

CAMS

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 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 CAMS Manual of Motor Sport.

Make of Car: Holden Torana **Model:** LC GTR XU1

Period of Original Manufacture: 8/1970 - 11/1971 - Updated for Bathurst 1971

CAMS Historic Group: Nc

Date of Issue of this Document:

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SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description: Unitary Construction
Manufacturer: GMH
Chassis no. from: Refer Comments
Chassis no. location: Refer Comments
Material: Steel

Period of Manufacture:
 8/1970-11/1971

Comments: VIN is located on the ID plate attached to the radiator support panel assembly on the right hand side of the engine bay. The first five (5) digits of the thirteen (13) digit number denote the model number. The model number is then followed by the letter 'C' for LC Torana. A letter & number follow indicating the plant the vehicle was built i.e. H1 - Brisbane. A five (5) digit serial number follows.

The VIN No for an XU1 would read 82911CH100001. The 82911 prefix indicates that it is a GTR Torana.

The vehicle serial number is stamped in the left hand fender inner panel. The first two (2) letters indicate the model series i.e. 'LC'. A five (5) digit serial number follows. A letter for the plant of manufacture follows i.e. S - Sydney. Finally an * is added to denote compliance with safety design rules.

An XU1 would have a serial number that reads: LC00001S*

1.2 FRONT SUSPENSION

Description: Double Wishbone
Spring medium: Coil Over Damper
Damper Type: Double Acting Hydraulic Telescopic
Anti-sway bar: Fitted
Suspension adjustable: No
Comments:

Adjustable: No
Adjustable: No
Method: N/A

1.3 REAR SUSPENSION

Description: Live Axle - Trailing Arms
Spring medium: Coil
Damper type: Double Acting Hydraulic Telescopic
Anti-sway bar: No
Suspension adjustable: No
Comments:

Adjustable: No
Adjustable: N/A
Method: N/A

1.4 STEERING

Type: Rack & Pinion
Comments:

Make: GMH

1.5 BRAKES

Type:	Front	Rear
	Disc	Drum
Dimensions:	254 mm x 15 mm	228 mm
Material of drum/disc	Cast Iron	Cast Iron
No. cylinders/pots per wheel:	2	2
Actuation:	Hydraulic	Hydraulic
Caliper: Make, Material, Type:	Cast Iron - Girlock	
Master cylinder make:	PBR	Type: Tandem
Adjustable bias	No	
Servo Fitted	Yes	
Comments:		

SECTION 2 - ENGINE

2.1 ENGINE

Make:	GMH		
Model:	186		
No. cylinders:	6	Configuration:	In Line
Cylinder Block-material:	Cast Iron	Four Stroke	
Bore - Original:	92.07 mm	Max. allowed:	93.57 mm
Stroke - original:	76.07 mm	Max. allowed:	76.07 mm
Capacity - original:	3048 cc	Max. allowed:	3136 cc
Cooling method:	Water		
Identifying marks:	Refer Comments		

Comments: The engine number is stamped on the engine boss on the right hand side of the engine. The number consists of a model identification number followed by a serial number that started at 1001 & ran consecutively regardless of the engine size.

The pre Bathurst 1971 engines were stamped with a number that was prefixed with either 186X or 3100X i.e. 186X1001. The Bathurst 1971 XU1's were prefixed by CK & suffixed by an X i.e. CK1001X.

All LC XU1 engines had an external copper oil feed pipe that linked all the main bearing & ran down the side of the block.

2.2 CYLINDER HEAD

Make:	Holden		
No. of valves/cylinder-		Inlet: 1	Exhaust: 1
No. of ports total:	9	Inlet: 3	Exhaust: 6
No. of camshafts:	1	Location: Block	Drive: Gear
Valve actuation:	OHV Pushrod		
Spark plugs/cylinder:	1		
Identifying marks:			

Comments: The head fitted to the LC XU1 was a 161 cu in Holden head fitted with larger valves. Any Holden 9 port rounded shoulder cylinder head may be used.

2.3 LUBRICATION

Method:	Wet	Oil tank location:	N/A
Dry sump pump type:	N/A	Location:	N/A
Oil cooler standard:	No	Location:	N/A
Comments:			

2.4 IGNITION

Type:	Coil & Distributor
Make:	Delco Remy
Comments:	<u>Refer to specific group Regulations</u>

2.5 FUEL FEED

Carburettor: Make:	Stromberg	Model:	150 CDS	No:	3	Size:	1.5"
Fuel injection Make:		Type:					
Supercharged:	N/A	Type:					
Make:	N/A						
Comments:							

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: Holden **Type:** Diaphragm **Diameter:** 219 mm
No. of Plates: 1
Actuation: Mechanical
Comments:

3.2 TRANSMISSION

Type: Holden
Make: **Model:** Opel or M20
No. forward speeds: 4 **Gearbox location:** Behind Engine
Gearchange type and location: Floor
Case material: Cast Iron **Identifying marks:**
Comments: Pre Bathurst 1971 XU1's were fitted with the 'Opel' gearbox as fitted to the 186S Holden Kingswood etc. The stronger M20 box was fitted for Bathurst 1971.

3.3 FINAL DRIVE

Make: GMH **Model:**
Wheel drive method: Rear
Ratios: Various
Differential: Bevel **Type:** Hypoid
Comments: Spin Resistant or Locked Differential permitted. "Detroit Locker" style banjo diff was fitted.

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: 1 **Location:** Gearbox to Final Drive
Description: Tubular Tailshaft with Hardy Spicer Universal Joints
Comments:

3.5 WHEELS & TYRES

		FRONT	REAR
Wheel type:	Original: Steel		
	Allowed: Alloy		
Fixture method:	Bolt on		
Wheel dia. & rim width			
	Original:	5.5 x 13	5.5 x 13
	Allowed:	7 x 13	7 x 13
Tyre section:			
	Original:		
	Allowed:		
Aspect ratio - minimum:		60%	60%
Comments:			

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank Location:	Rear	Capacity:	77 Litres
Fuel pump, type and location:	Mechanical	Make:	AC

Comments: Two (2) normal Torana lower fuel tank sections were welded together to achieve this capacity. An alternate filler mounted through the Gauge hole should be strongly recommended as fuel surge under acceleration produces leakage through the standard filler.

4.2 ELECTRICAL SYSTEM

Voltage: 12 **Alternator fitted:** Yes

Battery Location: Engine Compartment

Comments: The battery in cars fitted with Webers has to be moved to the boot to provide space for the carburettors

4.3 BODYWORK

Type: 2 Door Coupe **Material:** Steel

No. of seats:	4	No. doors:	2
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Comments: The XU1 had a metal front spoiler bolted to the front cross member. A fibre glass rear spoiler on the boot lid. There were three (3) slits cut in the lower section of the front guards behind the wheel opening.

The interior had a sports steering wheel similar to the HT Monaro & a plastic floor console around the gear stick. The door trims where of a different embossing & featured 'GTR' in chrome lettering. The dashboard featured full instrumentation similar to the HB Torana Brabhams. High back seats without headrests were fitted.

4.4 DIMENSIONS

Track - Front: 1331 mm

Rear: 1300 mm

Wheelbase: 2540 mm

Overall length: 4386 mm

Dry weight: 1031 kg

Comments:

4.5 SAFETY EQUIPMENT

Fire extinguisher required

Type fitted and location:

Seat belt required

Type and make fitted:

Rollbar optional/required

Electrical cut off switch required

Safety fuel tank optional/required