

### 2.1 ENGINE

Make:	Chrysler	Configuration:	In Line
Model:	Slant 6	Four Stroke	
No. cylinders:	6	Max. allowed:	89.5 mm
Cylinder Block-material:	Cast Iron	Max. allowed:	79.3mm
Bore - Original:	86mm	Max. allowed:	3000cc
Stroke - original:	79.3mm		
Capacity - original:	2788cc		
Cooling method:	Water		
Identifying marks:			

Comments: Bore may be varied and/or stroke reduced to attain capacity limit for Class B (3000cc)

### 2.2 CYLINDER HEAD

Make:	Chrysler	Inlet:	1	Exhaust:	1
No. of valves/cylinder:		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:	N/A	Location:	N/A
Oil cooler standard:	No	Location:	N/A
Comments:			

### 2.4 IGNITION SYSTEM

Type:	Coil & Distributor
Make:	Chrysler / Bosch
Comments:	

### 2.5 FUEL SYSTEM

Carburettor: Make:	Carter	Model:	BES	Size:	Single Choke
Fuel injection Make:	N/A	Type:			
Supercharged:	N/A	Type:			
Comments:	Carburettor/s may be replaced by others of a period type				

## SECTION 2 - ENGINE (225 ci)

### 2.1 ENGINE

Make:	Chrysler		
Model:	Slant 6		
No. cylinders:	6	Configuration:	In Line
Cylinder Block-material:	Cast Iron	Four Stroke	
Bore - Original:	86mm	Max. allowed:	95.5 mm
Stroke - original:	104.7mm	Max. allowed:	104.7mm
Capacity - original:	3690cc	Max. allowed:	4500cc
Cooling method:	Water		

Identifying marks:

Comments: Bore may be varied and/or stroke reduced to attain capacity limit for Class A2 (4500cc)

### 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:	N/A	Location:	N/A
Oil cooler standard:	No	Location:	N/A

Comments:

### 2.4 IGNITION SYSTEM

Type:	Coil & Distributor
Make:	Chrysler / Bosch

Comments:

### 2.5 FUEL SYSTEM

Carburettor: Make:	Carter	Model:	BBS	Size:	Single Choke
Fuel injection Make:	N/A	Type:			
Supercharged:	N/A	Type:			

Comments: Carburettor/s may be replaced by others of a period type

## SECTION 2 - ENGINE (273 ci)

### 2.1 ENGINE

Make:	Chrysler		
Model:	V8		
No. cylinders:	8	Configuration:	Vee
Cylinder Block-material:	Cast Iron	Four Stroke	
Bore - Original:	82.2mm	Max. allowed:	Variable
Stroke - original:	84.07mm	Max. allowed:	84.07mm
Capacity - original:	4477cc	Max. allowed:	See Comments
Cooling method:	Water		

Identifying marks:

Comments: Bore may be varied and/or stroke reduced to attain capacity increase as permitted in Class A1

### 2.2 CYLINDER HEAD

Make:	Chrysler		
No. of valves/cylinder:		Inlet: 1	Exhaust: 1
No. of ports total:		Inlet:	Exhaust:
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:	N/A	Location:	N/A
Oil cooler standard:	No	Location:	N/A

Comments:

### 2.4 IGNITION SYSTEM

Type: Coil & Distributor  
Make: Chrysler  
Comments:

### 2.5 FUEL SYSTEM

Carburettor: Make:	Carter	Model: 2BBL	Size:
Fuel injection Make:	N/A	Type:	4 Barrel optional
Supercharged:	N/A	Type:	

Comments: Carburettor/s may be replaced by others of a period type

## SECTION 3 - TRANSMISSION

### 3.1 CLUTCH

**Make:** Chrysler      **Type:** Dry Plate      **Diameter:** 235 mm  
**No. of Plates:** 1  
**Actuation:** Mechanical Linkage  
**Comments:**

### 3.2 TRANSMISSION

**Type:** Manual - Syncromesh  
**Make:** Chrysler      **Model:** A-833  
**No. forward speeds:** 4      **Gearbox location:** Behind engine  
**Gearchange type and location:** Floor Lever  
**Case material:** Alum. Alloy/Cast Iron      **Identifying marks:**  
**Comments:** 3 speed manual and 3 speed automatic also available

### 3.3 FINAL DRIVE

**Make:** Chrysler BW      **Model:**  
**Wheel drive method:** Rear  
**Ratios:** Various  
**Differential:** 'Sure Grip'- Limited Slip      **Type:** Hypoid  
**Comments:**

### 3.4 TRANSMISSION SHAFTS (EXPOSED)

**Number:** 1      **Location:** Gearbox to Final Drive  
**Description:** Tubular One-piece Tailshaft  
**Comments:**

### 3.5 WHEELS & TYRES

<b>Wheel type:</b> Original:	Steel Disc	<b>Material:</b> Original:	Steel
Allowed:	Period Alloy	Allowed:	Alloy
<b>Fixture method:</b>	Bolt on	<b>No. studs:</b>	5
	<b>FRONT</b>		<b>REAR</b>
<b>Wheel dia. &amp; rim width</b>			
Original:	14 x 4.5		14 x 4.5
Allowed:	14 x 5.5		14 x 5.5
<b>Tyre section:</b>			
Original:	650 x 14		650 x 14
Allowed:	205/60 x 14		205/60 x 14
<b>Aspect ratio - minimum:</b>	60%		60%
<b>Comments:</b>			

## SECTION 4 - GENERAL

### 4.1 FUEL SYSTEM

Tank Location: Rear Capacity: 80 Litres  
Fuel pump, type and location: Mechanical Make:  
Comments:

### 4.2 ELECTRICAL SYSTEM

Voltage: 12 Alternator fitted  
Battery Location: Engine Compartment  
Comments:

### 4.3 BODYWORK

Type: Two door sedan Material: Steel  
No. of seats: 4 No. doors: 2  
Comments:

### 4.4 DIMENSIONS

Track - Front: 1420mm Rear: 1412mm  
Wheelbase: 2692mm Overall length: 4775mm  
Dry weight: 1135Kg  
Comments:

### 4.5 SAFETY EQUIPMENT

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

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