



**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 a Historic Logbook, 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>	Ford	<b>Model:</b>	Falcon XY (1) 500, (2) GT (3) GT HO Ph 3
<b>Period of Original Manufacture:</b>	1970 to 1971		
<b>Motorsport Australia Historic Group:</b>	Nc		
<b>Date of issue of this document:</b>	August 2019		



<b>Update Log</b>	
August 2020	Replacement Cleveland cylinder block added

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

## SECTION 1 – CHASSIS

### 1.1 CHASSIS FRAME

<b>Description:</b>	Uni-body four door sedan
<b>Period of Manufacture:</b>	1970 – 1971
<b>Manufacturer:</b>	Ford Motor Co.
<b>Chassis no. from:</b>	JG33XXXXXX
<b>Chassis no. location:</b>	ADR style I/D plate on left side of firewall Early models had body I/D number stamped on left side of radiator support panel later models had I/D stamped on L/H suspension tower. Original engine number stamped on L/H suspension tower early models, R/H suspension tower in later models
<b>Material:</b>	Steel
<b>Comment:</b>	None

### 1.2 FRONT SUSPENSION

<b>Description:</b>	Independent, upper wishbone, lower arm with track rod.		
<b>Spring Medium:</b>	Coil		
<b>Damper Type:</b>	Telescopic	<b>Adjustable:</b>	No
<b>Anti-sway bar:</b>	Fitted	<b>Adjustable:</b>	No
<b>Suspension adjustable:</b>	Yes	<b>Method:</b>	Caster, camber and toe, spring height
<b>Comment:</b>			

### 1.3 REAR SUSPENSION

<b>Description:</b>	Live axle		
<b>Spring medium:</b>	Leaf		
<b>Damper type:</b>	Telescopic	<b>Adjustable:</b>	No
<b>Anti-sway bar:</b>	Only GTHO Phase 3	<b>Adjustable:</b>	No
<b>Suspension adjustable:</b>	Yes	<b>Method:</b>	By spring height
<b>Comment:</b>	See Appendix A		

### 1.4 STEERING

<b>Type:</b>	Recirculating ball	<b>Make:</b>	Ford
<b>Comment:</b>	Power steering permitted all models 16:1 ratio 20:1 ratio to be used on Model 500 unless power steering fitted Models GT and GTHO PH3 used Power steering		

### 1.5 BRAKES

	Front	Rear
<b>Type:</b>	Disc, vented	Drum
<b>Dimensions:</b>	286 x 23.9 mm	254 x 44,57,63.5 mm*
<b>Material:</b>	Cast iron	Cast iron
<b>No. cylinders/pots per wheel:</b>	One	One
<b>Actuation:</b>	Hydraulic	Hydraulic
<b>Caliper Make:</b>	Kelsey Hayes / Ford	
<b>Caliper Type:</b>	Single piston, floating	
<b>Caliper Material:</b>	Cast	
<b>Master cylinder make:</b>	PBR	<b>Type:</b> Tandem
<b>Adjustable bias:</b>	No	
<b>Servo Fitted:</b>	Yes	
<b>Comment:</b>	See Appendix A	

## SECTION 2 - ENGINE

<b>2.1 ENGINE</b>			
<b>Make:</b>	Ford		
<b>Model:</b>	Cleveland 351 2V(500) and 351 4V ( GT and GTHO Phase 3)		
<b>No. cylinders:</b>	Eight	<b>Configuration:</b>	Ve
<b>Cylinder block material:</b>	Cast iron	<b>Two/Four Stroke:</b>	Four
<b>Bore - Original:</b>	101.6 mm	<b>Max. allowed:</b>	103.1 mm
<b>Stroke:</b>	89.0 mm		
<b>Capacity - original:</b>	5766 cc	<b>Max. allowed:</b>	5937 cc
<b>Cooling method:</b>	Liquid		
<b>Identifying marks:</b>	Model 500 DOAZ – 6015 – D Models GT and GTHO Phase 3 DOAE – 6015 – J or G <b>Replacement Block See Appendix A</b>		
<b>Comment:</b>	ID marks located low on right side of block		

<b>2.2 CYLINDER HEAD</b>					
<b>Make:</b>	Ford				
<b>No. of valves/cylinder:</b>	Two (2)	<b>Inlet:</b>	One (1)	<b>Exhaust:</b>	One (1)
<b>No. of ports total:</b>	Eight (8)	<b>Inlet:</b>	Four (4)	<b>Exhaust:</b>	Four (4)
<b>No. of camshafts:</b>	One (1)	<b>Location:</b>	Block	<b>Drive:</b>	Chain
<b>Valve actuation:</b>	Pushrod & rocker				
<b>Spark plugs/cylinder:</b>	One				
<b>Identifying marks:</b>	DOAE 6090 H or R				
<b>Comment:</b>	ID located on unmachined area adjacent to head gasket surface (visible only with head removed) Note: Inlet and Exhaust valves are in different plains, being 'canted' in US language.				

<b>2.3 LUBRICATION</b>			
<b>Method:</b>	Wet sump		
<b>Oil cooler standard:</b>	No		
<b>Comment:</b>	None		

<b>2.4 IGNITION SYSTEM</b>	
<b>Type:</b>	Coil, points & distributor
<b>Make:</b>	Autolite
<b>Comment:</b>	Replacement distributors permitted but must points type (breaker less type not permitted) GTHO Phase 3 utilised electronic rev limiter regulations permit same on all models

<b>2.5 FUEL SYSTEM</b>				
<b>Carburettor Make:</b>	500 GT GTHO Phase 3	Autolite Autolite Holley	<b>Model:</b>	2100 D2V 4300C – 4V 4150C – 4V
<b>Carburettor number:</b>	One			
<b>Comment:</b>	Freedom of number and type of Carburettor is allowed subject to the carburettor being commercially available prior to 31/12/1972			

## SECTION 3 – TRANSMISSION

<b>3.1 CLUTCH</b>			
<b>Make:</b>	Ford		
<b>Type:</b>	Diaphragm		
<b>Diameter:</b>	241.5 mm	<b>No. of Plates:</b>	Two
<b>Actuation:</b>	Hydraulic		
<b>Comment:</b>	None		

<b>3.2 TRANSMISSION</b>			
<b>Type:</b>	Synchromesh		
<b>Make:</b>	Ford	<b>Model:</b>	Top loader
<b>No. forward speeds:</b>	Four	<b>Gearbox location:</b>	Behind engine
<b>Gear change type and location:</b>	Remote, Floor		
<b>Case material:</b>	Cast iron	<b>Identifying marks:</b>	
<b>Comment:</b>	Two types of "Toploader" are used in these models See Appendix A		

<b>3.3 FINAL DRIVE</b>			
<b>Make:</b>	Ford	<b>Model:</b>	9 inch
<b>Type:</b>	Live axle		
<b>Wheel drive method:</b>	Rear		
<b>Ratios:</b>	3.25 or 3.5 to 1 Fitted however ratios are free		
<b>Differential type:</b>	500 Open or LSD, GT Traction-lok GTHO Ph 3 Detroit locker		
<b>Comment:</b>	The Detroit Locker fitted to GTHO Ph 3 was 31 Spline axles 500 and GT were 28 spline The correct assembly must be used in the appropriate model		

<b>3.4 TRANSMISSION SHAFTS (EXPOSED)</b>	
<b>Number:</b>	One
<b>Description:</b>	Single piece steel with Hardy-Spicer type (Cardan) Universal joints
<b>Comments:</b>	

<b>3.5 WHEELS &amp; TYRES</b>			
<b>Wheel type - Original:</b>	Pressed steel or alloy	<b>Material:</b>	Steel or alloy
<b>Allowed:</b>	Period Alloy	<b>Allowed:</b>	Aluminium
<b>Fixture method:</b>	Studs	<b>No. studs:</b>	Five
<b>Wheel dia. &amp; rim width:</b>	<b>FRONT</b>		<b>REAR</b>
<b>Original:</b>	6 x 14" / 15 x 7" in alloy		6 x 14" / 15 x 7" in alloy
<b>Allowed:</b>	8 x 15"		8 x 15"
<b>Tyres allowed:</b>	60% minimum aspect ratio, refer approved tyre list.		
<b>Comment:</b>	None		

## SECTION 4 - GENERAL

### 4.1 FUEL SYSTEM

4.1 FUEL SYSTEM				
Tank Location:	Boot floor	Capacity:	500 GT GTHO Phase3	73 litres 164 litres* 164 litres*
Fuel pump type and location:	Mechanical on block	Make:	Ford	
Comment:	Optional*			

### 4.2 ELECTRICAL SYSTEM

<b>Voltage:</b>	12	<b>Alternator:</b>	Fitted
<b>Battery Location:</b>	Engine bay, RHF		
<b>Comment:</b>	None		

### 4.3 BODYWORK

<b>Type:</b>	Sedan	<b>Material:</b>	Steel
<b>No. of seats:</b>	Five	<b>No. doors:</b>	Four
<b>Comments:</b>	See Appendix B		

### 4.4 DIMENSIONS

<b>Track - Original</b>	<b>Front:</b>	1510 mm 14" wheel 1534 mm 15" wheels	<b>Rear:</b>	1487 mm 14" wheel 1534 mm 15" wheels
<b>Track - Allowed:</b>	<b>Front:</b>	1560 mm 14" wheel 1584 mm 15" wheels	<b>Rear:</b>	1537 mm 14" wheel 1584 mm 15" wheels
<b>Wheelbase:</b>	2820 mm		<b>Overall length:</b>	4690 mm
<b>Dry weight:</b>	1444 kg			
<b>Comment:</b>	None			

### 4.5 SAFETY EQUIPMENT

Fire Extinguisher required
Seat Belt required
ROPS required
Electrical isolator required

## **Appendix A**

### **Cylinder Block**

Aftermarket replacement block for the Cleveland engine:

The ARROW Ford 351 Cleveland Small Block

- Must be in conjunction with MSD Soft Touch rev Limiter Part no 8728 with a 7500 RPM limit.
- Must be in an easily accessible position within the engine bay.
- The limiter will be subject to testing at race meetings,

### **Front Suspension**

- Anti-sway bar diameter may be changed
- Dampers are free subject to original mounting and period correct technology

### **Rear Suspension**

- Trailing links, Panhard rod or Watts linkage permitted
- Addition of Rear anti – sway bar on 500 and GT permitted
- Change of diameter of the Rear anti – sway bar on GTHO Phase 3 Permitted
- Dampers are free subject to original mounting and period correct technology

### **Brakes**

- Rear drum width on the 3 models must be respected\*
- Components from other touring cars manufactured prior to 31/12/72 may be used subject to swept area limitation
- Twin master cylinders permitted subject to no structural modification of the bodyshell.
- Brake Bias adjustment permitted, adjustment by driver in normal driving position not permitted

### **Gearbox**

- Models 500 and GT used a Gearbox with a 28-spline output shaft and 2.78:1 first gear
- GTHO Phase 3 used a close ratio Gearbox with 2.32:1 First gear and a 31-spline output shaft, this shaft was approx. 105 mm longer allowing the tail shaft to be shortened by corresponding amount.
- Freedom of gear ratios is permitted however the correct type of gearbox must be used according to model of Car

## **Appendix B**

### **Bodywork**

It is essential that detail of external bodywork and interior trim correspond with original production form of model concerned.

#### **Summarising:**

##### **GTHO Phase 3 must be fitted with:**

- 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.
- Internally 'full' instrumentation is required including 8000 rpm Tacho
- 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.

##### **GT As per GTHO Phase 3 except the following may not be used:**

- Front air Dam
- Rear wing
- 8000 rpm tacho

### **500**

None of the above options are permitted if the Car is presented as a "base 500 model" Door trims were shorter leaving 100 mm metal exposed below the window glass

Standard instruments were:

- Speedometer
- Fuel gauge
- Temperature gauge:

The base model could be optioned with:

- Fairmont trim as per GT this included decorative strips on the wheel arches that were not included on the GT.
- GS Rally pack which included full instrumentation (not 8000 RPM Tacho)