

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 Boss 302
Period of Original Manufacture:	Nov. 1968 to Nov. 1969		
Motorsport Australia Historic Group:	Nc		
Date of issue of this document:	July 2020		



Update Log					
May 2020 Corrections in Engine comments and sealing procedure					

# **SECTION 1 - CHASSIS**

1.1 CHASSIS FRAME	
Description:	Uni-body two door coupe
Period of Manufacture:	1968 – 69
Manufacturer:	Ford Motor Co.
Chassis no. from:	9(F,R or T) 02 - 100001
Chassis no. location:	Left side of firewall
Material:	Steel
Comment:	none

1.2 FRONT SUSPENSION						
Description:	Independ	Independent, upper wishbone, lower arm with track rod.				
Spring Medium:	Coil	Coil				
Damper Type:	Telescop	ic	Adjustable:	Yes		
Anti-sway bar:	Fitted		Adjustable:	No		
Suspension adjustable:	Yes	Yes <b>Method</b> : Caster, camber and toe, spring hei				
Comment:	none					

1.3 REAR SUSPENSION					
Description:	Live axle	Live axle			
Spring medium:	Leaf	Leaf			
Damper type:	Telescop	ic	Adjustable:	Yes	
Anti-sway bar:	None				
Suspension adjustable:	Yes	Method:	Spring height	······	
Comment:	none				

1.4 ST	TEERING			
Type:		Recirculating ball	Make:	Ford
Comn	nent:	None		

1.5 BRAKES			
	Front		Rear
Type:	Disc		Drum
Dimensions:	287 x 23.8 mm		254 x 44.4 mm
Material:	Cast iron		Cast iron
No. cylinders/pots per wheel:	One		One
Actuation:	Hydraulic		Hydraulic
Caliper Make:	Kelsey Hayes – Ford		
Caliper Type:	Floating		
Caliper Material:			
Master cylinder make:	Ford	Type:	Tandem
Adjustable bias:	No		
Servo Fitted:	Yes		
Comment:	none		

# **SECTION 2 - ENGINE**

2.1 ENGINE			
Make:	Ford		
Model:	Boss 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:	76.2 mm	Max. allowed:	76.2 mm
Capacity - original:	4942 cc	Max. allowed:	5089 cc
Cooling method:	liquid		···········
Identifying marks:	C9ZE - 6015B		
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 8	& rocker	<del>-</del>		
Spark plugs/cylinder:	One				
Identifying marks:	N/A				
Comment:	See Appe	ndix A			

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

2.4 IGNITION SYSTEM			
Туре:	Points, coil & distributor		
Make:	Autolite		
Comment:	none		

2.5 FUEL SYSTEM				
Carburettor Make:	Holly	Model:	9510	
Carburettor number:	One			
Comment:	none			

# **SECTION 3 - TRANSMISSION**

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

3.2 TRANSMISSION			
Туре:	Synchromesh		
Make:	Ford, top loader		
No. forward speeds:	Four	Gearbox location:	Behind engine
Gear change type and location:	Remote floor shift		
Case material:	Cast iron	Identifying marks:	N/A
Comment:	none		

3.3 FINAL DRIVE				
Make:	Ford	Model:	9 inch	
Type:	Live axle	Live axle		
Wheel drive method:	Rear			
Ratios:	Various			
Differential type:	LSD "Traction-lok" or "Detroit Locker"			
Comment:	none			

3.4 TRANSMISSION SHAFTS (EXPOSED)		
Number:	One	
Description:	Open tail shaft	
Comment:	none	

Disc Material - Original:		Steel
Cast	Allowed:	Aluminium alloy
Studs	No. studs:	Five
	FRONT	REAR
7 x 15 inch		7 x 15 inch
8 x 15 inch		8 x 15 inch
60% minimum aspect ratio, refer approved tyre list.		
none		
	Cast Studs 60% minir	Cast Allowed: Studs No. studs: FRONT 7 x 15 inch 8 x 15 inch 60% minimum aspect ratio, refer approx

# **SECTION 4 - GENERAL**

4.1 FUEL SYSTEM			
Tank Location:	Boot floor	Capacity:	75 litre
Fuel pump type and location:	Mechanical & Electrical	Make:	Ford
Comment:	none		

4.2 ELECTRICAL SYSTEM				
Voltage:	12	Alternator:	Fitted	
Battery Location:	Engine compartment			
Comment:	none			

4.3 BODYWORK			
Туре:	Closed touring	Material:	Steel
No. of seats:	Four	No. doors:	Two
Comment:	See Appendix B		

4.4 DIMENSIONS			
Track - Front:	1506 mm	Rear:	1486 mm
Wheelbase:	2743 mm	Overall length:	4770 mm
Dry weight:	1238 kg		
Comment:	none		

4.5 SAFETY EQUIPMENT	
Refer applicable Group Regulations	

# Appendix A

#### **Cylinder Heads**

Original Boss 302 head or any 4v Ford Cleveland head may be used.

#### Block

The Ford M-6010-BOSS 302 block as a replacement for the original 302 Boss block is approved for use.

#### **Sealing Procedure**

- 1. Engine to be assembled 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.
- 7. Note Seal Numbers

#### Appendix B



The rear spoiler is to meet the specifications and dimensions of the original Ford part number C9ZZ-6344210-K.

The spoiler will have an overall length of 57.5" and be 4.75" in height with 36" centre to centre between the mountings.



The front spoiler is to meet the specifications and dimensions of the original Ford part number C9ZZ-63001A74-A. The spoiler will be of high impact flexible plastic with the outside of the longest part on the corners 58-1/2" in length. The total width in the centre including the bottom lip 5". The total length at the centre before it turns corners (front part before turn) 50".



1969 Mustang Mach 1 hood scoop permitted. The hood scoop is to meet the specifications of the original Ford part No C9ZZ-16C630-A. The scoop will have an overall length of27.5 inches, 15.5 inches wide,2.25 inches high



Rear quarter panel fake scoops should not be used.





Repeater lights on lower front guards and rear quarter panels must be installed.