

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:	Toyota	Model:	Corolla – KE20
Period of Original Manufacture:	1970 - 1974		
Motorsport Australia Historic Group:	: Nc		
Date of Issue of this Document:	: 1 January 2024		
Comments	ts Body Styling changes in September 1971		ber 1971
	Grill change in August 1972		



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:	1969 – 1970
Manufacturer:	Toyota
Chassis Number From:	KE-20 - 000001
Chassis Number location:	Firewall
Material:	Steel
Comments	None

## 1.2. FRONT SUSPENSION

Description:	Independen	Independent - by MacPherson strut, lower control arm with castor bar			
Spring Medium:	Coil	Coil			
Damper Type:	Telescopic -	- internal	Adjustable:	No	
Anti-sway bar:	Fitted		Adjustable:	N/A	
Suspension adjustable:	Yes	Yes Method: Caster, camber and toe			
Comments:	Refer to App	Refer to Appendix A			

## 1.3. REAR SUSPENSION

Description:	Live rear ax	Live rear axle			
Spring Medium:	Semi elliptio	Semi elliptical leaf			
Damper Type:	Telescopic		Adjustable:	No	
Anti-sway bar:	No	No		N/A	
Suspension adjustable:	No	No Method:			
Comments:	Refer to Ap	pendix a			

# 1.4. STEERING

Type:	Worm and sector	Make:	Toyota
Comments	None		

#### 1.5. BRAKES

	Front	Rear			
Type:	Disc, solid	Drum			
Dimensions:	200 mm x 10 mm	200 mm x 30 mm			
Material of drum/disc:	Cast iron	Cast iron			
No. cylinders/pots per wheel:	Two	One			
Actuation:	Hydraulic	Hydraulic			
Caliper make:	Toyota				
Caliper type:	Sliding	Sliding			
Material:	Cast iron	Cast iron			
Master cylinder make:	Toyota	Toyota			
Type:	Dual				
Adjustable bias:	No				
Servo Fitted:	Yes	Yes			
Comments:	None				

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

#### 2.1. ENGINE

Make:	Toyota	Toyota			
Model:	3K				
No. cylinders:	Four	Configuration:	In line		
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four		
Bore - Original:	75 mm	Max allowed:	76.5 mm		
Stroke - original:	66 mm	Max allowed:	66 mm		
Capacity - original:	1166 cc	Max allowed:	1213 cc		
Identifying marks:	3k******				
Cooling method:	Liquid				
Comments:	None				

#### 2.2. CYLINDER HEAD

Make:	Toyota					
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	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, distributor & coil	
Make:	Nippondenso	
Comments	Breakerless electronic ignition permitted	

#### 2.5. FUEL SYSTEM

Carburettor Make:	Aisan	Model:	3К-В	
<b>Carburettor Number:</b>	One			
Size:	28 mm			
Fuel injection Make:	N/A	Type:	N/A	
Supercharged:	No	Type:	N/A	
Comments:	None	•	<u>.</u>	

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

#### 3.1. CLUTCH

Make:	Toyota
Type:	Diaphragm
Diameter:	183 mm
No. of Plates:	One
Actuation:	Mechanical
Comments:	None

#### 3.2. TRANSMISSION

Type:	Syncromesh	
Make:	Toyota	
Gearbox location:	Behind engine	
No. forward speeds:	Four	
Gearchange type and location:	H pattern floor shift	
Case material:	Alloy	
Identifying marks:	N/A	
Comments:	Model K40	

#### 3.3. FINAL DRIVE

Make:	Toyota	Model:	KE
	Borg Warner *		
Type:	Hypoid gear	Hypoid gear	
Ratios:	Various		
Differential type:	Bevel gear		
Comments:	* In Australian built KE20		

# 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 - Origin	al: Steel
Wheel type - Allowed:	Steel	Material - Allow	ed: Steel
	Alloy (period style)		Alloy
Fixture method:	Bolt on	No. studs:	Four
Wheel dia. & rim width	FRONT		REAR
Original:	4" x 12"		4" x 12"
	4" x 13"		4" x 13"
Allowed	6" x 12"		6" x 12"
	6" x 13"		6" x 13"
Tyre Section:			
Allowed:	Refer approved tyre list.		
Aspect ratio - minimum:	60% minimum aspect ratio.		
Comments:	None		

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#### **SECTION 4 GENERAL**

## 4.1. FUEL SYSTEM

Tank Location:	Rear	Capacity:	36 litres
Fuel pump, type:	Mechanical on block	Make:	Toyota
Comments:	None		

## 4.2. ELECTRICAL SYSTEM

Voltage:	12	Alternator fitted:	Alternator
<b>Battery Location:</b>	Engine bay		
Comments:	None		

## 4.3. BODYWORK

Type:	Coupe	Material:	Steel
No. of seats:	Flour	No. doors:	Two
Comments:		e, turn signal lights, and r facelift was done.	I tail lights

#### 4.4. DIMENSIONS

Track - Front:	1255 mm	Rear:	1245 mm
Wheelbase:	2334 mm	Overall length:	3855 mm
Approved Manufacturer's	700 kgs		
kerb weight:			
Approved minimum racing	679 kgs		
weight:			
Comments:	None		

## 4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations	
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# Appendix A

# Suspension

# Front

Spring height adjustment permitted.

## Rear

Spring height adjustment permitted.