



**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:	Ford	Model:	Falcon XY 500 GT GT HO Phase 3
Period of Original Manufacture:	1970 to 1971		
Motorsport Australia Historic Group:	Nc		
Date of Issue of this Document:	September 2021		



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

Update Log

SECTION 1 - CHASSIS

1.1. CHASSIS

Description:	Uni-body four door sedan
Period of Manufacture:	1970-1971
Manufacturer:	Ford Motor Company
Chassis Number From:	JG33XXXXXX
Chassis Number location:	All XY models had ADR style I/D plate on the left firewall. Early models had body I/D number stamped on the left-hand side of radiator support panel. On later models, body I/D number was stamped on left suspension tower. Original engine number stamped on left suspension tower in early model, right suspension towers in later models.
Material:	Steel
Comments	None

1.2. FRONT SUSPENSION

Description:	Independent - upper wishbone, lower control arm & castor rod		
Spring Medium:	Coil		
Damper Type:	Telescopic	Adjustable:	No
Anti-sway bar:	Fitted	Adjustable:	No
Suspension adjustable:	Yes	Method:	Caster, camber and toe
Comments:	Refer to Appendix A..		

1.3. REAR SUSPENSION

Description:	Live rear axle		
Spring Medium:	Semi-elliptical leaf		
Damper Type:	Telescopic	Adjustable:	No
Anti-sway bar:	No Phase 3 -Yes	Adjustable:	N/A Phase 3 -No
Suspension adjustable:	No	Method:	N/A
Comments:	Refer to Appendix A		

1.4. STEERING

Type:	Recirculating ball	Make:	Ford
Comments	Collapsible steering standard. 500 - 20:1 ratio. Power steering permitted – RAM assist - 16:1 ratio. GT - Power steering – 16:1 ratio. Phase 3 - Power steering – RAM assist– 16:1 ratio		

1.5. BRAKES

	Front	Rear
Type:	Disc, Solid	Drum
Dimensions:	286 mm x 23.9 mm	500 - 254 mm x 45 mm diameter GT - 254 mm x 57 mm diameter Phase 3 - 254 mm x 63.5 mm diameter
Material of drum/disc:	Cast iron	Cast iron
No. cylinders/pots per wheel:	One	One
Actuation:	Hydraulic	Hydraulic
Caliper make:	Kelsey Hayes Ford single piston	
Caliper type:	Floating	
Material:	Cast iron	
Master cylinder make:	PBR	
Type:	Tandem	
Adjustable bias:	No	
Servo Fitted:	Yes	
Comments:	None	

SECTION 2 - ENGINE

2.1. ENGINE

Make:	Ford		
Model:	500	Cleveland 351 2V	
	GT	Cleveland 351 4V	
	Phase 3	Cleveland 351 4V	
No. cylinders:	Eight	Configuration:	Vee
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four
Bore - Original:	101.6 mm	Max allowed:	103.1 mm
Stroke - original:	89.0 mm	Max allowed:	89.0 mm
Capacity - original:	5768 cc	Max allowed:	5940 cc
Identifying marks:	Located low on right side of block – most easily sighted from below car on stands. 500 DOAE-6015 – D GT DOAE-6015 – J or G Phase 3 DOAE-6015 – J or G		
Cooling method:	Liquid		
Comments:	ARROW Ford 351 Cleveland Small Block engine block with a rev limit of 7500rpm as a replacement for the original block is approved for use. Logbook endorsed and the engine sealed required. See Appendix A.		

2.2. CYLINDER HEAD

Make:	Ford		
No. of valves/cylinder:	Two	Inlet: One	Exhaust: One
No. of ports total:	Sixteen	Inlet: Eight	Exhaust: Eight
No. of camshafts:	One	Location: Block	Drive: Roller chain
Valve actuation:	Pushrod and rocker		
Spark plugs/cylinder:	One		
Identifying marks:	DOAE 6090 H or R Located on unmachined area adjacent to the head gasket surface (visible only with head removed).		
Comments:	Note that inlet valves are not in the same plain, being “canted” in US language.		

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

Type:	Points, coil & distributor
Make:	Autolite
Comments:	Breakerless electronic ignition permitted

2.5. FUEL SYSTEM

Carburettor Make:			
500:	Autolite	Model:	2100 D2V
GT:	Autolite	Model:	4300 – 4V
GT HO Phase 3	Holley	Model:	4150 – 4V
Carburettor Number:	One		
Size:	Various		
Fuel injection Make:	N/A	Type:	N/A
Supercharged:	No	Type:	N/A
Comments:	None		

SECTION 3 - TRANSMISSION

3.1. CLUTCH

Make:	Ford
Type:	Diaphragm
Diameter:	241.5 mm
No. of Plates:	Two
Actuation:	Hydraulic
Comments:	None

3.2. TRANSMISSION

Type:	Synchromesh
Make:	Ford Top loader
Model:	500 Close ratio, 28 spline output shaft. GT Close ratio, 28 spline output shaft. Phase 3 31 spline output shaft (approx. 105 mm longer, allowing tailshaft to be shortened by corresponding amount).
Gearbox location:	Behind engine
No. forward speeds:	Four
Gearchange type and location:	Remote floor lever
Case material:	Cast iron
Identifying marks:	N/A
Comments:	The correct type of gearbox must be used according to the model car

3.3. FINAL DRIVE

Make:	Ford	Model:	9 inch
Type:	Live axle		
Ratios:	3.25 or 3.5 to 1		
Differential type:	500 Open or LSD, GT Traction-lok GT HO Ph 3 Detroit locker		
Comments:	The correct assembly must be used according to the model car. 500 and GT Axle to be 28 splines (with Traction-Lok) GT HO Phase 3 Axle to be 31 splines (with Detroit locker)		

3.4. TRANSMISSION SHAFTS (EXPOSED)

Number:	One
Location:	Gearbox to final drive
Description:	Open tailshaft with twin uni joints
Comments:	Steel

3.5. WHEELS & TYRES

Wheel type - Original:	Pressed disc or alloy	Material - Original:	Steel or alloy
Wheel type - Allowed:	Cast	Material - Allowed:	Steel or alloy
Fixture method:	Studs	No. studs:	Five
Wheel dia. & rim width	FRONT		REAR
Original:	6" x 14" 7" x 14" in alloy		6" x 14" 7" x 14" in alloy
Allowed	8" x 15"		8" x 15"
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:	Boot floor	Capacity:	500 GT GT HO Ph 3	73 litres 164 litres 164 litres
Fuel pump, type:	Mechanical, left side of engine block.	Make:	Ford	
Comments:	None			

4.2. ELECTRICAL SYSTEM

Voltage:	12	Alternator fitted:	Alternator	
Battery Location:	Engine compartment RHF			
Comments:	None			

4.3. BODYWORK

Type:	Sedan	Material:	Steel	
No. of seats:	Five	No. doors:	Four	
Comments:	It is essential that detail of external bodywork and interior trim correspond with original production form of model concerned. See Appendix B			

4.4. DIMENSIONS

Track - Front:	1510 mm on 14" wheels 1534 mm on 15" wheels	Rear:	1510 mm on 14" wheels 1534 mm on 15" wheels	
Wheelbase:	2820 mm	Overall length:	4690 mm	
Dry weight:	1444 kg			
Comments:	None			

4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix A

Suspension

Front

Ride height and 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. Spring height adjustment permitted.

Rear

Spring height adjustment permitted.

Engine

Cylinder Block

Cleveland Block

ARROW Ford 351 Cleveland Small Block engine block is approved for use, in conjunction with MSD Soft Touch rev Limiter Part no 8728 with a 7500 RPM limit. The limiter will be subject to testing at race meetings, and will be located in an easily accessible position within the engine bay.

Appendix B

Bodywork – 500

- Front air dam, driving lights, bayonet, locks, “shaker” air intake, stainless capping on rear window, weather seal and “GT” strip across boot are not permitted.
- Rear wing is optional.
- Internally, “full” instrumentation including 6000 RPM tacho is required.
- Door trims were shorter leaving a metal sill some 100 mm wide below window glass and “standard instruments were speedo, fuel and temp gauges; however, the 500 could be ordered with the following options:
- “Fairmont” level trim – material of door trims comes up to window level and there are two courtesy lights on “C” pillar in addition to roof light;
- Additional decorative strips around wheel arches;
- GS Rally Pack – offered full instrumentation. Tacho was 6000 RPM instrument.

Bodywork – GT

- Must have driving lights, bonnet locking pins of ‘hairpin’ type with pins attached by Bowden cable, “shaker” air intake, stainless capping on rear window, weather seal and “GT” strip across boot.
- Rear wing is optional.
- Internally, “full” instrumentation including 6000 RPM tacho is required.
- Trim must be “Fairmont” level – material of door trims comes up to window level and there are two courtesy lights on “C” pillar in addition to roof light.

Bodywork – Phase 3

- Must have the front air dam, driving lights, bonnet locking pins of ‘hairpin’ type with pins attached by Bowden cable, “shaker” air intake, stainless capping on rear window, weather seal and “GT” strip across boot.
- Rear wing is optional.
- Internally, “full” instrumentation including 8000 RPM tacho is required.
- Trim must be “Fairmont” level – material of door trims comes up to window level and there are two courtesy lights on “C” pillar in addition to roof light.