



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 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: Valiant Pacer

Model: VG & VH, 245 or 265 Eng.

Period of Original Manufacture: 1968 to 71

CAMS Historic Group: Nc

Date of issue of this document: Sep 1999 – Revised August 2014



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

SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description: Unitary
Period of Manufacture: 1968 - 1971
Manufacturer: Chrysler Australia
Chassis no. from:
Chassis no. location: RH Fender, under bonnet
Material: Steel
Comments:

1.2 FRONT SUSPENSION

Description: Independent with torsion bar
Spring Medium: Torsion Bar
Damper Type: Telescopic **Adjustable:** No
Anti-sway bar: Yes **Adjustable:** No
Suspension adjustable: Yes **Method:** Camber, Caster & spring height

1.3 REAR SUSPENSION

Description: Live axle
Spring medium: Semi Elliptic Leaf
Damper type: Telescopic **Adjustable:** No
Anti-sway bar: No
Suspension adjustable: No

1.4 STEERING

Type: Recirculating Ball **Make:** Chrysler
Comment:

1.5 BRAKES

| | Front | Rear |
|--------------------------------------|--------------|---------------------|
| Type: | Disc, Vented | Drum |
| Dimensions: | 280 mm | 230 mm |
| Material: | Cast Iron | Cast Iron |
| No. cylinders/pots per wheel: | Two | One |
| Actuation: | Hydraulic | Hydraulic |
| Caliper Make: | Girlock | |
| Caliper Type: | Road | |
| Caliper Material: | Cast Iron | |
| Master cylinder make: | Girlock | Type: Tandem |
| Adjustable bias: | No | |
| Servo Fitted: | Yes | |
| Comment: | | |

SECTION 2 - ENGINE

2.1 ENGINE

Make: Chrysler
Model: Hemi 245 or 265
No. cylinders: 6
Configuration: Inline
Cylinder block material: Cast Iron
Two/Four Stroke: Four
Bore - Original: 95.504 mm (245)
99.31 mm (265)
Max. allowed: 97.404 mm (245)
100.81 mm (265)
Stroke - original: 93.47 mm
Capacity - original: 4051 cc (245)
4344 cc (265)
Max. allowed: 4179 cc (245)
4476 cc (265)
Cooling method: Water
Identifying marks:
Comment:

2.2 CYLINDER HEAD

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

2.3 LUBRICATION

Method: Wet Sump **Oil cooler standard:** None
Comment: External single stage, wet, belt driven oil pump allowed. Refer appendix

2.4 IGNITION SYSTEM

Type: Distributor & Coil **Make:**

2.5 FUEL SYSTEM

Carburettor Make: N/A **Model:** Two Barrel
Carburettor number: One **Size:** N/A

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: Borg Beck **Type:** Dry
Diameter: **No. of Plates:** Two
Actuation:

3.2 TRANSMISSION

Type: Single Rail **Make:** Borg Warner
No. forward speeds: Three **Gearbox location:** Behind Engine
Gear change type and location: H Pattern Floor Mounted
Case material: Alloy

3.3 FINAL DRIVE

Type: Live Axle **Model:** Sure Grip
Make: Borg Warner
Wheel drive method: Rear
Ratios: 2.92, 3.23, 3.5
Differential type: Limited Slip

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: One
Description: Tubular Tail Shaft

3.5 WHEELS & TYRES

| | | | |
|------------------------------------|---|-----------------------------|-------------|
| Wheel type - Original: | Sports type | Material - Original: | Steel |
| Allowed: | Period cast | Allowed: | Alloy |
| Fixture method: | Studs | No. studs: | 5 |
| Wheel dia. & rim width: | FRONT | | REAR |
| Original: | 5.5" x 14" | | 5.5" x 14" |
| Allowed: | 8" x 14" | | 8" x 14" |
| Tyres original: | ER70/14 | | |
| Tyres allowed: | 60% minimum aspect ratio, refer approved tyre list. | | |

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

| | | | |
|-------------------------------------|--------------|------------------|----------|
| Tank Location: | Rear | Capacity: | N/A |
| Fuel pump type and location: | Engine Block | Make: | Chrysler |
| Comments: | | | |

4.2 ELECTRICAL SYSTEM

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

4.3 BODYWORK

| | | | |
|----------------------|------------------------|-------------------|-------------|
| Type: | Two or four door sedan | Material: | Steel |
| No. of seats: | Five | No. doors: | Two or four |
| Comments: | | | |

4.4 DIMENSIONS

| | | | |
|-----------------------|---------|------------------------|---------|
| Track - Front: | 1480 mm | Rear: | 1430 mm |
| Wheelbase: | 2820 mm | Overall length: | 4890 mm |
| Dry weight: | 1400 Kg | | |

4.5 SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix 1

External oil pump

Three options of pump brands permitted, Johnson, Moroso and SCP

The pumps are to be external single stage, wet, belt driven pump.

Maximum width of belt is to be 25mm

Maximum width of rotor / gear on pump is 1.1 inches

Mounting is to be below the horizontal centreline of the water pump.

Piping / Plumbing to be a maximum size of dash 12.

One hose in and one hose out of pump, single pick up, single return, can be via oil cooler / filter.

Pipes connected to the pump must be black in colour