

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: 15th December 1999



SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description:	Unitary Construction	Period of Manufacture:
Manufacturer:	GMH	8/1970-11/1971
Chassis no. from:	Refer Comments	
Chassis no. location:	Refer Comments	
Material:	Steel	

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 B2911CH100001. 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	Adjustable:	No
Anti-sway bar:	Fitted	Adjustable:	No
Suspension adjustable:	Yes - Camber & castor	Method:	Shims
Comments:			

1.3 REAR SUSPENSION

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

1.4 STEERING

Type:	Rack & Pinion	Make:	GMH
Comments:			

1.5 BRAKES

Type:		Front Disc	Rear 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		
Adjustable bias:		No	Tandem
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.

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:	

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

Wheel type: Original:	Steel	Material: Original:
Allowed:	Alloy	Allowed:
Fixture method:	Bolt on	No. studs: 5 Studs
	FRONT	REAR
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:		



F.I.A. Recognition No.

Group.

~~10/12/1971~~ H2-2

CONFEDERATION OF AUSTRALIAN MOTOR SPORT

394 ST KILDA ROAD, MELBOURNE, VIC 3004

PRODUCTION CERTIFICATE

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Date 3.1.1972

Manufacturer: General Motors-Holden's Pty. Ltd.

Car Model: Torana LC GTR XU1

Production Period From August, 1970 to November, 1971

Monthly Production

Month / Year	Number
January/February 71	186
March/April 1971	240
May/June 1971	8
July/August, 1971	-
September/October	285
November/December 71	14
TOTAL	733
Total built since inception i.e. Aug- Remarks 1970 to December, 1971	1433

I HEREBY certify that the production mentioned hereabove concerns cars which are entirely completed, identical and in conformity with the recognition form submitted for the said model.

.....
(Signature)

Position: Sales Promotion Officer,
General Motors-Holden's Sales
Pty. Ltd.



F.I.A. Recognition No.....

Group.....

10/12/01
HZ-2

CONFEDERATION OF AUSTRALIAN MOTOR SPORT

394 ST. KILDA ROAD, MELBOURNE, VIC. 3004

Form of recognition in accordance with appendix J to the International Sporting Code of the
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Manufacturer GENERAL MOTORS HOLDEN LTD. Cylinder capacity 3048 cm.³ in.³
 Model TORANA GTR XU1
 Serial No. of chassis body LCXXXXXB Manufacturer G.M.H. Ltd.
 Serial No. of engine 3100X Manufacturer G.M.H. Ltd.
 Recognition is valid from 3.1.1972 List.....
 The manufacturing of the model described in this recognition form started on August 1970
 and the minimum production of 1433 identical cars, in accordance with the specifications of
 this form was reached on November 1971.

Photograph A. 3. view of car from front



F.I.A. Stamp

C.A.M.S. Stamp

A1



A2



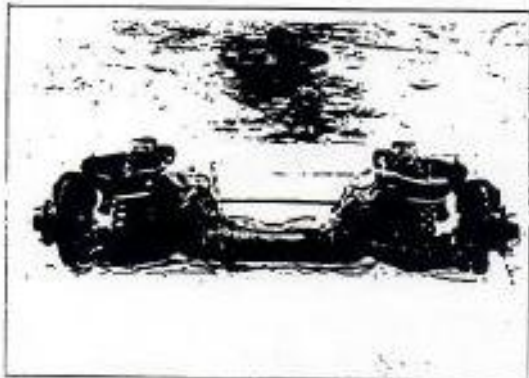
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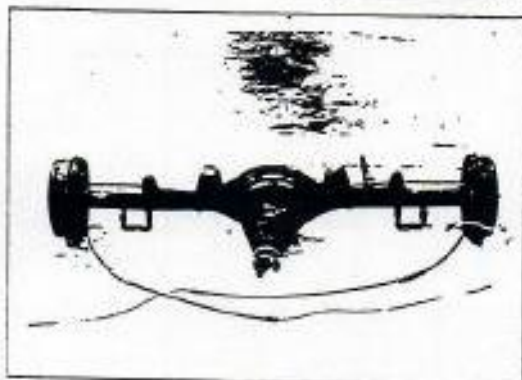
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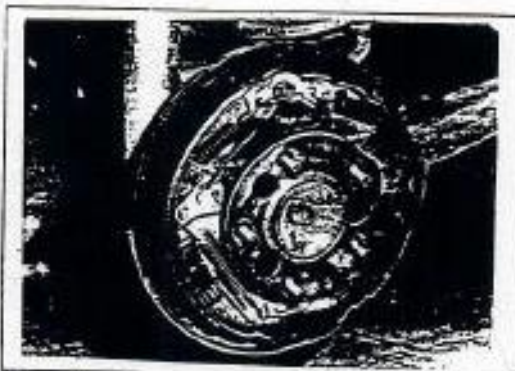
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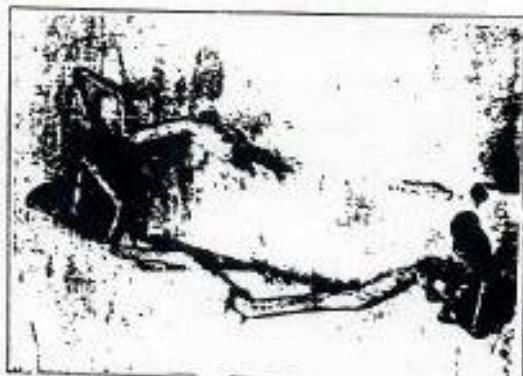
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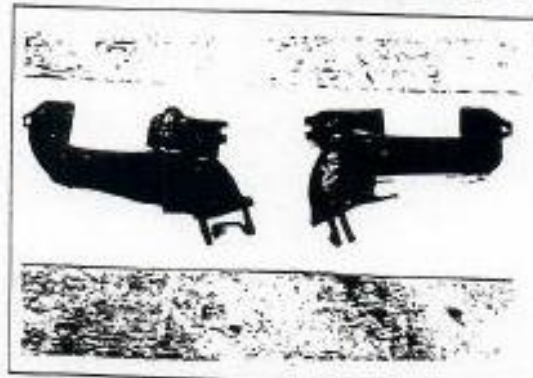
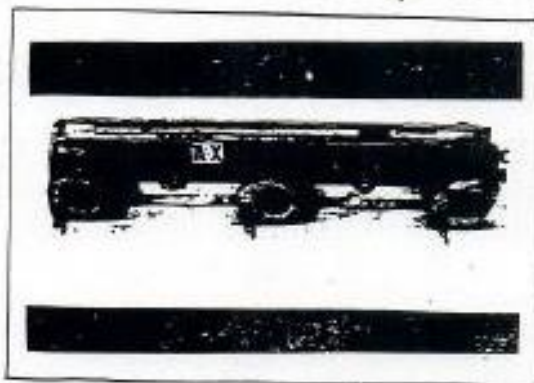
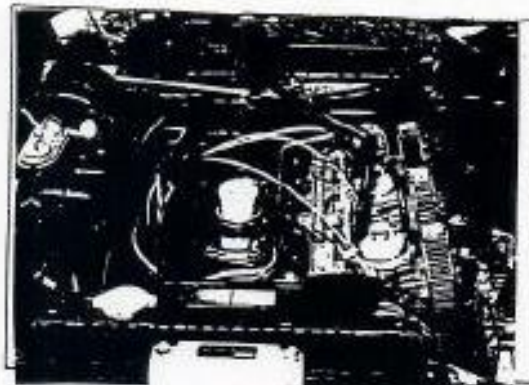
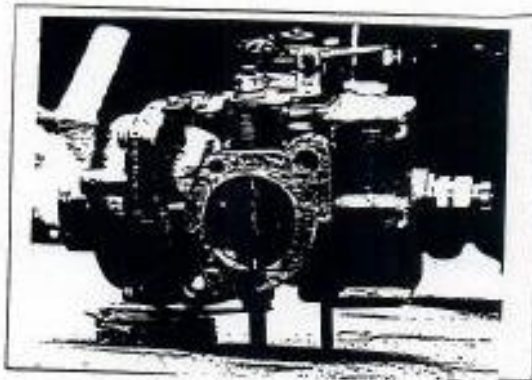
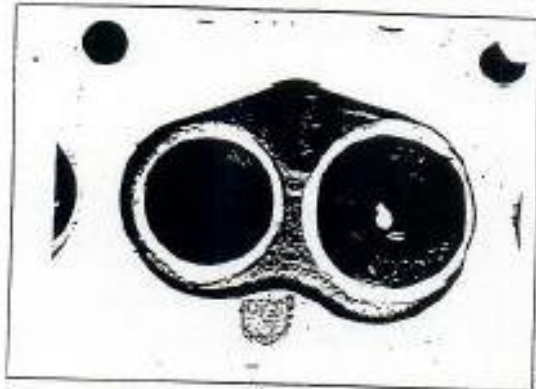
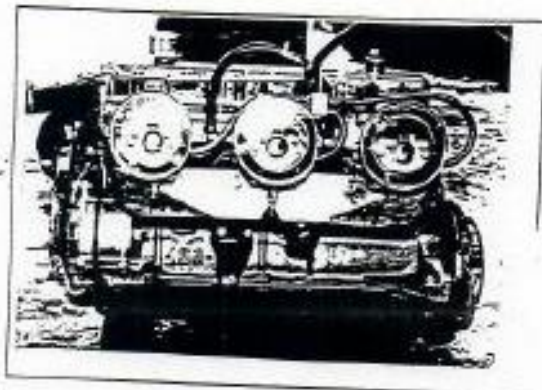
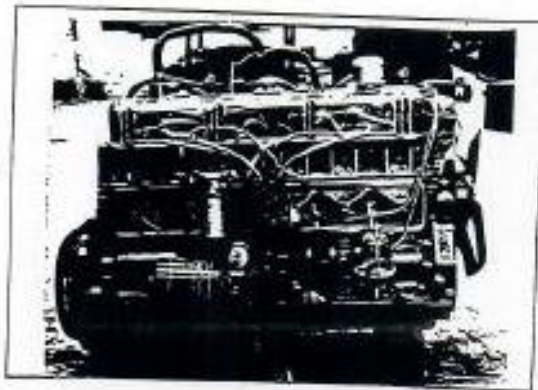


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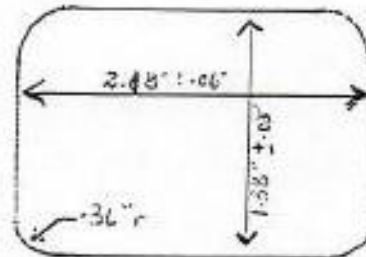
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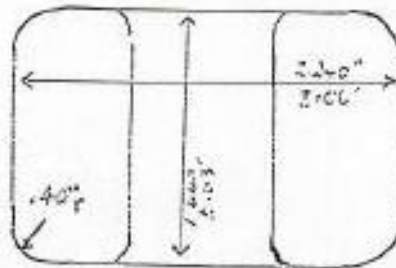
Model

Rec. No. ~~1172/00~~ H2-2

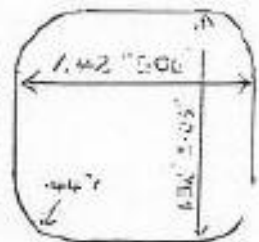
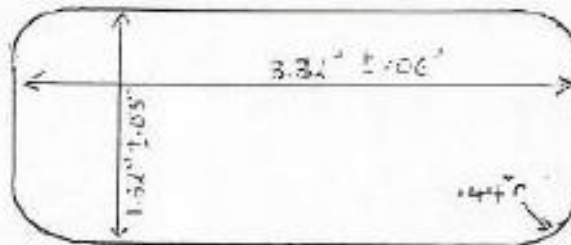
Drawing inlet manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



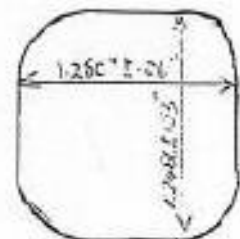
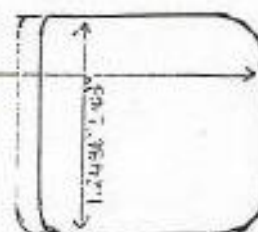
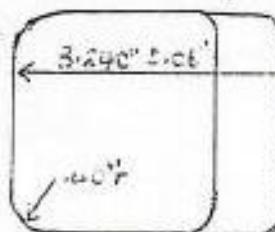
Drawing of entrance to inlet port of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



Drawing of exhaust manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



Drawing of exit to exhaust port of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



<p>J</p> <p>engine unit out of car, from left, with clutch and accessories but without gear box or air filter</p>	<p>K</p> <p>engine unit out of car, from right with clutch and accessories but without air filter or gear box</p>
<p>L</p> <p>combustion chamber</p>	<p>M</p> <p>piston crown</p>
<p>N</p> <p>Carburettor (view from side of manifold)</p>	<p>O</p> <p>engine in car with all accessories, bonnet open or removed</p>
<p>P</p> <p>inlet manifold</p>	<p>Q</p> <p>exhaust manifold</p>

Make ~~General Motors~~ Model TORANA GTR XU1
 Holden's Ltd.

Reg. No.

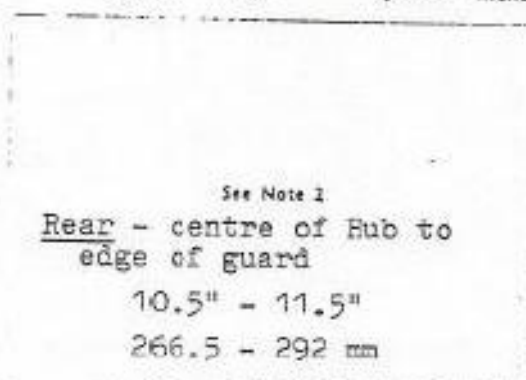
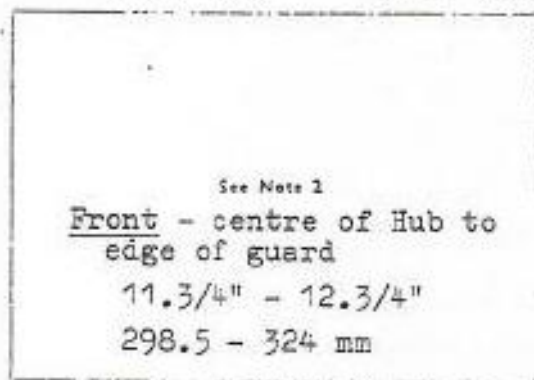
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 H2-2

NOTE 1.

All dimensions must be given in two measuring systems, see Note 3.

CAPACITIES AND DIMENSIONS

- | | | | | |
|-------------------------------------|-------|-----|------|--------|
| 1. Wheelbase | 254.0 | mm. | 100 | inches |
| 2. Front track (1 spacer per wheel) | 1331 | mm. | 52.4 | inches |
| 3. Rear track (no spacers) | 1300 | mm. | 51.2 | inches |



- | | | | | |
|---|-------------|--------|-------|------------|
| 4. Overall length of the car | 4386 | cm. | 172.7 | inches |
| 5. Overall width of the car | 1600 | cm. | 63.0 | inches |
| 6. Overall height of the car | 1371 | cm. | 54.0 | inches |
| 7. Capacity of fuel tank (reserve included) | 77.28 | lters. | 20.4 | gall. U.S. |
| | | | 17 | gall. Imp. |
| 8. Seating Capacity: | 4/5 persons | | | |
| 9. Weight: Total weight of the car with normal equipment, water, oil, and spare wheel but without fuel or repair tools: | 1030.58 | kg. | 2270 | lbs. |
| | | | 20.26 | cwts. |

NOTE 2.

Differences in track caused by the use of other wheels with different rim widths must be stated when recognition is requested for the wheels concerned; Specify ground clearance in relation to the track and give drawing of two easily recognisable points at front and rear at which measurements are taken. These ground clearance dimensions are only for information when checking the track and can in no way affect the eligibility of the car.

NOTE 3.

CONVERSION TABLE

1 inch/pouce	— 2.54	cm.	1 quart US	— 0.9464	lters.
1 foot/pied	— 30.4794	cm.	1 pint (pt)	— 0.568	lters.
1 sq. inch/pouce carre	— 6.452	cm. ²	1 gallon Imp.	— 4.546	lters.
1 cubic inch/pouce cube	— 16.387	cm. ³	1 gallon US	— 3.785	lters.
1 pound/livre (lb)	— 453.593	gr.	1 hundred weight (cwt.)	— 50.802	kg.

Make TORANA

Model GTR XU1

Rec. No. _____

CHASSIS AND COACHWORK (Photographs A, B and C)

- | | |
|--|---------------------------------------|
| 20. Chassis/body construction: separate/unitary construction | |
| 21. Unitary construction. material(s) | steel |
| 22. Separate construction. Material(s) of chassis | - |
| 23. Material(s) of coachwork | - |
| 24. Number of doors <u>2</u> Material(s) | steel |
| 25. Material(s) of bonnet | steel |
| 26. Material(s) of boot lid | steel - (fibreglass spoiler attached) |
| 27. Material(s) of rear window | safety glass |
| 28. Material(s) of windscreen | laminated glass |
| 29. Material(s) of front-door windows | safety glass |
| 30. Material(s) of rear-door windows | - |
| 31. Sliding system of door windows | vertical by regulator |
| 32. Material(s) of rear-quarter light | |

ACCESSORIES AND UPHOLSTERY

- | | | |
|---|--|-----------------|
| 38. Interior heating : yes —no | 39. Air conditioning : yes —no | |
| 40. Ventilation : yes —no | 41. Front seats, type of seat and upholstery | separate, vinyl |
| 42. Weight of front seat(s), complete with supports and rails, out of the car : | 18.14 - 18.60 kg. | 40-41 lbs. |
| 43. Rear seats, type of seat and upholstery | bench seat, vinyl | |
| 44. Front bumper, material(s) | steel Weight 3.63 kg. | 8 lbs. |
| 45. Rear bumper, material(s) | steel Weight 3.17 kg. | 7 lbs. |

WHEELS

- | | | |
|--------------------------------------|-------------------|----------------------------------|
| 50. Type | Pressed steel | |
| 51. Weight (per wheel, without tyre) | 6.8 kg. | 15 lbs. |
| 52. Method of attachment | 5 stud, nuts | |
| 53. Rim diameter | 330.2 mm. 13 ins. | 54. Rim width 139.7 mm. 5.5 ins. |

STEERING

- | | |
|---|--------------------|
| 60. Type | Rack and pinion |
| 61. Servo-assistance : | yes —no |
| 62. Number of turns of steering wheel from lock to lock | 3.5 |
| 63. In case of servo-assistance | N/A |

2

Make..... Model GTR XU1 Rec. No.....

ENGINE (photographs J and K)

- 130. Cycle Otto 4 stroke 131. Number of cylinders 6
- 132. Cylinder Arrangement 14 line
- 133. Bore 92.07 mm. 3.625 in. 134. Stroke 76.07 mm. 3.0 in.
- 135. Capacity per cylinder 508 cm.³ 31.0 cu.in.
- 136. Total cylinder capacity 3048 cm.³ 186 cu.in.
- 137. Material(s) of cylinder block cast iron 138. Material(s) of sleeves (if fitted) N/A
- 139. Cylinder head, material(s) cast iron Number fitted one
- 140. Number of inlet ports 3 141. Number of exhaust ports 6
- 142. Compression ratio 10.0 : 1
- 143. Volume of one combustion chamber 47.14 cm.³ 28.75 cu.in.
- 144. Piston, material Aluminium 145. Number of rings 3
- 146. Distance from gudgeon pin centre line to highest point of piston crown 45.31 mm. 1.784 in.
- 147. Crankshaft: ~~not~~ stamped 148. Type of crankshaft: integral/.....
- 149. Number of crankshaft main bearings 7
- 150. Material of bearing cap cast iron
- 151. System of lubrication: ~~dry sump~~ oil in sump
- 152. Capacity, lubricant 4.26 ltrs. 7.5 pts. 4.501 quarts U.S.
- 153. Oil cooler: yes/no 154. Method of engine cooling water
- 155. Capacity of cooling system 8.52 ltrs. 15 pts. 9 quarts U.S.
- 156. Cooling fan (if fitted) dia. 34.03 cm. 13.40 in.
- 157. Number of blades of cooling fan 4

Bearings

- 158. Crankshaft main, type Tri-Metal dia. 55.83 m.m. 2.198 in.
- 159. Connecting rod big end, type Tri-Metal dia. 48.24 m.m. 1.90 in.

Weights

- 160. Flywheel (clean) 10.90 kg. 24 lbs.
- 161. Flywheel with clutch (all turning parts) 16.33 kg. 36 lbs.
- 162. Crankshaft 20.01 kg. 44.125 lbs. 163. Connecting rod 481 kg. 1.06 lbs.
- 164. Piston with rings and pin +5 grammes -671 kg. 1.484 lbs.

Make TORANA

Model GTR XU1

Rec. No. 4072/001
H2-2

SUSPENSION

70. Front suspension (photograph D), type Independent by coil springs & wishbones
 71. Type of spring Coil
 72. Stabiliser (if fitted) Torsion bar type
 73. Number of shock absorbers 2 74. Type Telescopic (Hydraulic)
 78. Rear suspension (photograph E), type Rigid
 79. Type of spring Coil, trailing arms
 80. Stabiliser (if fitted) No
 81. Number of shock absorbers 2 82. Type Telescopic hydraulic

BRAKES (photographs F and G)

90. Method of operation Hydraulic
 91. Servo-assistance (if fitted), type P.B.R. - Tandem Booster
 92. Number of hydraulic master cylinders 1 tandem

93. Number of cylinders per wheel	2	FRONT	1	REAR
94. Bore of wheel cylinder(s)	53.97	mm. 2.125 inches	14.30	mm. .563 inches

Drum Brakes

95. Inside diameter	mm.	inches	228.6	mm. 9.0	inches		
96. Length of brake linings	}	{	mm.	inches	234.9	mm. 9.25	inches
97. Width of brake linings			mm.	inches	209.5	8.25	inches
98. Number of shoes per brake			44.4	mm. 1.75	inches		2
99. Total area per brake	mm. ²	sq. in.	77287	mm. ² 30.62	sq. in.		

Disc Brakes

100. Outside diameter	254	mm.	10	inches	mm.	inches
101. Thickness of disc	15.75	mm.	.620	inches	mm.	inches
102. Length of brake linings	76.20	mm.	3.0	inches	mm.	inches
103. Width of brake linings	57.15	mm.	2.25	inches	mm.	inches
104. Number of pads per brake			2			
105. Total area per brake	342.9	mm. ²	13.5	sq. in.	mm. ²	sq. in.

Make.....

Model GTR XU1Rec. No. 10/73/001
H2-2FOUR STROKE ENGINES

170. Number of camshafts ONE 171. Location Side of Block
 172. Type of camshaft drive Gears
 173. Type of valve operation Pushrod and hydraulic cam-followers

INLET (see page 4)*

180. Material(s) of inlet manifold Aluminium alloy
 181. Diameter of valves 41.2 mm. 1.62 ins.
 182. Max. valve lift 8.76 mm. .345 in. 183. Number of valve springs ONE
 184. Type of spring coil 185. Number of valves per cylinder ONE
 186. Tappet clearance for checking timing (cold/warm) .178 mm. .007 ins.
 187. Valves open at (with tolerance for tappet clearance indicated) 230 BTDC
 188. Valves close at (with tolerance for tappet clearance indicated) 650 ABDC
 189. Air filter, type Paper element, 1 per carburettor

EXHAUST (see page 4)*

195. Material(s) of exhaust manifold cast iron
 196. Diameter of valves 35.8 mm. 1.41 ins.
 197. Max. valve lift 8.76 mm. .345 in. 198. Number of valve springs ONE
 199. Type of spring coil 200. Number of valves per cylinder ONE
 201. Tappet clearance for checking timing (cold/warm) mm. .007 ins.
 202. Valves open at (with tolerance for tappet clearance indicated) 58° BBDC
 203. Valves close at (with tolerance for tappet clearance indicated) 30° ATDC
 204. Diameter outlet orifice exhaust manifold 45.2 mm. 1.760 ins.

CARBURETION (photograph N)

210. Number of carburetors fitted 3 211. Type side-draught
 212. Make Zenith 213. Model 150 CDS
 214. Number of mixture passages per carburetor ONE
 215. Flange hole diameter of exit port(s) of carburetor 38.10 mm. 1.50 ins.
 216. Minimum diameter of venturi/minimum diam., with piston at maximum height (example: SU)
 25.4 mm. 1.0 ins.

INJECTION (if fitted)

220. Make of pump 221. Number of plungers
 222. Model or type of pump 223. Total number of injectors
 224. Location of injectors
 225. Minimum diameter of inlet pipe mm. ins.

* For additional information concerning two-stroke engines and super-charged engines, see page 13.

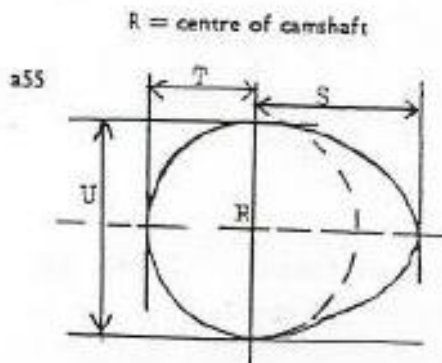
Make..... Model..... GTR XU1..... Rec. No.....

ENGINE ACCESSORIES

230. Fuel pump: mechanical ~~and/or electrical~~
231. No. fitted **ONE**
232. Type of ignition system **coil & distributor**
233. No. of distributors **one**
234. No. of ignition coils **one**
235. No. of spark plugs per cylinder **one**
236. Generator, type: ~~dynamo~~/alternator—number fitted **one**
237. Method of drive **vee-belt**
238. Voltage of generator **12/13.5** volts
239. Battery, number **one**
240. Location **left front engine compartment**
241. Voltage of battery **12** volts

ENGINE AND CAR PERFORMANCES (as declared by manufacturer in catalogue)

250. Max. engine output **150** (type of horsepower: **SAE**) at **5200** r.p.m.
251. Max. r.p.m. **6400** output at that figure **not quoted**
252. Max. torque **190lbs/ft** at **3600** r.p.m.
253. Max. speed of the car **201** km./hour **125** miles/hour



Inlet cam

S =	21.847	mm.	.860	inches
T =	16.000	mm.	.630	inches
U =	32.004	mm.	1.260	inches

Exhaust cam

S =	21.847	mm.	.860	inches
T =	16.000	mm.	.630	inches
U =	32.004	mm.	1.260	inches

Make Model GTR XU1

Rec. No. 10/77/001
H2-2

DRIVE TRAIN

CLUTCH

260. Type of clutch Diaphragm 261. No. of plates one
262. Dia. of clutch plates 21.89 cm. 8.60 ins.
263. Dia. of linings, inside 15.54 cm. 6.12 ins.
outside 21.89 cm. 8.60 ins.
264. Method of operating clutch Mechanical

GEAR BOX (photograph H)

270. Manual type, make Holden Method of operation remote floor control
271. No. of gear-box ratios forward 4 272. Synchronized forward ratios 4
273. Location of gear-shift floor
274. Automatic, make _____ type _____
275. No. of forward ratios _____ 276. Location of gear shift _____

277.	Manual		Automatic		Alternative manual/automatic			
	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth
1	3.428							
2	2.156							
3	1.366							
4	1.00							
5								
6								
reverse	3.317							

278. Overdrive, type N/A
279. forward gears on which overdrive can be selected -
280. Overdrive ratio -

FINAL DRIVE

290. Type of final drive Hypoid gear 291. Type of differential bevel gear
292. Type of limited slip differential (if fitted in series-production) cone-type, spring loaded
293. Final drive ratio 3.08/3.36 Number of teeth 40/13, 37/11

Make..... Model..... Rec. No.

IMPORTANT:

During the scrutineering of cars entered in group 5 (Sportscars) only the following items of the present recognition form are to be taken into consideration: 1, 2, 3, 9, 20, 21, 22, 23, 24, 25, 26, 70, 71, 78, 79, 90, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 147, 148, 149, 150, 158, 159, 170, 171, 172, 173, 185, 200, 270, 271, 274, 275, 290, 291, 292 and photographs A, B, D, E, F, G, H, J, K and O.

The vehicle described in this form has been subject to the following amendments:

or 16.8.71 19..... rec. no. 1/16 List..... on 19..... rec. no. List.....
or 1.11.71 19..... rec. no. 2/26 List..... on 19..... rec. no. List.....
or 19..... rec. no. List..... on 19..... rec. no. List.....
or 19..... rec. no. List..... on 19..... rec. no. List.....
or 19..... rec. no. List..... on 19..... rec. no. List.....

Optional equipment affecting preceding information. This to be stated together with reference number.



CONFEDERATION OF AUSTRALIAN MOTOR SPORT

284 ST. KILDA ROAD,
MELBOURNE, VIC. 3200

Manufacturer G.M.-Holden's

Model TORANA GTR XU1

C.A.M.S Recognition No. ~~10/92/00~~Amendment No. 1/1E ^{A2-2}

Amendment to Form of Recognition

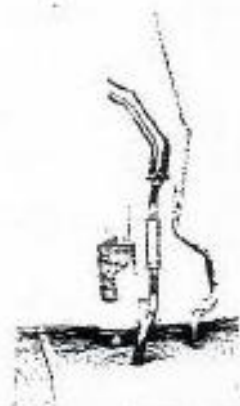
No	Reference No
2	2807154 - additional spacers, 1 to each wheel (i.e., 2 front, 1 rear) - track now (front 52.6 (rear 51.4
255	2822075 - new camshaft replaces 2815739. new dimensions, Inlet Cam and Exhaust Cam S 22.174 mm .873" T 14.909 mm .587" U 29.819 mm 1.174"
182) 197)	Valve lift now 10.9 mm. .429"
187	37° BTDC
188	74° ABDC
202	78° BBDC
203	34° ATDC
	Carburettor needles 5H fitted with camshaft 2822075.

Photograph I

Revised exhaust pipes now incorporate silencer near front of vehicle.

Date amendment is valid from

16 August, 1971



Stamp of CAMS



CONFEDERATION OF AUSTRALIAN MOTOR SPORT
 274 ST. KILDA ROAD,
 MELBOURNE, VIC. 3002

Manufacturer: G.M.-Holden's

Model: Torena GTR XU1

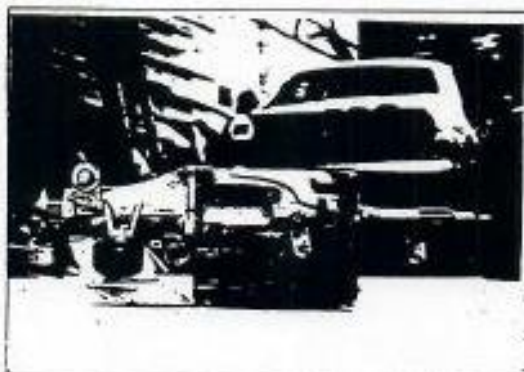
C.A.M.S. Recognition No. ~~10/7/71~~ 42-2

Amendment No. 2/2E

Amendment to Form of Recognition

No.	Reference No.										
Photograph D	2823855 - new lower control arm with reinforced ball joint mounting. Engine number prefix CK										
	2822072 - new cylinder head.										
	2823892 - new clutch driven plate.										
51	2823863 - road wheels of thicker material, no hub cap retaining nibs. Radiator core now 14.5 fins per inch in lieu of 12 fins per "										
277	gear ratios now <table border="0" style="margin-left: 20px;"> <tr> <td>1st</td> <td>2.54 : 1</td> </tr> <tr> <td>2nd</td> <td>1.83 : 1</td> </tr> <tr> <td>3rd</td> <td>1.255 : 1</td> </tr> <tr> <td>4th</td> <td>1.00 : 1</td> </tr> <tr> <td>Reverse</td> <td>2.54 : 1</td> </tr> </table>	1st	2.54 : 1	2nd	1.83 : 1	3rd	1.255 : 1	4th	1.00 : 1	Reverse	2.54 : 1
1st	2.54 : 1										
2nd	1.83 : 1										
3rd	1.255 : 1										
4th	1.00 : 1										
Reverse	2.54 : 1										
Photograph H	new gearbox.										

H



Date amendment is valid from:

1/11/71

Stamp of CAAS