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.

Make of Car:	Ford	**Model:**	Mustang
Period of Original Manufacture:	1968		
Motorsport Australia Historic Group:	Nc		
Date of issue of this document:	May 2020		

Update Log	
May 2020	Corrections in Engine comments and sealing procedure

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

SECTION 1 - CHASSIS

1.1 CHASSIS FRAME	
Description:	Uni – body
Period of Manufacture:	1968
Manufacturer:	Ford Motor Co
Chassis no. from:	8(F,R or T)01(A,C,D,F or K)000001 Eg 8F01D00001
Chassis no. location:	LHF inner front fender
Material:	Steel
Comment:	none

1.2 FRONT SUSPENSION			
Description:	Independent with upper wishbone, lower control arm & tension rod		
Spring Medium:	Coil		
Damper Type:	Telescopic	**Adjustable:**	No
Anti-sway bar:	Fitted	**Adjustable:**	No
Suspension adjustable:	No		
Comment:	none		

1.3 REAR SUSPENSION			
Description:	Live axle		
Spring medium:	Semi – elliptical leaf		
Damper type:	Telescopic	**Adjustable:**	No
Anti-sway bar:	No		
Suspension adjustable:	No		
Comment:	Overhead rear traction bars may be installed see Appendix A		

1.4 STEERING			
Type:	Recirculating ball & nut	**Make:**	Ford
Comment:	For fitment of a collapsible steering column refer to Appendix A		

1.5 BRAKES			
	Front		**Rear**
Type:	Disc, vented		Drum, twin leading shoe
Dimensions:	287 x 21 mm		254 x up to 63.5 mm
Material:	Cast iron		Cast iron
No. cylinders/pots per wheel:	Four		Two
Actuation:	Hydraulic		Hydraulic
Caliper Make:	Kelsey Hays		
Caliper Type:	Fixed		
Caliper Material:	Cast iron		
Master cylinder make:	Kelsey Hays / Girling	**Type:**	Tandem
Adjustable bias:	No		
Servo Fitted:	Yes		
Comment:	none		

SECTION 2 – ENGINE

2.1 ENGINE			
Make:	Ford		
Model:	302		
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:	76.2 mm	**Max. allowed:**	76.2 mm
Capacity - original:	4942 cc	**Max. allowed:**	5089 cc
Cooling method:	Liquid		
Identifying marks:	N/A		
Comment:	See Appendix A		

2.2 CYLINDER HEAD					
Make:	Ford				
No. of valves/cylinder:	Two	**Inlet:**	One	**Exhaust:**	One
No. of ports total:	Eight	**Inlet:**	Four	**Exhaust:**	Four
No. of camshafts:	One	**Location:**	Block	**Drive:**	Chain
Valve actuation:	Pushrod & rocker				
Spark plugs/cylinder:	One				
Identifying marks:	302 cast into the head adjacent to rocker stud boss				
Comment:	Tunnel Port heads allowed if using factory 4 bolt engine block or approved HC substitute. Approved cast iron cylinder heads After market Cylinder head use is allowed upon individual application. See Appendix A				

2.3 LUBRICATION			
Method:	Wet sump		
Oil cooler standard:	No		
Comment:	none		

2.4 IGNITION SYSTEM	
Type:	Coil & distributor
Make:	Autolite
Comment:	none

2.5 FUEL SYSTEM			
Carburettor Make:	Holly	**Model:**	4V
Carburettor number:	One	**Size:**	N/A
Comment:	none		

SECTION 3 – TRANSMISSION

3.1 CLUTCH			
Make:	Ford		
Type:	Diaphragm		
Diameter:	267 mm	**No. of Plates:**	One
Actuation:	Hydraulic		
Comment:	none		

3.2 TRANSMISSION			
Type:	Borg Warner or Ford		
Make:	T10 or top loader		
No. forward speeds:	Four	**Gearbox location:**	Attached to engine
Gear change type and location:	Centre / floor		
Case material:	Cast iron or alloy	**Identifying marks:**	N/A
Comment:	none		

3.3 FINAL DRIVE			
Make:	Ford	**Model:**	9 inch
Type:	Live rear axle		
Wheel drive method:	Rear		
Ratios:	Various		
Differential type:	LSD		
Comment:	none		

3.4 TRANSMISSION SHAFTS (EXPOSED)	
Number:	One
Description:	Tubular steel open tailshaft
Comment:	none

3.5 WHEELS & TYRES			
Wheel type - Original:	Disc	**Material - Original:**	Steel
Allowed:	Period Style	**Allowed:**	Alloy
Fixture method:	Studs	**No. studs:**	Five
Wheel dia. & rim width	**FRONT**		**REAR**
Original:	14 x 7 or 8 inch		14 x 7 or 8 inch
Allowed:	15 x 8 inch		15 x 8 inch
Tyres original:	N/A		N/A
Tyres allowed:	60% minimum aspect ratio, refer approved tyre list.		
Comment:	none		

SECTION 4 - GENERAL

4.1 FUEL SYSTEM			
Tank Location:	Boot floor	**Capacity:**	75 litre
Fuel pump type and location:	Mechanical / engine	**Make:**	AC
Comment:	none		

4.2 ELECTRICAL SYSTEM			
Voltage:	12	**Generator or Alternator:**	Alternator
Battery Location:	Engine bay		
Comment:	none		

4.3 BODYWORK			
Type:	Closed touring	**Material:**	Steel
No. of seats:	Four	**No. doors:**	Two
Comment:	1967 body permitted when modified (indicator recesses are added) to match 1968 configuration and external cosmetics.		

4.4 DIMENSIONS			
Track - Front:	1526 mm	**Rear:**	1519 mm
Wheelbase:	2743 mm	**Overall length:**	4663 mm
Dry weight:	1188 Kg		
Comment:	none		

4.5 SAFETY EQUIPMENT
Refer applicable Group Regulations

Appendix A

Block Substitution

Ford M-6010-BOSS 302 block with a rev limit of 7500rpm as a replacement for the Windsor 289 or 302 block is approved for use.
Once approved, endorsement and the engine seal numbers will be recorded in the logbook

Cylinder Head Substitution

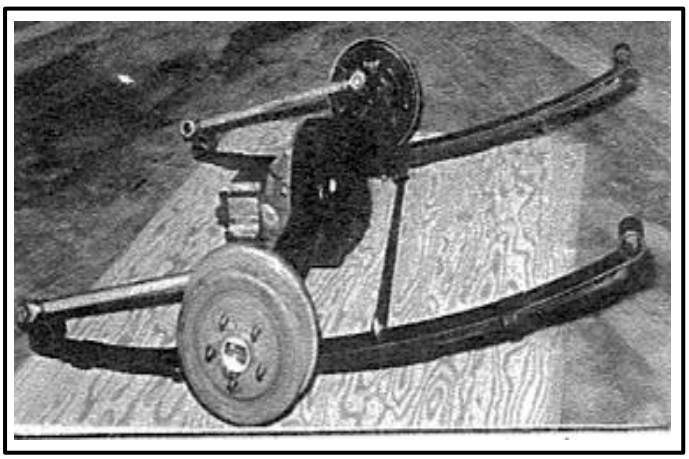
Approved cast iron cylinder heads:

- Dart Iron Eagle No. 1330008
- RHS Pro Action Small Block Ford No. 35305
- World Products Windsor Junior

Note: Dart Iron Eagle require the use of a MSD Soft Touch rev limiter Part No 8728 with a 7500 RPM limit. The limiter will be subject to testing at race meetings. The limiter will be located in an easily accessible position within the engine bay.
Once approval, endorsement and the engine seal numbers will be recorded in the logbook

Traction Bar installation

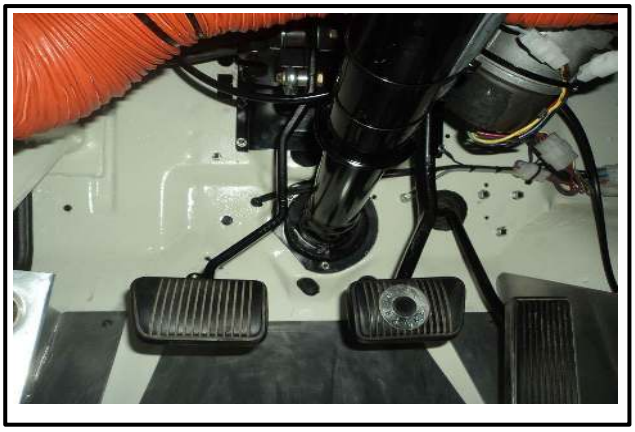
These bars are permitted to enter the interior of the car to a point beneath the rear seat. The forward end of the traction bar must be a bushing and the axle end may be a spherical joint. No part of these bars or their attachment points may be connected to any part of the roll cage. The interior floor opening should have some sealing to prevent the ingress of foreign material & water etc.



Overhead rear traction Bars

Replacement of solid steering column with collapsible type.

The original steering column main outer tube and steering shaft is replaced with a collapsible steering column main outer tube and steering shaft from an Australian XA to XC Ford Falcon.
The Ford Falcon main tube is modified by removing the spot welded Ford Australia mount and drilling a hole in the column for the Ford USA mount that bolts into the dashboard.



The Ford Falcon main outer tube will locate in the original lower firewall mount. An original Ford Australia coupler can then be used to join the collapsible inner shaft to the original steering box.

The original Ford USA steering column top and switches can then be mounted on the top of the Collapsible column to retain the original look and functions.

Sealing procedure for engines using the substitute cylinder head

1. Engine to be assemble to short motor without sump.
2. Heads to be assembled ready to be fitted to engine.
3. 2 sump bolts/studs to be drilled. 2 top timing case bolts/studs to be drilled.
4. Measure bore and stroke.
5. Note whether 2 bolt or 4 bolt block.
6. Fit sump and fit seal. Seal timing case.