

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:	Hillman	Model:	Arrow
			Hunter
			Hunter GT
Period of Original Manufacture:	1968 – 1970		
Motorsport Australia Historic Group:	Nc		
Date of Issue of this Document:	1 January 2024		







Refer to The *Manual*, Historic Appendix, Vehicle Eligibility, General Requirements & Historic Touring Cars Group N Regulations for permitted modifications.

#### **Update Log**

1/1/2024	Inclusion of kerb and minimum racing weights

#### **SECTION 1 - CHASSIS**

#### 1.1. CHASSIS

Description:	Unitary construction			
Period of Manufacture:	1968-1970			
Manufacturer:	Chrysler Australia			
Chassis Number From:	HB1 - M - 41 #chassis number – Hunter (HB)			
	HC3 – M – 41 #chassis number - Hunter (HC) Safari			
	HC3 – H – 41 #chassis number - Hunter (HC) - Royal			
	HC7 – P – 41 #chassis number – Hunter GT			
Chassis Number location:	Stamped on the top near the strut support on the LH side of the mud-guard			
Material:	Steel			
Comments	None			

# 1.2. FRONT SUSPENSION

Description:	Independen	Independent - by Macpherson strut				
Spring Medium:	Coil	Coil				
Damper Type:	Telescopic v	Telescopic within Macpherson Adjustable: No				
	strut	strut				
Anti-sway bar:	Fitted		Adjustable:	No		
Suspension adjustable:	No	Method:	Toe			
Comments:	Refer to App	Refer to Appendix A				

#### 1.3. REAR SUSPENSION

Description:	Live rear axl	Live rear axle				
Spring Medium:	Semi elliptic	Semi elliptical leaf				
Damper Type:	Telescopic		Adjustable:	No		
Anti-sway bar:	No	No		N/A		
Suspension adjustable:	No	No Method: N/A				
Comments:	Refer to App	Refer to Appendix A				

# 1.4. STEERING

Type:	Recirculating ball	Make:	Burman
Comments	None		

# 1.5. BRAKES

	Front	Rear			
Type:	Disc	Drum			
Dimensions:	244 mm x 8.8 mm	229 mm x 44.4 mm			
Material of drum/disc:	Cast iron	Cast iron			
No. cylinders/pots per wheel:	Two	One			
Actuation:	Hydraulic	Hydraulic			
Caliper make:	Girling				
Caliper type:	Fixed	Fixed			
Material:	Cast iron				
Master cylinder make:	Girling				
Type:	Single				
Adjustable bias:	No				
Servo Fitted:	No				
	Yes on GT model only				
Comments:	None				

#### **SECTION 2 - ENGINE**

#### 2.1. ENGINE

Make:	Rootes	Rootes			
Model:	Hillman				
No. cylinders:	Four	Configuration:	In-line		
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four		
Bore - Original:	81.53 mm	Max allowed:	83 mm		
Stroke - original:	82.55 mm	Max allowed:	82.55 mm		
Capacity - original:	1725 cc	Max allowed:	1800 cc		
Identifying marks:	N/A				
Cooling method:	Liquid				
Comments:	None				

#### 2.2. CYLINDER HEAD

Make:	Hillman				
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:	Chain
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

Туре:	Points, coil and distributor	
Make:	Lucas/Autolite	
Comments	Breakerless electronic ignition permitted	

#### 2.5. FUEL SYSTEM

Carburettor Make:	Stromberg	Model:	150 CDS	
Carburettor Number:	One or Two			
Size:	Various			
Fuel injection Make:	N/A	Туре:	N/A	
Supercharged:	No	Туре:	N/A	
Comments:	None	•	•	

#### **SECTION 3 - TRANSMISSION**

#### 3.1. CLUTCH

Make:	Borg and Beck
Type:	Dry Plate
Diameter:	190.5 mm
No. of Plates:	One
Actuation:	Hydraulic
Comments:	None

#### 3.2. TRANSMISSION

Type:	Synchromesh or Auto	
Make:	Rootes	
Gearbox location:	Behind engine	
No. forward speeds:	Four	
Gearchange type and location:	Floor remote	
Case material:	Cast iron with alloy bell housing	
Identifying marks:	HB1-M-41, HB-M-45, HC3-M-45	
Comments:	None	

#### 3.3. FINAL DRIVE

Make:	Rootes	Model:	Banjo
Type:	Live axle		
Ratios:	Various		
Differential type:	Semi flotaing hypoid		
Comments:	None		

# 3.4. TRANSMISSION SHAFTS (EXPOSED)

Number:	One
Location:	Gearbox to final drive
Description:	Tubular and Open tail shaft with twin uni joints.
Comments:	One

# 3.1. WHEELS & TYRES

Wheel type - Original:	Pressed disc	Material	- Original:	Steel
Wheel type - Allowed:	Steel	Material	- Allowed:	Steel
	Alloy (period style)			Alloy
Fixture method:	Bolt on	No. stud	s:	Four
Wheel dia. & rim width	FRONT			REAR
Original:	6" x 13"		6" x 13"	
Allowed	7" x 13"		7" x 13"	
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:	Boot floor	Capacity:	46 litres
Fuel pump, type:	Mechanical on cylinder	Make:	AC
	block		
Comments:	None		

#### 4.2. ELECTRICAL SYSTEM

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

# 4.3. BODYWORK

Type:	Sedan		Material:	Steel
No. of seats:	Five		No. doors:	Four
Comments:	Hillman Arrow	Roun	d headlights, Console fi	tted
	Hillman Hunter GT	Recta	ngle headlights, Wood	grain Dashboard with
		Speed	dometer, Tachometer, (	Oil Pressure gauge,
		Temp	erature gauge, Fuel ga	uge, Console fitted.

# 4.4. DIMENSIONS

Track - Front:	1320.8 mm	Rear:	1320.8 mm
Wheelbase:	2501.9 mm	Overall length:	4292.6 mm
Approved Manufacturer's	945 kgs		
kerb weight:			
Approved minimum racing	921 kgs		
weight:			
Comments:	None		

# 4.5. SAFETY EQUIPMENT

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Dofor applicable Group Pogulations	
Refer applicable Group Regulations	

# Appendix A

# Suspension

# Front

Spring height adjustment permitted.

# Rear

Spring height adjustment permitted.