



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.

<b>Make of Car:</b>	Mazda	<b>Model:</b>	R100
<b>Period of Original Manufacture:</b>	1968 - December 1971		
<b>Motorsport Australia Historic Group:</b>	Nc		
<b>Date of Issue of this Document:</b>	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

<b>Description:</b>	Unitary construction
<b>Period of Manufacture:</b>	1968 - December 1971
<b>Manufacturer:</b>	Toyo Kogyo
<b>Chassis Number From:</b>	M10A-1001
<b>Chassis Number location:</b>	Above brake master cylinder
<b>Material:</b>	Steel
<b>Comments</b>	None

### 1.2. FRONT SUSPENSION

<b>Description:</b>	Independent - by McPherson Strut		
<b>Spring Medium:</b>	Coil		
<b>Damper Type:</b>	Telescopic incorporated in strut	<b>Adjustable:</b>	Yes
<b>Anti-sway bar:</b>	Yes - Integral with lower arms	<b>Adjustable:</b>	Yes
<b>Suspension adjustable:</b>	Yes	<b>Method:</b>	Caster, camber and toe
<b>Comments:</b>	None		

### 1.3. REAR SUSPENSION

<b>Description:</b>	Live rear axle		
<b>Spring Medium:</b>	Semi elliptical leaf		
<b>Damper Type:</b>	Telescopic	<b>Adjustable:</b>	No
<b>Anti-sway bar:</b>	No	<b>Adjustable:</b>	N/A
<b>Suspension adjustable:</b>	No	<b>Method:</b>	N/A
<b>Comments:</b>	None		

### 1.4. STEERING

<b>Type:</b>	Ball and nut	<b>Make:</b>	Mazda
<b>Comments</b>	None		

### 1.5. BRAKES

	Front	Rear
<b>Type:</b>	Disc, solid	Drum
<b>Dimensions:</b>	244 mm x 10 mm	200 mm x 32 mm
<b>Material of drum/disc:</b>	Cast iron	Cast iron
<b>No. cylinders/pots per wheel:</b>	Two	Two
<b>Actuation:</b>	Hydraulic	Hydraulic
<b>Caliper make:</b>	Mazda	
<b>Caliper type:</b>	Fixed	
<b>Material:</b>	Cast iron	
<b>Master cylinder make:</b>	Mazda	
<b>Type:</b>	Tandem	
<b>Adjustable bias:</b>	No	
<b>Servo Fitted:</b>	Yes	
<b>Comments:</b>	None	

## SECTION 2 - ENGINE

### 2.1. ENGINE

<b>Make:</b>	Toyo Kogyo - Mazda		
<b>Model:</b>	10A		
<b>No. cylinders:</b>	2 rotor – 6 chamber	<b>Configuration:</b>	Rotary
<b>Cylinder Block-material:</b>	Alloy	<b>Two/Four Stroke:</b>	N/A
<b>Bore - Original:</b>	N/A	<b>Max allowed:</b>	N/A
<b>Stroke - original:</b>	N/A	<b>Max allowed:</b>	N/A
<b>Chamber Capacity - original:</b>	491 cc x 2 = 982 cc	<b>Max allowed:</b>	491 cc x 2 = 982 cc
<b>Identifying marks:</b>	10A		
<b>Cooling method:</b>	Liquid		
<b>Comments:</b>	Spark ignition engine based on the Wankel principle. Extend/Bridge porting is permitted – refer Appendix A.		

### 2.2. CYLINDER HEAD

<b>Make:</b>	N/A		
<b>No. of valves/cylinder:</b>	N/A	<b>Inlet:</b>	N/A
<b>No. of ports total:</b>	N/A	<b>Inlet:</b>	N/A
<b>No. of camshafts:</b>	N/A	<b>Location:</b>	N/A
<b>Valve actuation:</b>	N/A		
<b>Spark plugs/cylinder:</b>	N/A		
<b>Identifying marks:</b>	N/A		
<b>Comments:</b>	None		

### 2.3. LUBRICATION

<b>Method:</b>	Direct injection	<b>Oil tank location:</b>	N/A
<b>Dry sump pump type:</b>	N/A	<b>Location:</b>	N/A
<b>Oil cooler standard:</b>	N/A	<b>Location:</b>	N/A
<b>Comments:</b>	None		

### 2.4. IGNITION SYSTEM

<b>Type:</b>	Points, coil & distributor (two distributor engine)		
<b>Make:</b>	Mazda		
<b>Comments:</b>	Breakerless electronic ignition permitted		

### 2.5. FUEL SYSTEM

<b>Carburettor Make:</b>	Hitachi	<b>Model:</b>	KCBB306(26/30)
<b>Carburettor Number:</b>	One		
<b>Size:</b>	N/A		
<b>Fuel injection Make:</b>	N/A	<b>Type:</b>	N/A
<b>Supercharged:</b>	No	<b>Type:</b>	N/A
<b>Comments:</b>	When using replacement carburettors, only one choke per rotor is allowed.		

**SECTION 3 - TRANSMISSION**

**3.1. CLUTCH**

<b>Make:</b>	Mazda
<b>Type:</b>	Diaphragm
<b>Diameter:</b>	203 mm
<b>No. of Plates:</b>	One
<b>Actuation:</b>	Hydraulic
<b>Comments:</b>	None

**3.2. TRANSMISSION**

<b>Type:</b>	Four speed synchromesh
<b>Make:</b>	Mazda
<b>Gearbox location:</b>	Behind engine
<b>No. forward speeds:</b>	Four
<b>Gearchange type and location:</b>	H pattern floor mounted
<b>Case material:</b>	Alloy
<b>Identifying marks:</b>	N/A
<b>Comments:</b>	None

**3.3. FINAL DRIVE**

<b>Make:</b>	Mazda	<b>Model:</b>	R100
<b>Type:</b>	Live axle		
<b>Ratios:</b>	Various		
<b>Differential type:</b>	Hypoid bevel		
<b>Comments:</b>	None		

**3.4. TRANSMISSION SHAFTS (EXPOSED)**

<b>Number:</b>	One
<b>Location:</b>	Gearbox to final drive
<b>Description:</b>	Open tail shaft with twin uni joints
<b>Comments:</b>	None

**3.5. WHEELS & TYRES**

<b>Wheel type - Original:</b>	Pressed disc	<b>Material - Original:</b>	Steel
<b>Wheel type - Allowed:</b>	Steel Alloy (period style)	<b>Material - Allowed:</b>	Steel Alloy
<b>Fixture method:</b>	Bolt on	<b>No. studs:</b>	Four
<b>Wheel dia. &amp; rim width</b>	<b>FRONT</b>		<b>REAR</b>
<b>Original:</b>	4.5" x 14"		4.5" x 14"
<b>Allowed</b>	7" x 14"		7" x 14"
<b>Tyre Section:</b>			
<b>Allowed:</b>	Refer approved tyre list.		
<b>Aspect ratio - minimum:</b>	60% minimum aspect ratio.		
<b>Comments:</b>	None		

## SECTION 4 GENERAL

### 4.1. FUEL SYSTEM

<b>Tank Location:</b>	In boot	<b>Capacity:</b>	60 litres
<b>Fuel pump, type:</b>	Electric	<b>Make:</b>	N/A
<b>Comments:</b>	None		

### 4.2. ELECTRICAL SYSTEM

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

### 4.3. BODYWORK

<b>Type:</b>	Two door coupe	<b>Material:</b>	Steel
<b>No. of seats:</b>	Four	<b>No. doors:</b>	Two
<b>Comments:</b>	None		

### 4.4. DIMENSIONS

<b>Track - Front:</b>	1200 mm	<b>Rear:</b>	1190 mm
<b>Wheelbase:</b>	2260 mm	<b>Overall length:</b>	3830 mm
<b>Approved Manufacturer's kerb weight:</b>	805 kgs		
<b>Approved minimum racing weight:</b>	781 kgs		
<b>Comments:</b>	None		

### 4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations
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## **Appendix**

Rotary engines shall be deemed to be engines with rotary (rather than reciprocating) motion of the compressing medium (Wankel type). A rotary engine shall be defined as the rotor housings, intermediate and end plates.

Modifications: The rotors, apex seals and crankshaft are free.

Modifications to rotary engine rotor, housings and end plates may be effected only by the removal of metal. Rotary engines may be modified by the utilisation of the porting technique/s known as "Extend", "Mild" or "Bridge" porting.

Mild/extend porting shall be defined as a single induction port per end/intermediate plate, per rotor, extended beyond the original induction port size and shape. Save that it may not extend beyond the region traversed by the original rotor seal, the size and shape of such a port is free.

"Bridge" porting is permitted with the restriction that the original O-ring seals must remain unmodified and in their original location.

Bridge porting shall be defined as where the induction is accomplished utilising two separate induction ports per end/intermediate plate, per rotor, but not extending beyond the original outer edge of the inner water seal.

Peripheral porting is specifically not permitted. Peripheral porting is defined as a port on a rotary engine allowing the passage of gasses through the periphery of the rotor housing. Any bridged induction port that is extended radially beyond the original outer edge of the inner water seal is, for the purposes of these regulations, considered to be a peripheral port.

Engines must be sealed, with rotor housing and end plates as a complete assembly.