

CAMS

5TH CATEGORY - HISTORIC RACING

GROUP Nc

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 CAMS Manual of Motor Sport.

Make of Car

Ford Falcon

Model: XW V8:

(1)GT
(2)GT HO Ph.I
(3)GT HO Ph.II

Period of Original Manufacture: 1969-70

CAMS Historic Group:

Nc

Date of Issue of this Document: January 2000



SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description: Unitary construction with body **Period of manufacture:** 1969-70
Chassis no. from: Typical JG33XXXXX
Chassis no. location: Left upper radiator support panel & I/D plate
Material: Steel

Comments: 1969 models had small I/D plate attached to right side of radiator support panel. 1970 models had larger (ADR style) I/D plate attached to left firewall. Body I/D number stamped on left side radiator support panel in all cases. Original engine number stamped on left suspension tower.

1.2 FRONT SUSPENSION

Description: Independent by upper wishbones & lower track control arm
Spring medium: Coil springs
Damper Type: Telescopic **Adjustable:** No (but permitted)
Anti-sway bar: Fitted **Adjustable:** No
Suspension adjustable: Yes **Method:** Caster by tension rods; camber by cam at TCA pivot; toe-in by tie rod ends.

Comments: Ride height & spring rate may be changed by variation of coil springs: change of sway-bar diameter permitted: dampers free subject to original mountings being used and period technology limitation.

1.3 REAR SUSPENSION

Description: Live rear axle
Spring medium: Leaf springs
Damper type: Telescopic **Adjustable:** No (but permitted)
Anti-sway bar: Fitted Models 2 & 3 only **Adjustable:** No
Suspension adjustable: No.

Comments: Addition of trailing links, Panhard rod or Watts linkage permitted. Addition of sway-bar to Models 1 permitted: change of sway bar diameter on Models 2 & 3 permitted. Dampers free subject to use of original mountings and period technology limitations.

1.4 STEERING

Type: Recirculating ball **Make:** Ford
Comments: 16:1 ratio used on all models. Optional power steering on all Models.

1.5 BRAKES

	Front	Rear
Type:	Disc	Drum
Dimensions:	286mm x 23.9mm	254mm x 57/63.5/63.5mm*
Material of drum/disc	Cast iron	Cast iron
No. cylinders/pots per wheel:	1	1
Actuation:	Hydraulic	Hydraulic
Caliper: Make, Material, Type:	Kelsey Hayes/Ford cast iron single piston floating caliper	
Master cylinder make:	PBR	Type: Tandem
Adjustable bias	No.	
Servo Fitted	Yes	

Comments: Components from other touring cars manufactured before 31/12/72 may be used subject to swept area limitation (note respective rear drum width* on three models, which must be honoured). Twin master cylinders permitted subject to no structural modification of body shell. Brake bias adjustment permitted: adjustment by driver in normal driving position not permitted.

SECTION 2 - ENGINE

2.1 ENGINE

Make:	Ford		
Model:	Windsor 351 4V (Models 1 & 2) and Cleveland 351 4V (Model 3)		
No. cylinders:	8	Configuration:	90°
Cylinder Block-material:	Cast iron	Four Stroke	
Bore - Original:	101.6mm	Max. allowed:	103.1mm
Stroke - original:	89mm	Max. allowed:	89mm
Capacity - original:	5768cc	Max. allowed:	5940cc
Cooling method:	Water cooled		
Identifying marks:	Models 1 & 2 C90E- Model 3: DOAE-6015-J or G 6015B		

Comments: Identification marks located low on right side of block - most easily sighted from below with car on stands.

2.2 CYLINDER HEAD

Make:	Ford 351 Windsor 4V (Models 1 & 2), Ford 351 Cleveland 4V (Model 3)				
No. of valves/cylinder-	2	Inlet:	1	Exhaust:	1
No. of ports total:16		Inlet:	8	Exhaust:	8
No. of camshafts:	1	Location:	In block	Drive:	Roller chain
Valve actuation:		Pushrods & rockers			
Spark plugs/cylinder:	1				
Identifying marks:	Windsor: D00E or C90E & Cleveland: D0AE-6090-H or R 351.				

Comments: Identification marks are located on unmachined area adjacent to the head gasket surface (visible only with head removed). Windsor has "351" and "WF" on top surface of the head visible with rocker cover removed. Note that Inlet valves and exhaust valves are in the same plain in the Windsor engine; in the Cleveland engine they are in different plains, being 'canted' in US language

2.3 LUBRICATION

Method:	Wet sump.
Oil cooler standard:	No (but permitted).
Comments:	

2.4 IGNITION SYSTEM

Type:	Conventional points type distributor and coil.
Make:	Autolite.
Comments:	Replacement distributors permitted, but must employ points (breakerless units not permitted). Regulations permit use of electronic rev. limiters.

2.5 FUEL SYSTEM

Carburettor:	Model 1: Autolite 4300-4V
	Models 2/3: Holley 4150C-4V

COMMENTS: Freedom of number and type of carburettor is allowed subject to the carburettor used being commercially available prior to 31/12/1972.

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: Ford **Type:** Diaphragm **Diameter:** 241.5mm
No. of Plates: 2
Actuation: Hydraulic
Comments

3.2 TRANSMISSION

Type: 4-speed synchromesh

Make: Ford **Model:** 'Toploader'
No. forward speeds: 4 forward & reverse **Gearbox location:** Behind engine
Gearchange type and location: Remote floor shift
Case material: Cast iron **Identifying marks:**

Comments: Two types of 'Toploader' are used in these models. Model 1 used a unit with 28 spline output shaft and 2.78:1 first gear. Models 2 & 3 used a 'close ratio' unit with 2.32:1 first gear, a 31 spline output shaft which was some 105mm longer (enabling the drive shaft to be shortened by that distance). Whilst freedom of internal ratios is permitted, the correct type of gearbox assembly must be used according to the model car.

3.3 FINAL DRIVE

Make: Ford **Model:** 9" ring gear
Wheel drive method: Rear
Ratios: 3.00 or 3.25:1 or 3.5:1 originally fitted but ratios are free.

Differential: Model 1 used 'Traction-lok', Models 2 & 3 used 'Traction-lok' or Detroit 'Locker'.

Comments: Note that Detroit 'Locker' fitted to Model 3 cars had 31 spline axles (others were 28 spline) and the appropriate axle assembly is required to be used.

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: 1 **Location:** Gearbox to rear axle
Description: Single piece tubular steel shaft with Hardy-Spicer type U/Joints
Comments:

3.5 WHEELS & TYRES

Wheel type: **Original:** Pressed steel
Allowed: Pressed steel or period alloy
Fixture method: Studs & nuts (5)
Wheel dia. & rim width
Original 14" x 6"
Allowed 14" x 8" steel or period alloy
Aspect ratio - minimum 60%

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank Location: Under rear of car - forms boot floor

Capacity: Model 1 - 73 Litre.
Models 2 & 3 - 164 litre..

Fuel pump, type and location: Mechanical, left side of cylinder block

Make: Ford

Comments:

4.2 ELECTRICAL SYSTEM

Voltage: 12

Alternator fitted:

Battery Location: Right front of engine bay

Comments:

4.3 BODYWORK

Type: Touring saloon

Material: Steel

No. of seats: 5

No. doors: 4

Comments: It is essential that detail of external bodywork and interior trim corresponds with original production form of model concerned. Summarising:-

All Models must have driving lights, bonnet locking pins of 'hairpin' type with pins attached by bowden cable, small air intake on right side of bonnet, stainless capping on rear window weather seal and two horizontal decorative strips across boot. Internally 'full' instrumentation is required whilst trim must be 'Fairmont' level - material of door trims comes up to window glass level and there are two courtesy lights on 'c' pillar in addition to roof light.

Models 2 & 3 additionally must have front air dam and Model 3 only has an 8000 rpm tach.

A rear wing was not fitted to any XW model.

4.4 DIMENSIONS

Track Original Front: 1510mm
 Permitted 1560mm

Rear: 1487mm
1537mm

Wheelbase: 2820mm

Overall length: 4690mm

Dry weight: 1444 Kg.

Comments:

4.5 SAFETY EQUIPMENT

Fire extinguisher required

Seat belt required

Rollbar required

Electrical cut off switch required

Safety fuel tank optional