



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:	Mazda	Model:	RX2 – Series 1 and 2
Period of Original Manufacture:	October 1970 – April 1976		
Motorsport Australia Historic Group:	Nc		
Date of Issue of this Document:	1 January 2024		
Comments	Latest specification allowed is 1972 Series 2.		



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 - Two door coupe or four door sedan
Period of Manufacture:	October 1970 – April 1976
Manufacturer:	Toyo Kogyo
Chassis Number From:	S122A*****
Chassis Number location:	Firewall
Material:	Steel
Comments	None

1.1. FRONT SUSPENSION

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

1.2. REAR SUSPENSION

Description:	Live rear axle with four links plus Panhard rod		
Spring Medium:	Coil		
Damper Type:	Telescopic	Adjustable:	No
Anti-sway bar:	No	Adjustable:	N/A
Suspension adjustable:	Yes	Method:	Spring height
Comments:	None		

1.3. STEERING

Type:	Ball and nut	Make:	Mazda
Comments	None		

1.4. BRAKES

	Front	Rear
Type:	Disc, solid	Drum
Dimensions:	230 mm x 12 mm	200 mm x 32 mm
Material of drum/disc:	Cast iron	Cast iron
No. cylinders/pots per wheel:	Two	Two
Actuation:	Hydraulic	Hydraulic
Caliper make:	Mazda	
Caliper type:	Fixed	
Material:	Cast iron	
Master cylinder make:	Mazda	
Type:	Tandem	
Adjustable bias:	No	
Servo Fitted:	Yes	
Comments:	None	

SECTION 2 - ENGINE

2.1. ENGINE

Make:	Toyo Kogyo - Mazda		
Model:	12A		
No. cylinders:	2 rotor – 6 chamber	Configuration:	Rotary
Cylinder Block-material:	Alloy	Two/Four Stroke:	N/A
Bore - Original:	N/A	Max allowed:	N/A
Stroke - original:	N/A	Max allowed:	N/A
Chamber Capacity - original:	1146 cc -Capacity equivalent (x1.8) = 2063 cc	Max allowed:	1146 cc -Capacity equivalent (x1.8) = 2063 cc
Identifying marks:	12A Embossed on upper surface of each aluminium rotor housing.		
Cooling method:	Liquid		
Comments:	Spark ignition engine based on the Wankel principle. Extend/Bridge porting is permitted – refer Appendix A.		

2.2. CYLINDER HEAD

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

2.3. LUBRICATION

Method:	Direct injection	Oil tank location:	Sump
Dry sump pump type:	N/A	Location:	N/A
Oil cooler standard:	Yes	Location:	Below the radiator
Comments:	None		

2.4. IGNITION SYSTEM

Type:	Points, coil & distributor (one or two)		
Make:	Mazda		
Comments:	Breakerless electronic ignition permitted		

2.5. FUEL SYSTEM

Carburettor Make:	Nikki	Model:	210284 – 831
Carburettor Number:	One	Type:	Four barrel
Size:	Various		
Fuel injection Make:	N/A	Type:	N/A
Supercharged:	No	Type:	N/A
Comments:	When using replacement carburettors, only one choke per rotor is allowed.		

SECTION 3 - TRANSMISSION

3.1. CLUTCH

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

3.2. TRANSMISSION

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

3.3. FINAL DRIVE

Make:	Mazda	Model:	RX2
Type:	Live axle		
Ratios:	Various		
Differential type:	Hypoid bevel		
Comments:	None		

3.4. TRANSMISSION SHAFTS (EXPOSED)

Number:	One
Location:	Gearbox to final drive
Description:	Open tail shaft centre bearing with three uni joints
Comments:	None

3.5. WHEELS & TYRES

Wheel type - Original:	Pressed disc	Material - Original:	Steel
Wheel type - Allowed:	Steel Alloy (period style)	Material - Allowed:	Steel Alloy
Fixture method:	Nuts	No. studs:	Four
Wheel dia. & rim width	FRONT		REAR
Original:	4.5" x 13"		4.5" 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:	In boot	Capacity:	60 litres
Fuel pump, type:	Electric	Make:	N/A
Comments:	None		

4.2. ELECTRICAL SYSTEM

Voltage:	12	Alternator fitted:	Alternator
Battery Location:	Engine bay		
Comments:	None		

4.3. BODYWORK

Type:	Coupe or sedan	Material:	Steel
No. of seats:	Four	No. doors:	Two or four
Comments:	None		

4.4. DIMENSIONS

Track - Front:	1200 mm	Rear:	1190 mm
Wheelbase:	2260 mm	Overall length:	3830 mm
Approved Manufacturer's kerb weight:	2 door – 955 kgs 4 door – 955 kgs		
Approved minimum racing weight:	2 door – 931 kgs 4 door – 931 kgs		
Comments:	None		

4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix

Suspension

Front

Spring height adjustment permitted.

Rear

Spring height adjustment permitted.

Engine

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 (aluminium), intermediate and end plates (steel).

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.