



5TH CATEGORY - HISTORIC RACING
GROUP S
 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:	Triumph	Model:	TR5 250
Period of Original Manufacture:	August 1967 – September 1968		
Motorsport Australia Historic Group:	Sb		
Date of Issue of this Document:	30/6/2022		



Update Log

30/6/2022	Document layout
5/2020	Vacuum operated Lucas mixture control may be replaced with a Kinsler mechanical linkage unit see Fuel system comments

SECTION 1 - CHASSIS

1.1. CHASSIS

Description:	Steel ladder frame
Period of Manufacture:	August 1967 – September 1968
Manufacturer:	Triumph
Chassis Number From:	CP 1: First TR5 (prototype) CP 2: First series production car assembled on 29/08/1967 CP 586: First car assembled on 01/01/1968 CP 3101: Last TR5 assembled on 19/09/1968 CP XXX: without letters, right-hand drive car without overdrive. CP XXX L: The letter L means that the car is left-hand drive. CP XXX O: The letter O means that the car has overdrive. CP XXX LO: A left-hand drive TR5 with overdrive.
Chassis Number location:	Engraved on front near the front drive train mounting points
Material:	Mild steel
Comments	None

1.2. FRONT SUSPENSION

Description:	Independent – upper and lower wishbones		
Spring Medium:	Coil		
Damper Type:	Telescopic	Adjustable:	No
Anti-sway bar:	No	Adjustable:	No
Suspension adjustable:	No	Method:	N/A
Comments:	Spring rates and ride height are free		

1.3. REAR SUSPENSION

Description:	Independent – Semi Trailing Wishbones		
Spring Medium:	Coil		
Damper Type:	Armstrong lever arm	Adjustable	No
Anti-sway bar:	No	Adjustable:	N/A
Suspension adjustable:	No	Method:	N/A
Comments:	Spring Rates & Ride Height Unrestricted. Fore & Aft Location Permitted. Telescopic Shock Absorbers Permitted.		

1.4. STEERING

Type:	Rack and pinion	Make:	Alford and Alder
Comments	None		

1.5. BRAKES

	Front	Rear
Type:	Disc	Drum
Dimensions:	280 mm	229 mm x 43 mm
Material of drum/disc:	Cast iron	Cast iron
No. cylinders/pots per wheel:	Two	One
Actuation:	Hydraulic	Hydraulic
Caliper make:	Girling	
Caliper type:		
Material:	Cast iron	
Master cylinder make:	Girling	
Type:	Tandem	
Adjustable bias:	No	
Servo Fitted:	Yes	
Comments:	Dual master cylinders are permitted.	

SECTION 2 - ENGINE

2.1. ENGINE

Make:	Triumph		
Model:	TR5		
No. cylinders:	Six	Configuration:	In line
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four
Bore – Original:	74.7 mm	Max allowed:	76.2 mm
Stroke – original:	95 mm	Max allowed:	95 mm
Capacity – original:	2498 cc	Max allowed:	2599 cc
Identifying marks:	Engine number stamped on the left-hand of the cylinder block.		
Cooling method:	Liquid		
Comments:	None		

2.2. CYLINDER HEAD

Make:	Triumph		
No. of valves/cylinder:	Two	Inlet: One	Exhaust: One
No. of ports total:	Twelve	Inlet: Six	Exhaust: Six
No. of camshafts:	One	Location: Block	Drive: Chain
Valve actuation:	Pushrod and rockers		
Spark plugs/cylinder:	One		
Identifying marks:	N/A		
Comments:	None		

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:	Oil cooler permitted		

2.4. IGNITION SYSTEM

Type:	Points, Coil and Distributor
Make:	Lucas
Comments:	None

2.5. FUEL SYSTEM

Carburettor Make:	Stromberg	Model:	175CD
Carburettor Number:	Two		
Size:			
Fuel injection Make:	Lucas	Type:	Mechanical
Supercharged:	No	Type:	N/A
Comments:	<p>Carburettor throat size unrestricted.</p> <p>TR 250 cars fitted with carburettors (2). All cars may fit either Lucas injection or Stromberg carburettors.</p> <p>It is permitted to replace the vacuum operated mixture control unit attached to the injection pump See Appendix</p>		

SECTION 3 - TRANSMISSION

3.1. CLUTCH

Make:	Borg and Beck
Type:	Diaphragm
Diameter:	215 mm
No. of Plates:	One
Actuation:	Hydraulic
Comments:	Clutch free

3.2. TRANSMISSION

Type:	Syncromesh
Make:	Triumph TR6
Gearbox location:	Behind engine
No. forward speeds:	Four
Gearchange type and location:	Floor remote
Case material:	Cast iron
Identifying marks:	Stamped on the left-hand side of the gearbox casing
Comments:	Overdrive optional. Ratios free

3.3. FINAL DRIVE

Make:	Triumph	Model:	TR4
Wheel drive method:	Rear		
Ratios:	3.7:1 (standard)		
Differential type:	Hypoid bevel – free		
Comments:	Limited slip differential permitted. Ratios free		

3.4. TRANSMISSION SHAFTS (EXPOSED)

Number:	Three
Location:	Gearbox to final drive – final drive to rear wheel.
Description:	Tubular tailshaft with universal joints with individual driveshafts with sliding splines
Comments:	None

3.5. WHEELS & TYRES

Wheel type - Original:	Disc Wire Spoke	Material - Original:	Steel
Wheel type - Allowed:	Disc Wire Spoke	Material - Allowed:	Steel
Fixture method:	Studs Centre lock	No. studs:	Four
Wheel dia. & rim width	FRONT		REAR
Original:	5.5" x 15"		5.5" x 15"
Allowed	6" x 15"		6" x 15"
Tyre Section:			
Original:	175 x 15"		175 x 15"
Allowed:	195 x 15"		195 x 15"
Aspect ratio - minimum:	60% minimum aspect ratio.		
Comments:	Refer approved tyre list. Tyres/Rims limited to dimensions which fit under the wheel arch. Alloy wheels must be of period style		

SECTION 4 GENERAL

4.1. FUEL SYSTEM

Tank Location:	In boot	Capacity:	51 litres
Fuel pump, type:	Electric	Make:	
Comments:	Fuel pumps free		

4.2. ELECTRICAL SYSTEM

Voltage:	Twelve	Alternator fitted:	Alternator
Battery Location:	Engine bay		
Comments:	None		

4.3. BODYWORK

Type:	Two seat roadster	Material:	Steel
No. of seats:	Two	No. doors:	Two
Comments:	None		

4.4. DIMENSIONS

Track - Front:	1257mm	Rear:	1245 mm
Wheelbase:	2240 mm	Overall length:	3901 mm
Dry weight:	978 kg		
Comments:	None		

4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix

For Triumph TR6 fitted with Lucas fuel injection system:

- a. It is permitted to replace the vacuum operated mixture control unit attached to the injection pump.
- b. The replacement unit will be a Kinsler Fuel Injection (USA) direct linkage mixture control unit.
- c. With this conversion the use of a MSD Soft Touch rev Limiter Part no 8728 with a 7500RPM limit will be mandatory.
- d. The limiter will be in an easily accessible location within the vehicle's engine bay.
- e. The wiring loom is to be visibly accessible.

The limiter will be subject to testing at race meetings.



Kinsler direct linkage mixture control unit

