



5TH CATEGORY - HISTORIC RACING <b>GROUP N</b> APPROVED VEHICLE SPECIFICATION
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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:	Ford	Model:	Escort Twin Cam
Period of Original Manufacture:	1970 – 1973		
Motorsport Australia Historic Group:	Nc		
Date of Issue of this Document:	1 January 2024		



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

***Update Log***

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

## SECTION 1 - CHASSIS

### CHASSIS

<b>Description:</b>	Uni body, two door coupe with sub frames
<b>Period of Manufacture:</b>	1970-1973
<b>Manufacturer:</b>	Ford Australia
<b>Chassis Number From:</b>	Typical prefix CK49xxxxxxx
<b>Chassis Number location:</b>	Top of RH suspension tower
<b>Material:</b>	Steel
<b>Comments</b>	Assembled in Australia from CKD parts mainly of European origin with some local components

### FRONT SUSPENSION

<b>Description:</b>	Independent - by MacPherson Strut with lower arm and sway bar		
<b>Spring Medium:</b>	Coil		
<b>Damper Type:</b>	Telescopic incorporated in strut	<b>Adjustable:</b>	No
<b>Anti-sway bar:</b>	Yes	<b>Adjustable:</b>	No
<b>Suspension adjustable:</b>	Yes	<b>Method:</b>	Toe
<b>Comments:</b>	Refer to Appendix A.		

### REAR SUSPENSION

<b>Description:</b>	Live rear axle with trailing links		
<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>	Refer to Appendix A.		

### STEERING

<b>Type:</b>	Rack and pinion	<b>Make:</b>	Ford
<b>Comments</b>	None		

### BRAKES

	Front	Rear
<b>Type:</b>	Disc - solid	Drum
<b>Dimensions:</b>	218 mm x 15.5 mm	229 mm x 45.5 mm
<b>Material of drum/disc:</b>	Cast iron	Cast iron
<b>No. cylinders/pots per wheel:</b>	Two	One
<b>Actuation:</b>	Hydraulic	Hydraulic
<b>Caliper make:</b>	Girling	
<b>Caliper type:</b>	Two Cylinder	
<b>Material:</b>	Cast iron	
<b>Master cylinder make:</b>	Girling	
<b>Type:</b>	Single	
<b>Adjustable bias:</b>	None	
<b>Servo Fitted:</b>	Yes	
<b>Comments:</b>	None	

## SECTION 2 - ENGINE

### ENGINE

<b>Make:</b>	Lotus/Ford		
<b>Model:</b>	Twin-cam		
<b>No. cylinders:</b>	Four	<b>Configuration:</b>	In-line
<b>Cylinder Block-material:</b>	Cast iron	<b>Two/Four Stroke:</b>	Four
<b>Bore - Original:</b>	82.5 mm	<b>Max allowed:</b>	84 mm
<b>Stroke - original:</b>	72.75 mm	<b>Max allowed:</b>	72.75 mm
<b>Capacity - original:</b>	1558 cc	<b>Max allowed:</b>	1613 cc
<b>Identifying marks:</b>	681F-6015BA or 701M-6105BA		
<b>Cooling method:</b>	Liquid		
<b>Comments:</b>	Any 7.78" height deck block with the following Engine Casting Block number: 116E-6015BA, 118E-6015BA, 120E-6015, 120E-6015BA, 2731-6015BA, 3020-6015BA, 681F-6015BA, 701M-6015BA, as well as new Ford Motorsport block Part number M-6010-16L.		

### CYLINDER HEAD

<b>Make:</b>	Lotus Ford		
<b>No. of valves/cylinder:</b>	Two	<b>Inlet:</b> One	<b>Exhaust:</b> One
<b>No. of ports total:</b>	Eight	<b>Inlet:</b> Four	<b>Exhaust:</b> Four
<b>No. of camshafts:</b>	Two	<b>Location:</b> Cylinder head	<b>Drive:</b> Chain
<b>Valve actuation:</b>	Direct from camshaft via buckets		
<b>Spark plugs/cylinder:</b>	One		
<b>Identifying marks:</b>	A26E311 & WM9403 adjacent to gasket face but visible on assembled engine		
<b>Comments:</b>	The cylinder head manufactured by SAS Engineering may be used to replace original Lotus heads. Modified original or replacement aftermarket timing chests incorporating a removable water pump are acceptable.		

### LUBRICATION

<b>Method:</b>	Wet sump	<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>	Yes	<b>Location:</b>	Located at radiator support
<b>Comments:</b>	None		

### IGNITION SYSTEM

<b>Type:</b>	Points, coil and distributor		
<b>Make:</b>	Lucas/Autolite		
<b>Comments</b>	Breakerless electronic ignition permitted. The ignition module may be removed from the distributor and mounted remotely on the inner mudguard of the firewall in the vicinity of the distributor and coil. The module should be mounted on a plate to allow minimum gap of 10 mm between the module and the plate mounting surface.		

### FUEL SYSTEM

<b>Carburettor Make:</b>	Weber	<b>Model:</b>	40DCOE
<b>Carburettor Number:</b>	Two		
<b>Size:</b>	40DCOE		
<b>Fuel injection Make:</b>	N/A	<b>Type:</b>	N/A
<b>Supercharged:</b>	No	<b>Type:</b>	N/A
<b>Comments:</b>	None		

### SECTION 3 - TRANSMISSION

#### CLUTCH

Make:	Ford
Type:	Diaphragm
Diameter:	190 mm
No. of Plates:	One
Actuation:	Hydraulic
Comments:	None

#### TRANSMISSION

Type:	Synchromesh
Make:	Ford – 2000E Refer Appendix A
Gearbox location:	Behind engine
No. forward speeds:	Four
Gearchange type and location:	Remote change in extension housing
Case material:	Cast iron with separate cast iron bell housing
Identifying marks:	N/A
Comments:	In 1974 Ford standardised on the larger 2-litre gearbox. This gearbox, identified by the detachable bellhousing and 1" 23 spline input shaft is not eligible in Group Nc.

#### FINAL DRIVE

Make:	Ford	Model:	'English 'Banjo type
Type:	Live rear axle		
Ratios:	Various		
Differential type:	Free; torque biasing (LSD) permitted.		
Comments:	Some post-1972 cars were fitted with Borg Warner Australia integral carrier rear axles. These are not Nc acceptable.		

#### TRANSMISSION SHAFTS (EXPOSED)

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

#### WHEELS & TYRES

Wheel type - Original:	Pressed disc	Material - Original:	Steel
Wheel type - Allowed:	Steel Alloy (period style)	Material - Allowed:	Steel Alloy
Fixture method:	Studs and nuts	No. studs:	Four
Wheel dia. & rim width	FRONT		REAR
Original:	5.5" x 13"		5.5" 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		

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## SECTION 4 GENERAL

### FUEL SYSTEM

<b>Tank Location:</b>	RH side of boot	<b>Capacity:</b>	40 litres
<b>Fuel pump, type:</b>	Mechanical on engine block	<b>Make:</b>	Ford
<b>Comments:</b>	None		

### ELECTRICAL SYSTEM

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

### BODYWORK

<b>Type:</b>	Closed touring	<b>Material:</b>	Steel
<b>No. of seats:</b>	Four	<b>No. doors:</b>	Two or four
<b>Comments:</b>	None		

### DIMENSIONS

<b>Track - Front:</b>	1270 mm	<b>Rear:</b>	1295 mm
<b>Wheelbase:</b>	2413 mm	<b>Overall length:</b>	3980 mm
<b>Approved Manufacturer's kerb weight:</b>	785 kgs		
<b>Approved minimum racing weight:</b>	761 kgs		
<b>Comments:</b>	None		

### SAFETY EQUIPMENT

Refer applicable Group Regulations
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## Appendix A

### Suspension

#### Front

Adjustable strut top mounts and dampers permitted. Spring platform location may be changed; adjustable spring platforms are permitted. Spring height adjustment permitted.

#### Rear

Additional lateral and longitudinal linkages permitted; adjustable dampers permitted. Rear damper original upper mountings must be used; 'turret' style upper mountings (where modification to body floor pan is necessary) are NOT permitted. Spring height adjustment permitted.

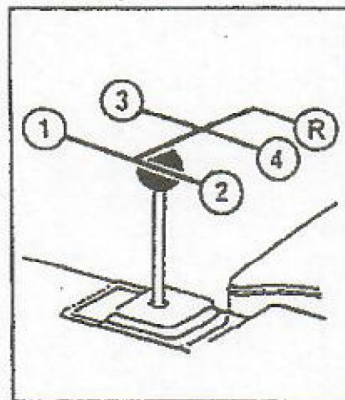
### Gearbox

#### 2000E



#### Features:

- Three rail
- Reverse is next to top gear (RHS)



Gear Lever Positions

- Case and extension housing are cast iron
- Starter motor is on the driver's side
- 7/8" x 20 spline input shaft