



JAPAN AUTOMOBILE FEDERATION

社団法人・日本自動車連盟

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

JAF公認番号 T-187
グループ ツーリング・カー
発効年月日 46.12.1

F. I. A. Recognition No.
Group 1

5437

Form of recognition in accordance with
Appendix J to the International Sporting Code.
国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

Manufacturer 製造会社名 Toyota Motor Co., Ltd.

Serial No of chassis 製造開始シャシー番号 RA20 - 000001

engine 製造開始エンジン番号 8R 0000001

Recognition is valid from

Cylinder-capacity 総排気量
Reciprocation レシプロ 1858 cm³ 113.3 cu.in.
Special 特殊 cm³ cu.in.

Model 型式及び通称名 Toyota Celica 1900, RA20L - KA

Manufacturer 製造会社名 Toyota Motor Co., Ltd.

Manufacturer 製造会社名 Toyota Motor Co., Ltd.

List 72/1

The manufacturing of the model described in this recognition form was started on May 1971 and the minimum production of 5000 identical cars, in accordance with the specifications of this form was reached on Aug. 1971

Photograph A, 3/4 view of car from front 写真A、全体写真(斜め前方)



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

Variants

on	19	rec. No.	List
on	19	rec. No.	List
on	19	rec. No.	List
on	19	rec. No.	List
on	19	rec. No.	List

Normal evolution of the type

on	19	rec. No.	List
on	19	rec. No.	List
on	19	rec. No.	List
on	19	rec. No.	List
on	19	rec. No.	List

Stamp and signature of the JAF

JAF公認印及び署名

庭山博史

Hiroshi Niwayama



Stamp and signature of the F. I. A.

[Signature]

Make Toyota

Model RA20L - KA
型式

J.A.F.公認番号

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IMPORTANT - the underlined items must be stated in two measuring systems, one of which must be the metric system. See conversion table hereafter.

CAPACITIES AND DIMENSIONS

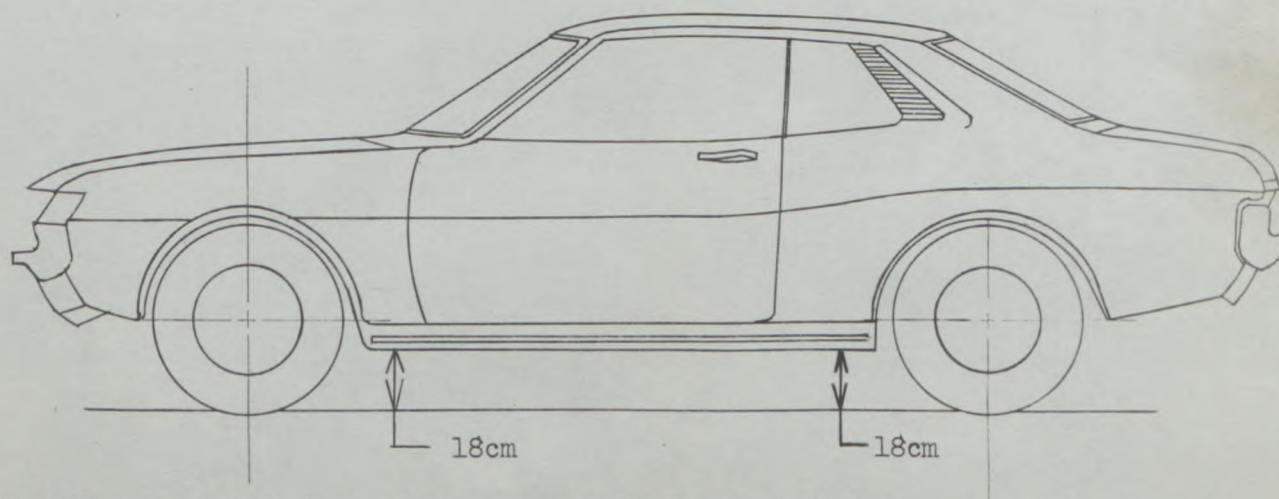
仕様諸元

1. <u>Wheelbase</u> ホイールベース	242.5	cm	95.5	inches
2. <u>Front track</u> トレッド (前)	128.0	cm	50.4	inches *
3. <u>Rear track</u> トレッド (後)	128.5	cm	50.6	inches *
4. Overall length of the car 全長	416.5	cm		inches
5. Overall width of the car 全幅	160.0	cm		inches
6. Overall height of the car 全高	131.0	cm		inches
7. Capacity of fuel tank (reserve included) 燃料タンク容量	13.2	Gallon US	50	ltrs Gallon Imp.
8. Seating capacity 定員	4			
9. Weight, total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools 車両重量 (冷却水、オイル、スペアタイヤを含む標準状態の車両重量、但し燃料、車載工具を除く)	930	kg	2050	lbs cwt

* 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 fixed points of the vehicle's structure 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.



Width of the car measured in the vertical plane passing through the axle of the wheels.

車軸上の車体幅

Front フロント	160.0	cm	Rear リヤ	160.0	cm
---------------	-------	----	------------	-------	----

CONVERSION TABLE

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



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CHASSIS AND COACHWORK (Photographs A, B and C)

シャーシー、ボデー

20. Chassis/body construction : ~~separate~~ / unitary construction
シャーシー / ボディーの構造 ~~separate~~ / 一体構造
21. Unitary construction, material (s) Steel
一体構造の場合その材質
22. Separate constructions: material(s) of chassis
セパレート構造の場合その材質
23. Material (s) of coachwork
ボディーの材質
24. Number of doors 2 Material (s) Steel
ドアの数 材質
25. Material (s) of bonnet Steel
ボンネットの材質
26. Material (s) of boot lid Steel
トランクリッドの材質
27. Material (s) of rear-window Glass
リヤウインドシールドの材質
28. Material (s) of windscreen Glass
フロントウインドシールドの材質
29. Material (s) of front-door windows Glass
フロントドアウインドーの材質
30. Material (s) of rear-door windows
リヤドアウインドーの材質
31. Sliding system of door windows Vertical manual
ドアウインドーの開閉方式
32. Material (s) of rear-quarter light Glass
リヤクォーターウインドーの材質

ACCESSORIES AND UPHOLSTERY

アクセサリ

38. Interior heating : yes - ~~NOX~~
39. Air-conditioning : ~~XXXX~~ - no
40. Ventilation : yes - ~~NOX~~
41. Front seats, type of seats and upholstery Separate, Vinyl
42. Weight of front seat (s), complete with supports and rails, out of the car :
12 x 2 kg lbs
43. Rear seats, type of seats and upholstery Bench, Vinyl
44. Front bumper, material (s) Steel Weight 5.0 kg lbs
フロントバンパーの材質 重量
45. Rear bumper, material (s) Steel Weight 4.0 kg lbs
リヤバンパーの材質 重量

WHEELS

ホイール

50. Type Pressed steel
形式
51. Weight (per wheel, without tyre) 5.5 kg lbs
重量
52. Method of attachment 4 Nuts
取付け方法
53. Rim diameter 330 mm 13 inches
リム径
54. Rim width 114 mm 4 $\frac{1}{2}$ inches
リム幅

STEERING

ステアリング

60. Type Recirculating ball
形式
61. Servo-assistance : ~~XXXX~~ - no
パワーステアリング ~~有~~ - 無
62. Number of turns of steering wheel from lock to lock 3.5
ロックツーロック
63. In case of servo-assistance



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SUSPENSION

サスペンション

70. Front suspension (photogr. D), type
フロントサスペンションの形式
71. Type of spring
スプリングの種類
72. Stabiliser (if fitted)
73. Number of shockabsorbers 2
ショックアブソーバーの数
78. Rear suspension (photogr. E), type
リヤサスペンションの形式
79. Type of spring
スプリングの種類
80. Stabiliser (if fitted)
81. Number of shockabsorbers 2
ショックアブソーバーの数

Mc. Pherson
Coil
Torsion bar
74. Type Hydraulic Telescopic
形式
Rigid axle
Coil
82. Type Hydraulic Telescopic
形式

BRAKES (photographs F and G)

ブレーキ

90. System
作動方式
91. Servo-assistance (if fitted), type
サーボシステムの形式
92. Number of hydraulic master cylinders 1
マスターシリンダーの数

Hydraulic
Vacuum

93. Number of cylinders per wheel
ホイール当りのシリンダー数

94. Bore of wheel cylinder (s)
ホイールシリンダーの内径

Drum Brakes

ドラムブレーキ

95. Inside diameter
ドラムの内径

96. Length of brake linings
ライニングの長さ

97. Width of brake linings
ライニングの幅

98. Number of shoes per brake
ブレーキ当りのシューの数

99. Total area per brake
1 ブレーキ当りの総摩擦面積

Disc brakes

ディスクブレーキ

100. Outside diameter
ディスクの外径

101. Thickness of disc
ディスクの厚さ

102. Length of brake linings
パッドの長さ

103. Width of brake linings
パッドの幅

104. Number of pads per brake.
ブレーキ当りのパッドの数

105. Total area per brake
1 ブレーキ当りの総摩擦面積

FRONT
フロント

REAR
リヤ

1

1

19.0

mm

in.

17.5

mm

in.

mm

in.

229

mm

in.

mm

in.

219

mm

in.

mm

in.

40

mm

in.

2

mm²

sq. in. 175 x 10

mm²

sq. in.

184

mm

in.

mm

in.

.9

mm

in.

mm

in.

97

mm

in.

mm

in.

46

mm

in.

mm

in.

2

78 x 10²

mm²

sq. in.

mm²

sq. in.



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ENGINE (photographs J and K) **

130. Cycle サイクル	4	131. Number of cylinders シリンダー数	4
132. Cylinder arrangement シリンダー配列	In - line		
133. Bore ボア	86.0 mm	134. Stroke ストローク	80.0 mm
135. Capacity per cylinder 1シリンダーの排気量	464.5		3.15 in.
136. Total cylinder-capacity 総排気量	1858		28.35 cu. in.
137. Material (s) of cylinder block シリンダーブロックの材質	Cast - iron		
138. Material (s) of sleeves (if fitted) スリーブの材質			
139. Cylinder-head, material (s) シリンダーヘッドの材質	Cast - iron	Number fitted 数	1
140. Number of inlet ports 吸気孔の数	4	141. Number of exhaust ports 排気孔の数	4
142. Compression ratio	9.0		
143. Volume of one combustion chamber	58		cm ³ cu. in.
144. Piston, material ピストンの材質	Aluminum alloy	145. Number of rings リングの数	3
146. Distance from gudgeon pin centre line to highest point of piston crown	40 mm		inches
147. Crankshaft : modified / stamped クランクシャフト : 鍛造 / 鍛造		148. Type of crankshaft : integral / XXXX クランクシャフトの形式 : 一体式 / XXXX	
149. Number of crankshaft main bearings メインベアリングの数	5		
150. Material of bearing cap ベアリングキャップの材質	Cast-iron		
151. System of lubrication : dry pump / oil in sump 潤滑方式 : ドライポンプ / ウェットサンプ			
152. Capacity, lubricant 潤滑油量	4.1 ltrs		pts quarts US
153. Oil cooler : yes / no オイルクーラー : 有 / 無		154. Method of engine cooling エンジン冷却方式	Water
155. Capacity of cooling system	7.4 ltrs		pints quarts US
156. Cooling fan (if fitted), dia.	360 mm		inches
157. Number of blades of cooling fan	6		

Bearings **
ベアリング

158. Crankshaft main, type メインベアリングの形式	Plain	Dia. 内径	60 mm	in.
159. Connecting rod big end, コンロッド大端部ベアリングの形式	Plain	Dia. 内径	53 mm	in.

Weights **

160. Flywheel (clean)	10.1 kg	lbs		
161. Flywheel with clutch (all turning parts)		15.9 kg		lbs
162. Crankshaft	17.7 kg	lbs	163. Connecting rod	0.84 kg lbs
164. Piston with rings and pin	0.55 kg	lbs		

** for additional information concerning Wankel rotary engines see page 15, 16
ロータリーエンジンは15、16頁参照



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FOUR STROKE ENGINES *, **

4サイクルエンジン

170. Number of camshafts
カムシャフトの数 1
171. location
カムシャフトの位置 Cylinder head
172. Type of camshaft drive
カムシャフトの駆動方式 Chain
173. Type of valve operation
バルブの作動方式 Rocker arm

INLET (see page 8) *, **
吸気系

180. Material(s) of inlet manifold
マニホールドの材質 Aluminum alloy
181. Diameter of valves
バルブの径 43 mm 1.69 inches
182. Max. valve lift
バルブリフト 10 mm 0.39 in.
183. Number of valve springs
バルブスプリングの数 2
184. Type of spring
バルブスプリングの種類 Coil
185. Number of valves per cylinder
シリンダー当りのバルブの数 1
186. Tappet clearance for checking timing (cold)
0.15 mm inches
187. Valves open at (with tolerance for tappet clearance indicated)
B.T.D.C $15^{\circ} \pm 7^{\circ}$
188. Valves close at (with tolerance for tappet clearance indicated)
A.B.D.C $45^{\circ} \pm 7^{\circ}$
189. Air filter, type Dry

EXHAUST (see page 8) *, **
排気系

195. Material (s) of exhaust manifold
マニホールドの材質 Cast - iron
196. Diameter of valves
バルブの径 34 mm 1.34 inches
197. Max. valve lift
バルブリフト 10 mm 0.39 in.
198. Number of valve springs
バルブスプリングの数 2
199. Type of spring
バルブ・スプリングの種類 Coil
200. Number of valves per cylinder
シリンダー当りのバルブの数 1
201. Tappet clearance for checking timing (cold)
0.30 mm inches
202. Valves open at (with tolerance for tappet clearance indicated)
B.B.D.C $50^{\circ} \pm 7^{\circ}$
203. Valves close at (with tolerance for tappet clearance indicated)
A.T.D.C $10^{\circ} \pm 7^{\circ}$

CARBURETION (photograph N)
気化器

210. Number of carburetors fitted
キャブレターの数 1
211. Type
形式 Down - draught
212. Make
製造会社 Aisan
213. Model
型式 8R
214. Number of mixture passages per carburettor
キャブレター当りのバルブ数 2
215. Flange hole diameter of exit port(s) of carburettor
キャブレター出口内径 34 & 36 mm in.
216. Minimum dimensions of mixture passage(s) with piston at max. height (example: SU)
ベンチュリーの最小寸法 (SUなどはピストン最上部で測定)
26 & 27 mm inches

INJECTION (if fitted)
燃料噴射

220. Make of pump
ポンプの製造会社
221. Number of plungers
プランジャーの数
222. Model or type of pump
ポンプの型式
223. Total number of injectors
ノズルの総数
224. Location of injectors
ノズルの位置
225. Minimum diameter of inlet pipe
吸気管の最小径 mm inches

*) for additional information concerning two-stroke engines and super-charged engines see page 14.
2サイクルエンジン、過給機付エンジンは14頁参照

**) for additional information concerning Wankel rotary engines see page 15, 16.
ロータリーエンジンは15, 16頁、参照

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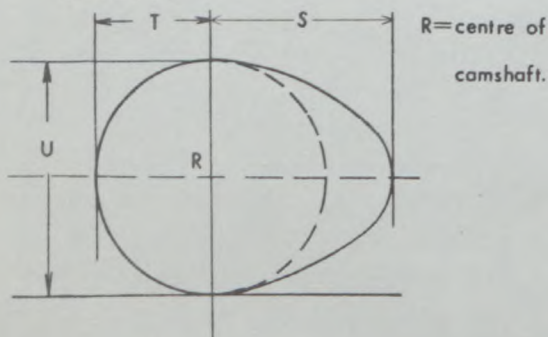
ENGINE ACCESSORIES

エンジン補機

230. Fuel pump : mechanical and / ~~or electric~~
燃料ポンプ 機械式 / ~~電気式~~
232. Type of ignition system Make & Break
点火方式
234. No. of ignition coils 1
コイルの数
236. Generator, type: ~~dynamo~~ / alternator-number fitted 1
発電器 交流 数
238. Voltage of generator 12 volts
発電機電圧
240. Location Engine room
バッテリー位置
241. Voltage of battery 12 volts
バッテリー電圧
231. No. fitted 1
ポンプの数
233. No. of distributors 1
ディストリビューターの数
235. No. of spark plugs per cylinder ~~xxxx~~ 1
シリンダー当りのプラグ数 (~~xxxxxxxx~~)
237. Method of drive V belt
駆動方式
239. Battery, number 1
バッテリーの数

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

250. Max. engine output 100 ps (type of horsepower: JIS) at 5500 rpm
251. Maximum rpm 6200 output at that figure 96 ps
252. Maximum torque 15.0 kg-m at 3600 rpm
253. Maximum speed of the car 170 km/hour miles / hour

255. Cam profile
カムプロフィールInlet cam

吸気カム

S =	26.1	mm	1.02	inches
T =	18.0	mm	0.71	inches
U =	36.0	mm	1.42	inches

Exhaust cam

排気カム

S =	26.2	mm	1.03	inches
T =	18.0	mm	0.71	inches
U =	36.1	mm	1.42	inches

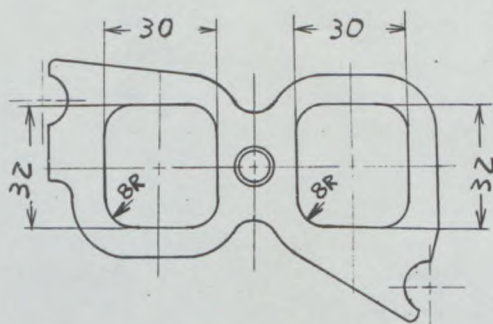


Make Toyota

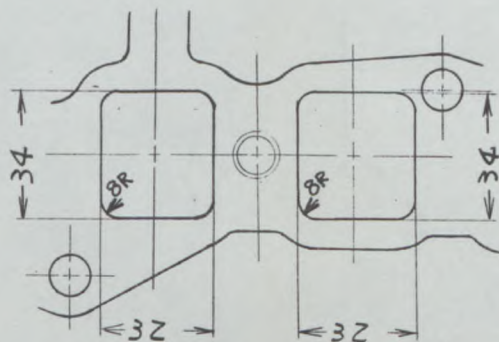
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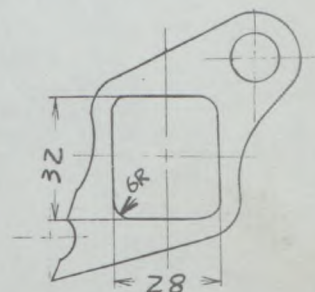
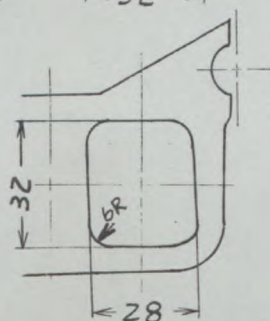
Drawing inlet
manifold ports,
side of cylinder-
head / ~~XXXX~~
scale or dimensions
and manufacturing
tolerance.



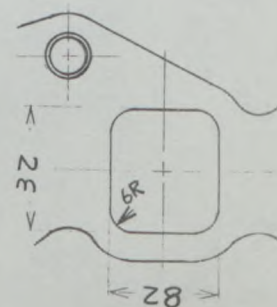
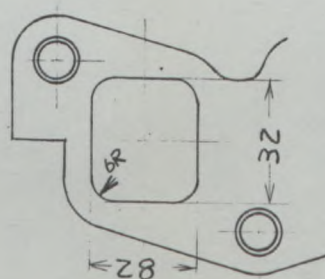
Drawing of entr-
ance to inlet
port of cylinder-
head / ~~XXXX~~
scale or dimen-
sions and manufac-
turing tolerance.



Drawing exhaust
manifold ports,
side of cylinder-
head / ~~XXXX~~
scale or dimen-
sions and manufac-
turing tolerance.



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



Unit: mm
Tolerance: 1.5



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DRIVE TRAIN

駆動系

CLUTCH

クラッチ

260. Type of clutch 形式 Dry plate
262. Dia. of clutch plates プレッシャープレートの外径 210 mm inches
263. Dia. of linings, inside フェーシングの内径 140 mm in. outside 200 mm in.
264. Method of operating clutch 作動方式 Hydraulic

261. No. of plates プレッシャープレートの数 1

GEAR BOX (photograph H)

トランスミッション

270. Manual type, make 手動式の製造会社名 Toyota
271. No. of gear-box ratios forward 前進段数 4
273. Location of gear-shift シフトレバーの位置 Floor
274. Automatic, make 自動式の製造会社名
275. No. of forward ratios 前進段数

- Method of operation 作動方式 Mechanical

272. Synchronized forward ratios 1, 2, 3 & 4

type
形式

276. Location of gear-shift シフトレバーの位置

277.	Manual 手動		Automatic 自動		Alternative manual/automatic 手動/自動			
	Ratio ギヤー比	No. teeth 歯数	Ratio ギヤー比	No. teeth 歯数	Ratio ギヤー比	No. teeth 歯数	Ratio ギヤー比	No. teeth 歯数
1	3.579	$\frac{30}{19} \times \frac{34}{15}$						
2	2.081	$\frac{30}{19} \times \frac{29}{22}$						
3	1.397	$\frac{30}{19} \times \frac{23}{26}$						
4	1.000							
5								
6								
reverse リバース	4.399	$\frac{30}{19} \times \frac{39}{14}$						

278. Overdrive, type

オーバードライブ形式

279. Forward gears on which overdrive can be selected

オーバードライブの作動段数

280. Overdrive ratio

オーバードライブ比

FINAL DRIVE

ファイナル

290. Type of final drive 形式
291. Type of differential 差動機形式 Hypoid gear
292. Type of limited slip differential (if fitted) リミテッドスリップデフの形式 Bevel gear
293. Final drive ratio ギヤー比 3.700
- Number of teeth 歯数 37/10



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Optional equipment affecting preceeding information. This to be stated together with reference number.
オプション:

NOT VALID FOR GROUP 1 ONLY

Wing extensions



Photo.

Front wing extension

(part number: 53818 - 14010)
53819 - 14010)

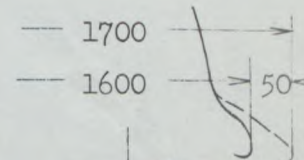


Photo.

Rear wing extension

(part number: 61619 - 14010)
61629 - 14010)

Fr:1280

Rr:1285



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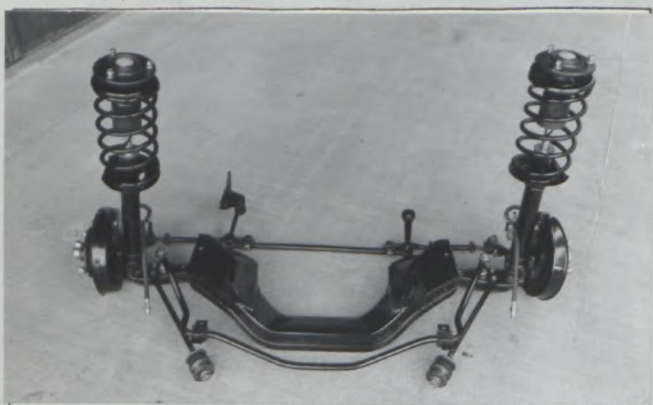
J.A.F. 公認番号 T-187
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Photograph

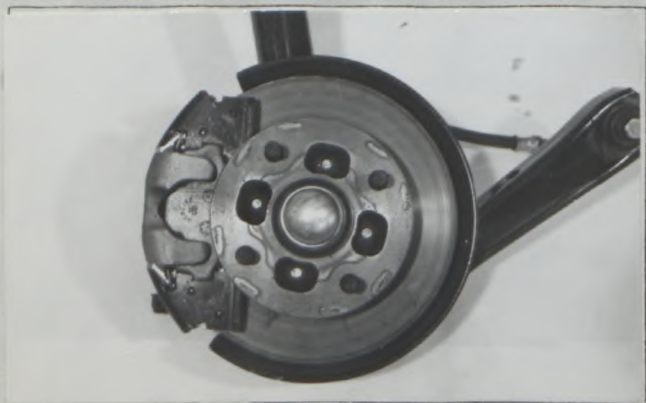
B, 3/4 view of car from rear 全体写真 (斜め後方)



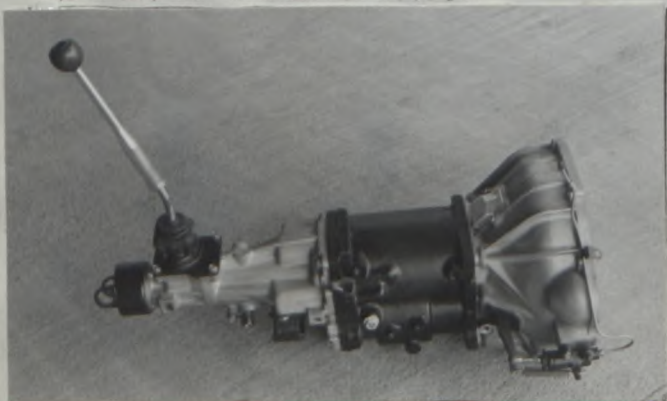
D, Front axle complete, removed from car. Without wheels.
フロントサスペンション



F, Front brake, drum removed or disc with caliper(s)
フロントブレーキ



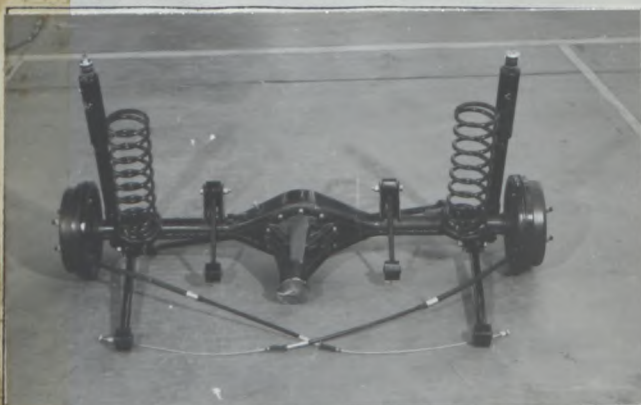
H, Gear-box, view from side トランスミッション



C, Interior view of car through driver's door (open or removed)
with dashboard 運転席附近



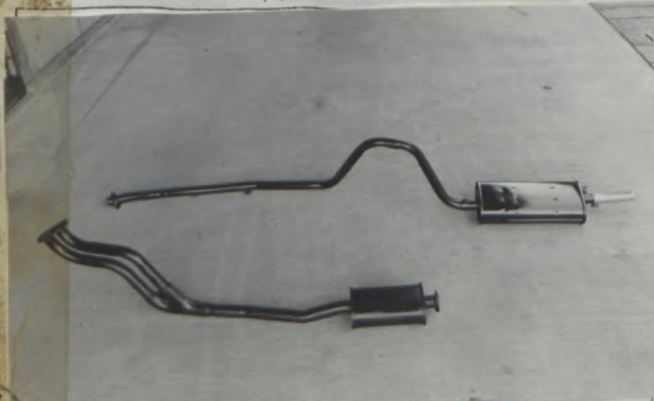
E, Rear axle complete without wheels, removed from car.
リヤサスペンション



G, Rear brake, drum removed or disc with caliper(s)
リヤブレーキ



I, Silencer + exhaust pipes after exhaust manifold. 排気系



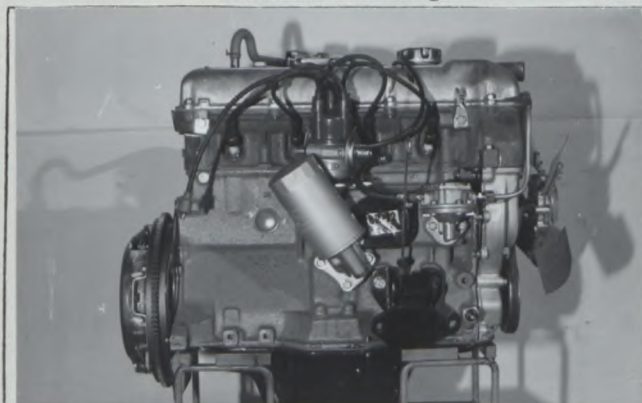
Make Toyota

Model
型式 RA20L - KA

J.A.F公認番号 T-187
F.I.A. Rec. No. 5437

Photograph

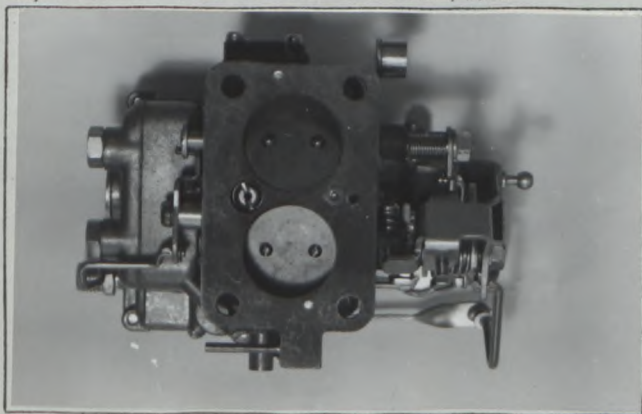
Engine unit out of car, from right. With clutch and
J, accessories but without air filter nor gear-box. エンジン右側面



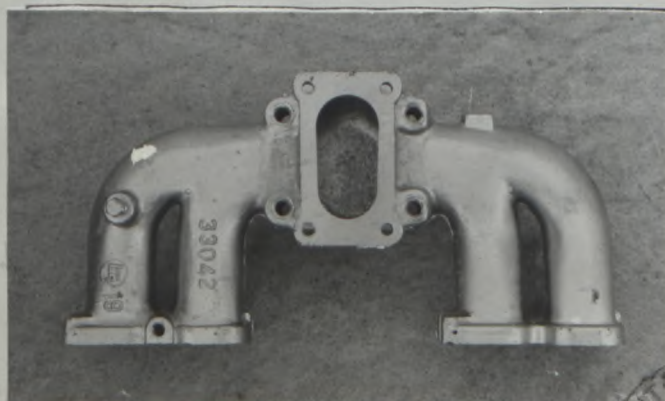
L, Combustion chamber 燃焼室/Rotor housing ローターハウジング



N, Carburettor (view from side of manifold) 気化器

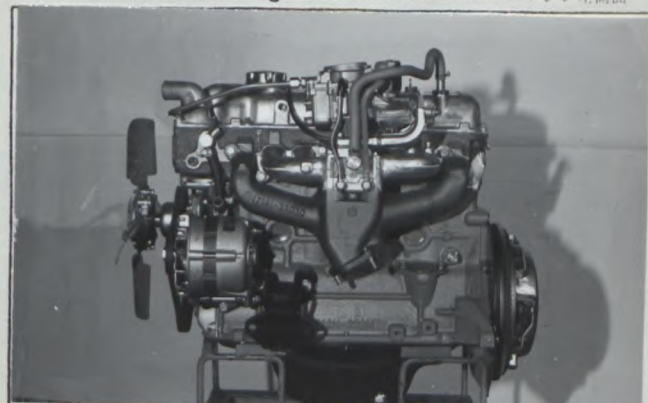


P, Inlet manifold 吸気マニホールド

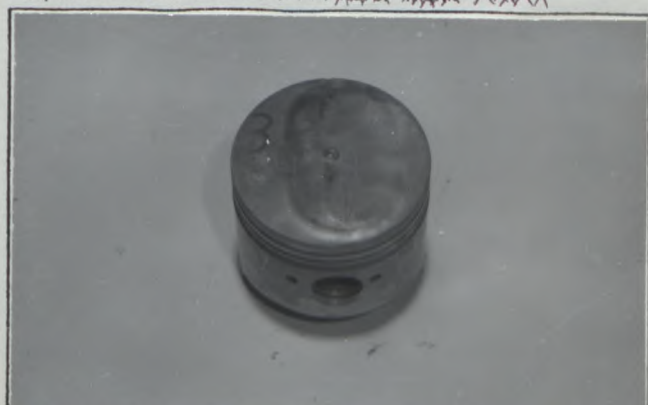


写真

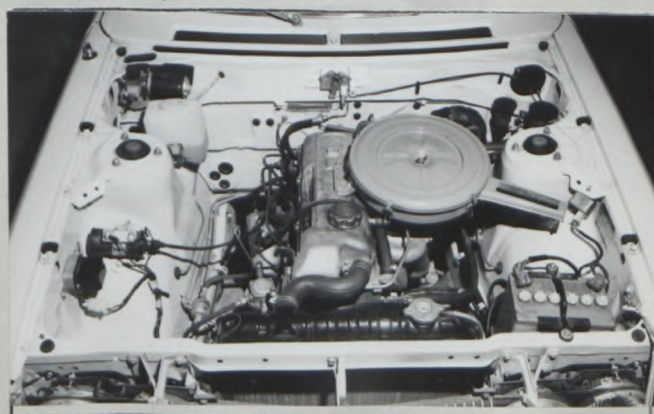
Engine unit out of car, from left. With clutch and ac-
K, cessories but without gear-box nor air filter. エンジン左側面



M, Piston crown ピストンクラウン / ~~XXXX~~ ~~XXXX~~ ~~XXXX~~



O, Engine in car with all accessories, bonnet open or removed.
エンジンルーム



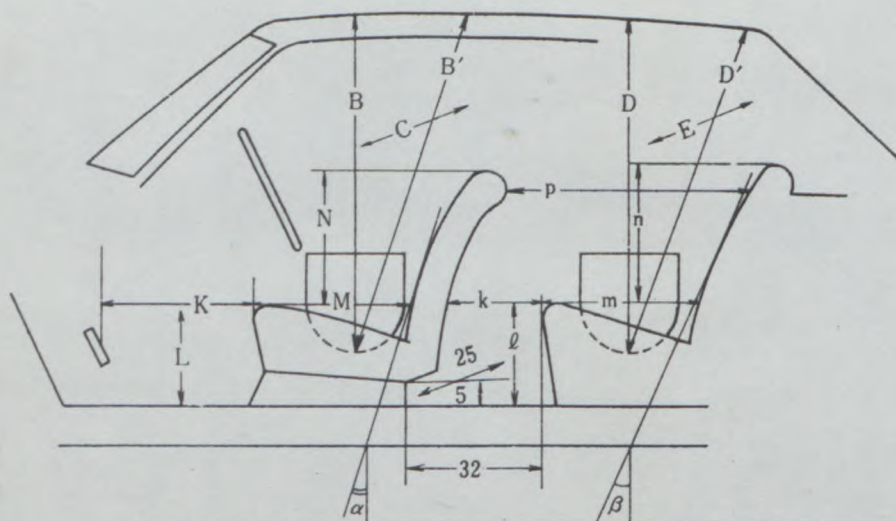
Q, Exhaust manifold 排気マニホールド



DIMENSIONS OF INTERIOR

室内寸法

(Conform to Art. 253 b of Appendix J)

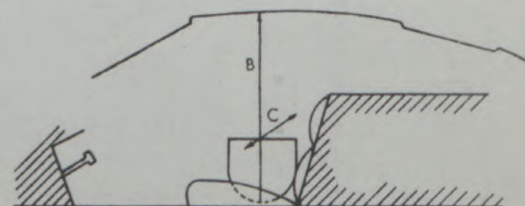
For four seaters:
4座席

Minimum Dimensions (cm)							
B	B'	α	C	D	D'	β	E
92	100	15°	131	93	92	20°	127

Minimum Dimensions (cm)										
L	ℓ	M	m	N	n	k+m	p	k	k+ ℓ +m	K+L+M
25	28	47	43	62	54	68	68	25	96	122
0.9L = 22.5		0.85M = 39.95		0.8N = 49.6		0.8(k+m) = 54.4		(15)	(95)	(120)

For two seaters:
2座席

Minimum Dimensions	
B	C
cm	cm



Make Toyota

Model RA20L - KA
型式

F.I.A. Rec. No.

TWO STROKE ENGINES

2サイクルエンジン

300. System of cylinder scavenging 掃気方式					
301. Type of lubrication 潤滑方式					
302. Inlet ports, length measured around cylinder wall 吸気孔の幅			mm		inches
303. Height inlet port 吸気孔の高さ	mm	in.	304. Area 吸気孔の総面積	mm ²	sq. in.
305. Exhaust ports, length measured around cylinder wall 排気孔の幅			mm		inches
306. Height exhaust port 排気孔の高さ	mm	in.	307. Area 排気孔の総面積	mm ²	sq. in.
308. Transfer port, length measured around cylinder wall 掃気孔の幅			mm		inches
309. Height transfer port 掃気孔の高さ	mm	in.	310. Area 掃気孔の総面積	mm ²	sq. in.
311. Piston ports, length measured around piston ピストンポートの幅			mm		inches
312. Height piston port ピストンポートの高さ	mm	in.	313. Area ピストンポートの総面積	mm ²	sq. in.
314. Method of precompression プレコンプレッション方式			315. Precompression cyl.:	yes /no	
316. Bore	mm	inches	317. Stroke	mm	inches
318. Distance from top of cyl. block to highest point of exhaust port : 排気孔の最高点とブロック上面との距離			mm		inches
319. Distance from top of cyl. block to lowest point of inlet port : 吸気孔の最下点とブロック上面との距離			mm		inches
320. Distance from top of cyl. block to highest point of transfer port : 掃気孔の最高点とブロック上面との距離			mm		inches
321. Drawing of cylinder ports. シリンダーポート展開図					

330. Supercharging—state full details hereafter :
過給器

Unit: mm

Tolerance:



Make Toyota

Model RA20L - KA
型式

F.I.A. Rec. No.

Wankel Rotary Engine (photographs J and K)

ロータリーエンジン

400.	Type & cycle 形式 及び サイクル		
401.	No of rotors ローターの数		
402.	Rotor arrangement ローターの配列		
403.	Trochoid, length of major Axis トロコイド長軸長さ	mm	in.
404.	Trochoid, length of minor Axis トロコイド短軸長さ	mm	in.
405.	Trochoid, width トロコイドの幅	mm	in.
406.	Trochoid, generating radius (Containing equidistance) トロコイドの生成半径 (平行移動量を含む)	mm	in.
407.	Eccentricity 偏心率	mm	in.
408.	Capacity per Rotor 1ローター当りの排気量	cm ³	cu. in.
409.	Total capacity 総排気量	cm ³	cu. in.
410.	Equivalent total capacity (by App. J Art. 252) 換算総排気量 (J項 252条による)	cm ³	cu. in.
411.	Material(s) of side housing サイドハウジングの材質		
412.	Material(s) of rotor housing ローターハウジングの材質		
413.	Number of inlet ports 吸気孔の数		
414.	Number of exhaust ports 排気孔の数		
415.	Compression ratio		
416.	Volume of one combustion chamber	cm ³	cu. in.
417.	Rotor material ローターの材質		
418.	Number of apex seal per rotor ローター当りのアペックスシールの数		
419.	Number of corner seal per rotor ローター当りのコーナーシールの数		
420.	Number of side seal per rotor ローター当りのサイドシールの数		



Make Toyota

Model RA20L - KA
型式

F.I.A. Rec. No.

421. Number of oil scraping ring per rotor
1 ローター当りのオイルリングの数
422. Eccentric shaft: moulded/stamped
偏心軸: 鋳造/鍛造
423. Type of eccentric shaft: integral/
偏心軸の形式: 一体式/
424. Number of eccentric shaft main bearings
メインベアリングの数

Bearing
ベアリング

440. Eccentric shaft, main
メインベアリング Type
形式
441. Rotor bearing
ローターベアリング Type
形式
- Weights

Dia. 内径 mm in.

Dia. 外径 mm in.

450. Flywheel (clean) kg
451. Flywheel with clutch (all turning parts) kg
452. Eccentric shaft kg
453. Rotor with seals, gear and bearing kg

Inlet (See page 8)
吸気系

460. Material(s) of inlet manifold
マニホールドの材質
461. Location of inlet ports
吸気孔の位置

462. Inlet port area per rotor. mm² sq. in.

463. Inlet port open at (with tolerance)
吸気孔開き始め (公差を含む)

464. Inlet port close at (with tolerance)
吸気孔閉じ終り (公差を含む)

465. Air filter type

Exhaust (See page 8)
排気系

470. Material(s) of exhaust manifold
マニホールドの材質

471. Location of exhaust Ports
排気孔の位置

472. Exhaust port area per rotor mm² sq. in.

473. Exhaust port open at (with tolerance)
排気孔開き始め (公差を含む)

474. Exhaust port close at (with tolerance)
排気孔閉じ終り (公差を含む)





JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

J.A.F. 公認番号 T-187 V-1
 発効年月日 46.12.1
 F.I.A. Homol. No. 5437
 1/V

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition accordance with
 Appendix J to the International Sporting Code.

国際スポーツ法典付則 J 項及び J A F 国内競技車両規則に従った公認書式。

Make Toyota Motor Co., Ltd. Model Toyota Celica 1900, RA20L-KA
 製造会社名 型式及び通称名
 Modification's application starts with serial No. chassis 適用シャーシ番号 RA20-000001.
 engine 適用エンジン番号 8R 0000001
 Application of this amendment started the 1st. July, 1971
 適用年月日
 Commercial denomination after application of modifications Toyota Celica 2000, RA21L-KA
 The modifications are to be considered as: Variant / ~~Normal modification of this type~~
 変型 / 正常進化
 Date amendment is valid from XXXXX List

Description of amendment 内容

Another type of engine can be selected for RA20L-KA cars as maker's option.

Photo. J

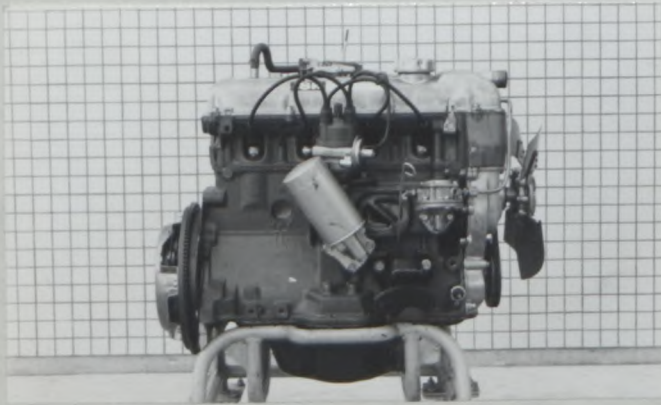
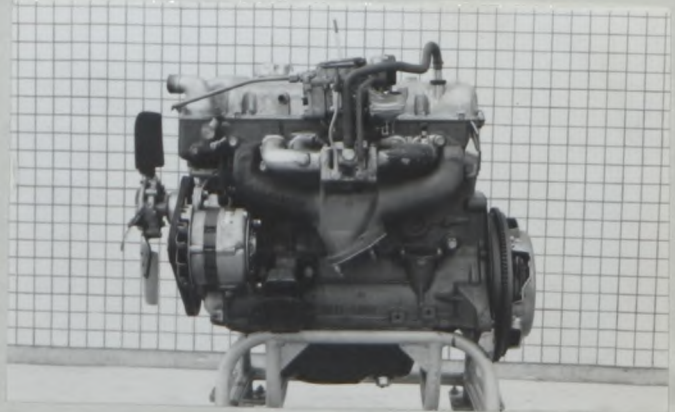


Photo. K



Further detailed specifications different from the original engine are described on attached sheets.
 The No. of chassis installed this engine include on and after RA21-000001.

Stamp and signature of the JAF

J A F 公認印及び署名

庭山博史

Hiroshi Niwayama



Stamp and signature of the F.I.A.

[Signature]

Make Toyota

Model RA21L-KA
型式

J.A.F.公認番号 T-187V-1
F.I.A. Rec. No. 5437

ENGINE(Photographs J and K)

133: Bore	88.5 mm	3.48 in.
135: Capacity per cylinder	492.1 cm ³	30.03 cu.in.
136: Total cylinder-capacity	1968 cm ³	120.10 cu.in.
142: Compression ratio	8.5	
143: Volume of one combustion chamber	65	
152: Capacity, lubricant	4.3 ltrs	

Weights

164: Piston with rings and pin	0.57 kg
--------------------------------	---------

INLET

181: Diameter of valves	41 mm	1.61 in.
187: Valves open at (with tolerance for tappet clearance indicated)	B.T.D.C 20 ⁺⁷	
188: Valves close at (with tolerance for tappet clearance indicated)	A.B.D.C 48 ⁺⁷	

EXHAUST

196: Diameter of valves	36 mm	1.42 in.
202: Valves open at (with tolerance for tappet clearance indicated)	B.B.D.C 56 ⁺⁷	
203: Valves close at (with tolerance for tappet clearance indicated)	A.T.D.C 12 ⁺⁷	

CARBURETION

213: Model	18R
216: Minimum dimensions of mixture passage(s)	with piston at max height (example 84) 23 & 29 mm

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

250: Max. engine output	105 PS (type of horsepower:JIS) at 5500 rpm
251: Maximum rpm	6200 rpm output at that figure 100 PS
252: Maximum torque	16.0 kg-m at 3800 rpm
253: Maximum speed of the car	170 km/hour



Make Toyota

Model RA21L-KA
型式

J.A.F 公認番号 T-187V-1
F.I.A. Rec. No. 5437

Photograph

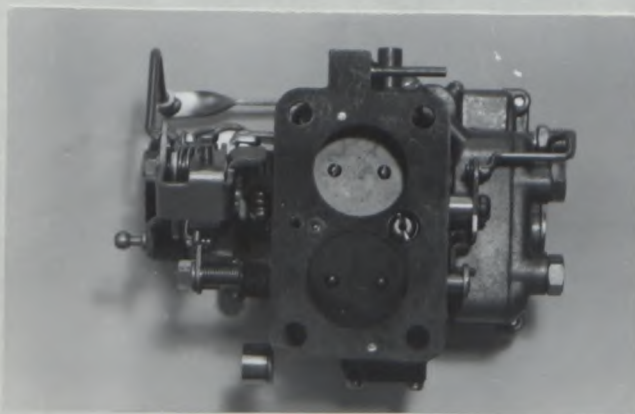
L , combustion chamber



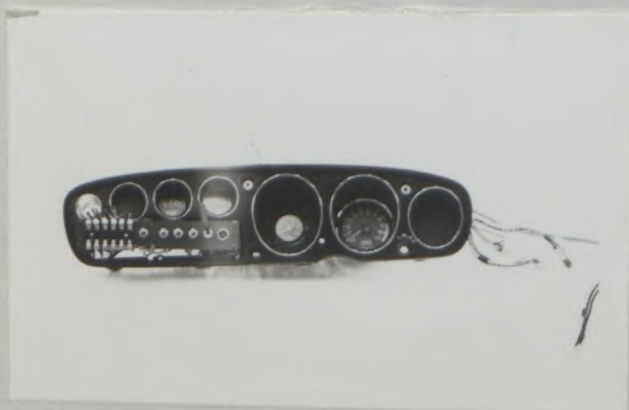
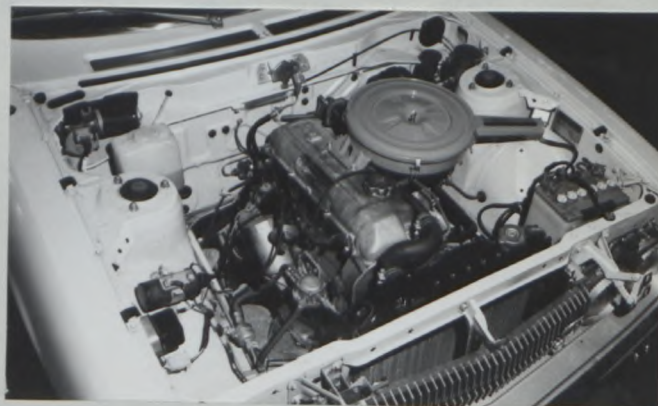
M , piston crown



N , Carburettor (view from side of manifold)



O , engine in car with all accessories, bonnet open or removed.



Dashboard





JAPAN AUTOMOBILE FEDERATION

社団 日本自動車連盟
法人

J.A.F.公認番号 T-187V-2

発効年月日 1973年 4月 30日

F.I.A. Homol. No5437

2/2v

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition accordance with
Appendix J to the International Sporting Code.

国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式

Make Toyota Motor Co., Ltd.

製造会社名

Model Toyoa Celica 1900, RA20L-KA

型式及び通称名

Modification's application starts with serial

No.

chassis 適用シャシー 型式番号 RA20-000001

engine 適用エンジン 型式番号 8R 0000001

Application of this amendment started the 1st November, 1971

適用年月日

Commercial denomination after application of modifications Toyota Celica 1900, RA20L-KA series.

The modifications are to be considered as: Variant / ~~XXXXX~~ ~~XXXXXXXXXXXX~~

変型 / ~~XXXXX~~

Date amendment is valid from

1-8-73

List

Description of amendment 内容

OPTIONAL

VALID FOR GROUP 2 ONLY

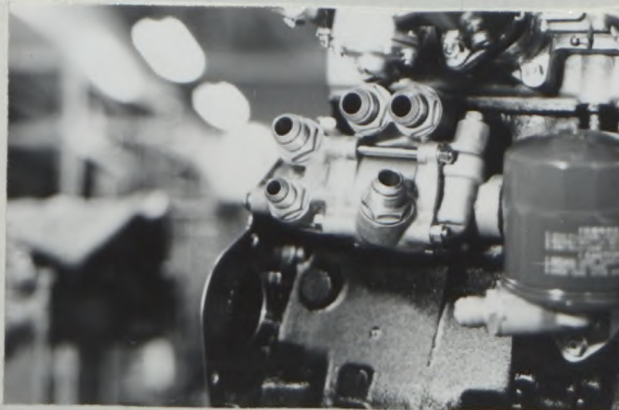
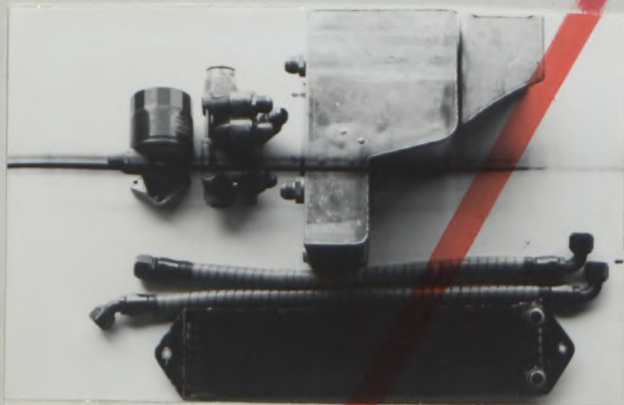
"valable en Groupe 2 uniquement"

"valid for Group 2 only"

ENGINE

151. System of lubrication : dry sump / ~~xxxxxxxxxxxx~~

152. Capacity lubrication 8.4 ltrs



Pump Assy. oil

part No. 15100-09250

Cooler Assy. oil

part No. 15710-26010

Tank Assy. oil

part No. 15740-26010

Tank Assy. bleeder

part No. 15750-26010

Flexible hose

part No. 27009-2H004

27009-2H005



Stamp and signature of the F.I.A.



JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

J.A.F.公認番号

発効年月日

F.I.A. Homol. No

T-187E-7

1973年7月31日

5437

3/1E

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition accordance with
Appendix J to the International Sporting Code.

国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

Make

製造会社名 Toyota Motor Co., Ltd.

Modification's application starts with serial

Model

型式及び通称名 Toyota Celica 1900, RA20L-KA

No.

chassis
engine

適用シャーシー型式番号

適用エンジン型式番号

RA20-00001

8R 0000001

Application of this amendment started the

適用年月日

May 1971

Commercial denomination after application of modifications

Toyota Celica 1900, RA20L series

The modifications are to be considered as: ~~variation~~ / normal evolution of the type

変型 / 正常進化

Date amendment is valid from

1.10.73

List

Description of amendment 内容

Revision of error

Disc brakes

100: Outside diameter

228 mm

Stamp and signature of the JAF

JAF公認印及び署名

難波靖昭

Yasuharu Nanba



Stamp and signature of the F.I.A.

[Signature]



JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

J.A.F.公認番号

発効年月日

F.I.A. Homol. No

T-187 V-8

1973年7月31日

5437

4/3V

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition accordance with
Appendix J to the International Sporting Code.

国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

Make Toyota Motor Co., Ltd.
製造会社名 Toyota Motor Co., Ltd.
Modification's application starts with serial No. **Model** Toyota Celica 1900, RA20L-KA
型式及び通称名 Toyota Celica 1900, RA20L-KA
chassis 適用シャーシー型式番号 RA20-000001
engine 適用エンジン型式番号 8R-0000001
Application of this amendment started the December, 1972
適用年月日 December, 1972
Commercial denomination after application of modifications Toyota Celica 1900, RA20L-KA series
The modifications are to be considered as: Variant / ~~Normal evolution of the type~~
変型 / 正常進化
Date amendment is valid from 1. 10. 73 **List**

Description of amendment 内容

OPTIONAL

VALID FOR GROUP 2 ONLY

ENGINE

147. Crankshaft: moulded

(steel)

150. Material of bearing cap:

Aluminum-alloy

WEIGHTS

160. Flywheel (clean):

3.8 kg

161. Flywheel with clutch (all turning parts):

8.3 kg

162. Crankshaft:

16.9 kg

163. Connecting rod:

0.66kg

CYLINDER-HEAD

139. Cylinder-head material:

Aluminum-alloy

170. Number of camshafts

2

173. Type of Valve operation

Direct

235. No. of spark plugs per cylinder

2

CLUTCH

261. No. of plates

2

262. Dia. of clutch plates

186 mm 7.33 inches

263. Dia. of linings, inside

132 mm 5.20 in.

outside

184 mm 7.17 in.

FINAL DRIVE

292. Type of limited slip differential Friction

STEERING GEAR BOX

60. Type

Ball screw and lever

62. Number of turns of steering wheel from lock to lock

3.0

Stamp and signature of the JAF

Stamp and signature of the F.I.A.

JAF公認印及び署名

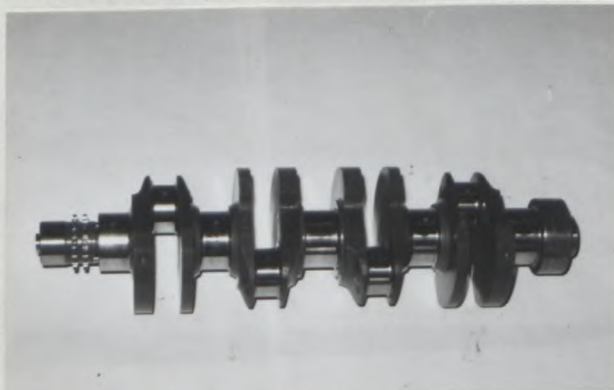
難波清治

Yasuharu Nanba



Photo.

Crankshaft (parts No. 13411-09250)



Bearing cap (part No. 11511-09250)

(part No. 11511-09251)



Flywheel (part No. 13451-09960)



"valable en Groupe 2 uniquement"
"valid for Group 2 only"

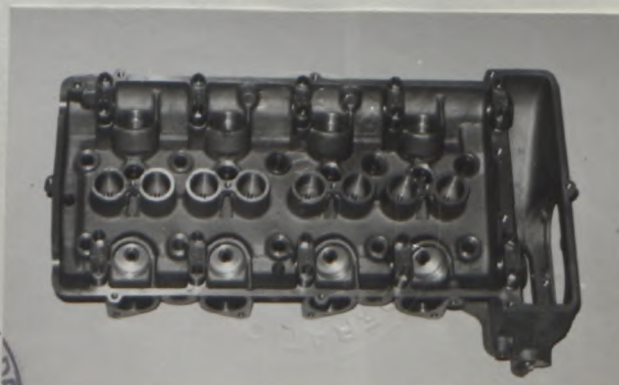
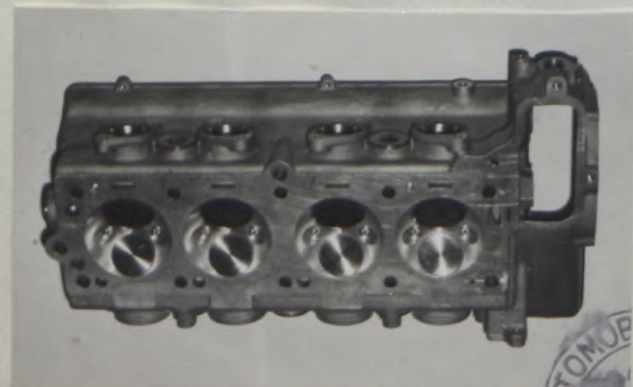
Clutch (part No. 31000-08050)



Connecting rod (part No. 13201-09250)



Cylinder-head (part No. 11111-09250)



Make Toyota

Model RA20-KA

J.A.F公認番号

F.I.A.Rec.No.

T-187U-8
5437

Photo

Diff lubrication system (parts No.
0311-05860, 41920-14010, 41910-14010)

Limited slip differential
(part No. 41301-14010)

h/3V



Front shock absorber (part No. 48510-08050) Strut bar (part No. 48603-08050)



Lower arm (part No. 48605-08050 RH,
48606-08050 LH)



Dashboard

"valable en Groupe 2 uniquement"
"valid for Group 2 only"

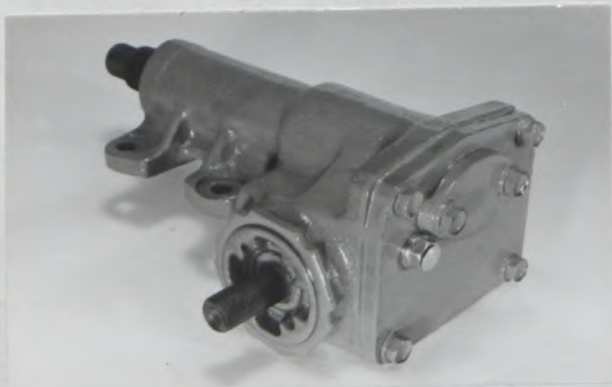


Photo

4/3V

Steering Gear box

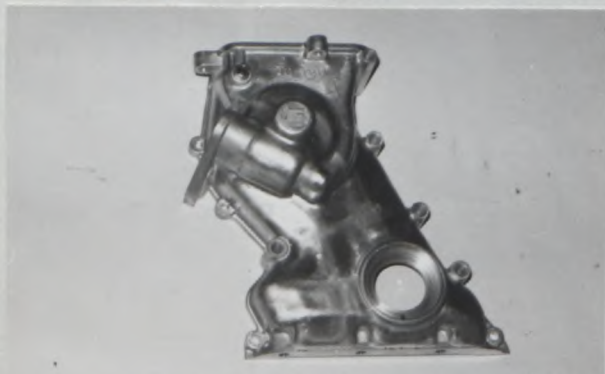
part No. 45310-05868 (RH)
45310-05869 (LH)



"valable en Groupe 2 uniquement"
"valid for Group 2 only"

Bolt on optional kit

Timing gear cover (part No. 11321-88210) Distributer (part No. 19100-09251)



Pump drive shaft (part No. 13602-09251)



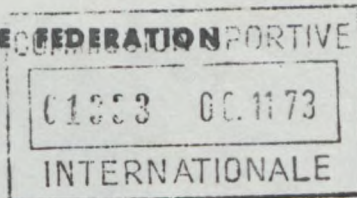
Distributer drive gear (part No. 13515-88221)





JAPAN AUTOMOBILE FEDERATION SPORTIVE

社団 日本自動車連盟
法人



J.A.F.公認番号 T-187 V-/Z

発効年月日 1973年10月31日

F.I.A. Homol. No 5437

5/hv

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

Make Toyota Motor Co., Ltd.

製造会社名

Modification's application starts with serial

Model

型式及び通称名

Toyota Celica 1900, RA20L-KA

No. chassis

適用シャーシー型式番号

RA20-000001

engine

適用エンジン型式番号

8R-0000001

Application of this amendment started the 1st October, 1973

適用年月日

Commercial denomination after application of modifications Toyota Celica 1900

The modifications are to be considered as: Variant / ~~Standard~~

変型 / 標準型

Date amendment is valid from

1.1.74

List

Description of amendment 内容

OPTIONAL EQUIPMENT

VALID FOR GROUP 2 ONLY

UNDER PROTECTOR

"valable en Groupe 2 uniquement"

"valid for Group 2 only"

Photo.Under Protector

Part No. 51447-05866

Weight. 3.0 Kg



Stamp and signature of the JAF

JAF公認印及び署名

難波靖彦

Yasuharu Nanba



Stamp and signature of the F.I.A.



JAPAN AUTOMOBILE FEDERATION

社団 日本自動車連盟
法人

J.A.F 公認番号

発効年月日

T-187 V-7

1973年8月31日

F.I.A. Homol. No.

5437

6/5V

COMMISSION SPORTIVE

01306 05.1173

INTERNATIONALE

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition accordance with
Appendix J to the International Sporting Code.

国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

Make Toyota Motor Co., Ltd. **Model** 型式及び通称名 Toyota Celica 1900, RA20L-KA
製造会社名
Modification's application starts with serial No. **chassis** 適用シャーシー型式番号 RA20
engine 適用エンジン型式番号 18R
Application of this amendment started the 1st March, 1973
適用年月日
Commercial denomination after application of modifications Toyota Celica 2000, RA21
The modifications are to be considered as: Variant / ~~Normal~~ ~~Special~~ ~~Other~~
変型 / ~~XXXX~~
Date amendment is valid from 1.1.74 **List**

Description of amendment 内容

COACHWORK

Another type of coachwork can be selected for RA20L-KA cars as maker's option.

Photo. A

3/4view of car from front



Photo. B

3/4view of car from rear



Futher detailed specification different from the original coachwork are described on the attached sheets.

The No. of chassis installed this coachwork include on and after RA21-000001 (Engine type : 18R)

Stamp and signature of the JAF

JAF公認印及び署名

難波靖彦

Yasuharu Nanba



Stamp and signature of the F.I.A.

Make Toyota

Model RA21
型式

J.A.F.公認番号 T-187v-9
F.I.A.Rec.No. 5437 6/5V

Photo. C

Interior view car through driver's door (open or removed) with dashboard.



(LT Type)



(GT Type)

CAPACITIES AND DIMENSIONS

9. Weight, total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools.

900 kg

1984 lbs





JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

J.A.F.公認番号

発効年月日

T-187V-13

1974年7月31日

F.I.A. Homol. No

5437

7/6V

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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Appendix J to the International Sporting Code.

国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

Make Toyota Motor Co., Ltd. Model Toyota Celica 1900, RA20L-KA
製造会社名 型式及び通称名
Modification's application starts with serial No. chassis 適用シャーシー型式番号 RA20-000001, RA21-000001
適用年月日 engine 適用エンジン型式 8R, 18R
Application of this amendment started the Nov, 1973
Commercial denomination after application of modifications
The modifications are to be considered as: Variant / ~~normal resolution of the type~~
変型 / 定款改定
Date amendment is valid from 1.2.75 List

Description of amendment 内容

VALID FOR GROUP 2 ONLY

Optional Equipement

ENGINE 18R (TYPE RA21) "valable en Groupe 2 uniquement"
"valid for Group 2 only"

Cylinder-head

139. Cylinder-head material(s)	Aluminum-alloy
170. Number of camshafts	2
171. Location	Cylinder-head
173. Type of valve operation	Direct

INLET

181. Diameter of valves	36 ⁺ mm
185. Number of valves per cylinder	2

EXHAUST

196. Diameter of valves	31 ⁺ mm
200. Number of valves per cylinder	2

Stamp and signature of the JAF

JAF公認印及び署名

難波靖治

Yasuharu Nanba



Make Toyota

Model RA20L-KA
型式

J·A·F 公認番号 T-187V-18

F.I.A. Rec. No. 5437

VALID FOR GROUP 2 ONLY

PHOTO Cylinder-head parts No.11111-09520

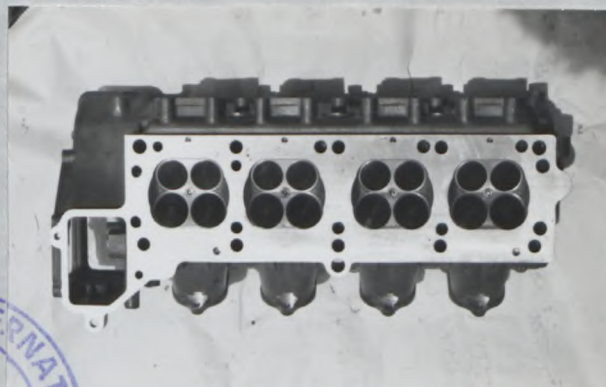
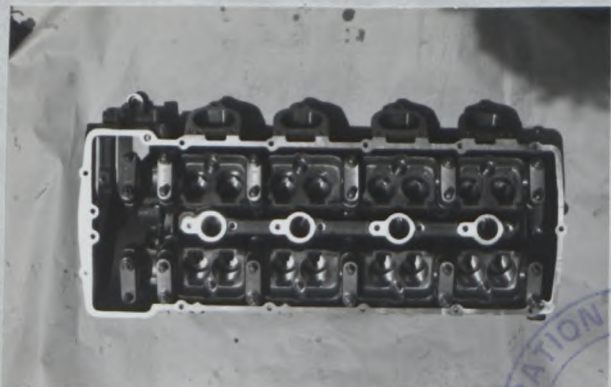
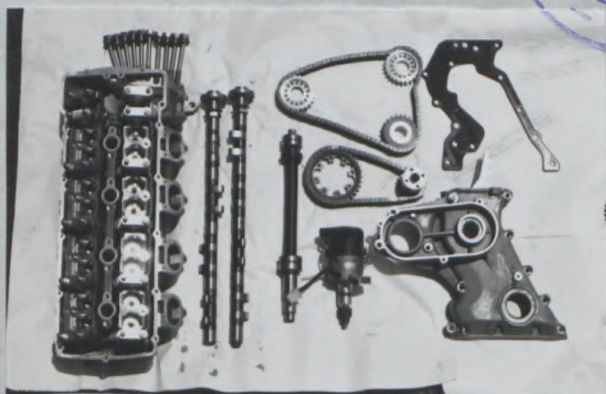


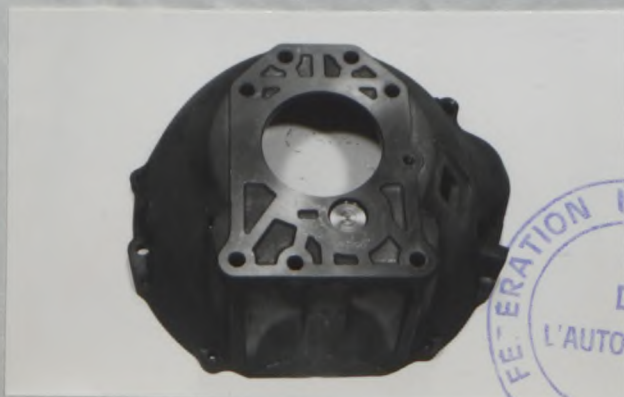
PHOTO Bolt on optional kit



Camshaft No.1	13511-09520
Camshaft No.2	13512-09520
Cover timing chain	11321-09520
Shaft pump drive	13612-09520
Distributor	19100-09520
Plate front end	11311-09520
Chain No.1	13506-33010
Chain No.2	13507-09520
Gear camshaft timing	13523-09520
Gear camshaft drive	13528-09000

Gear pump drive shaft	13522-09520
Gear camshaft timing	13521-09520
Bolt cylinder head	26921-09520

PHOTO Clutch housing parts No.31111-08052
material Magnesium alloy



valable en Groupe 2 uniquement
"valid for Group 2 only"

Make Toyota

Model RA20L-KA
型式

J.A.F.公認番号 T-187V-3
F.I.A. Rec. No. 5437

VALID FOR GROUP 2 ONLY

PHOTO Transmission case parts No.33111-08051
material Magnesium alloy



PHOTO Extension housing parts No.33103-08051
material Magnesium alloy



"valable en Groupe 2 uniquement"
"valid for Group 2 only"

PHOTO Differential carrier parts No.41101-08050
material Magnesium alloy



* These parts are applicable to [REDACTED] RA21 type cars.





JAPAN AUTOMOBILE FEDERATION

社団 日本自動車連盟
法人

J.A.F. 公認番号

T-187E-14

発効年月日

1975年3月31日

F.I.A. Homol. No 5437

8/2E

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition accordance with
Appendix J to the International Sporting Code.

国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

Make Toyota Motor Co., Ltd.
Model Toyota Celica 1900, RA20L-KA
型式及び通称名
Modification's application starts with serial No. chassis 適用シャーシー型式番号 RA20-000001, RA21-000001
engine 適用エンジン型式番号 8R, 18R
Application of this amendment started the Dec. 1971
適用年月日
Commercial denomination after application of modifications Toyota Celica 1900, 2000
The modifications are to be considered as: ~~Variant~~ normal evolution of the type
変型 / 正常進化
Date amendment is valid from 1.7.75
List

Description of amendment 内容

Revision of error

Description about item NO. 94 is wrong. Right value is following.

94. Bore of wheel cylinder 50.8 mm

Stamp and signature of the JAF

JAF公認印及び署名

難波靖治

Yasuharu Nanba



Stamp and signature of the F.I.A.



JAPAN AUTOMOBILE FEDERATION

社団 日本自動車連盟
法人

J.A.F. 公認番号

発効年月日

F.I.A. Homol. No

T-187 V-15

1975年3月31日

5437

9/7V

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

Make Toyota Motor Co., Ltd. Model Toyota Celica 1900, RA20L-KA
製造会社名 型式及び通称名
Modification's application starts with serial No. chassis 適用シャーシ型式番号 RA21-000001
適用エンジン型式番号 18R
Application of this amendment started the Jan. 1974
適用年月日
Commercial denomination after application of modifications Toyota Celica 2000, RA21
The modifications are to be considered as: Variant / ~~2000 2000 2000 2000 2000 2000~~
変型 / ~~2000 2000 2000 2000 2000 2000~~
Date amendment is valid from 1.7.75 List

Description of amendment 内容

VALID FOR GROUP 2 ONLY

OPTIONAL

PHOTO

"valable en Groupe 2 uniquement"

"valid for Group 2 only"

Reinforced front strut & spindle

Parts No. 48510-08052

Reinforced front hub

Parts No. 43511-08050



Stamp and signature of the JAF

JAF公認印及び署名

難波靖治

Yasuharu Nanba



Stamp and signature of the F.I.A.



Make Toyota

Model
型式

RA20L-KA

J.A.F.公認番号 T-187 V-15

F.I.A. Rec. No. 5437

OPTIONAL

PHOTO

Reinforced Rear axle housing

Parts No. 42110-08055



Rear Disc brake

Parts No. 42411-04090

47810-08750 (RH)

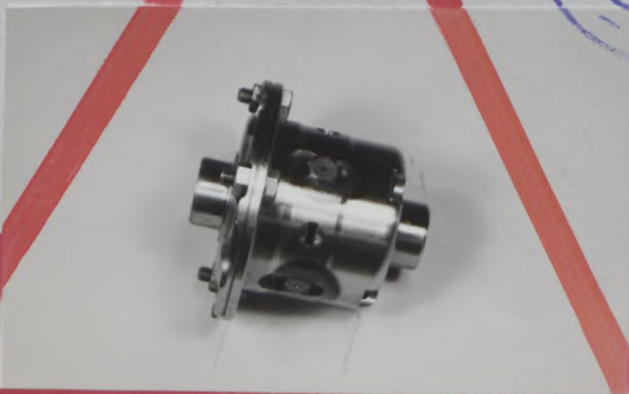
47820-08750 (LH)



Limited slip differential

292. Type of limited slip differential

Parts No. 41301-05865



friction



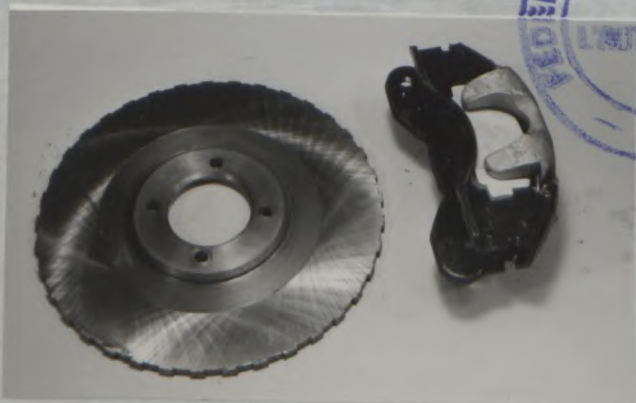
"valable en Groupe 2 uniquement"
"valid for Group 2 only"

Front Disc brake

Parts No. 43512-08055

47710-12080 (RH)

47720-12080 (LH)



Front Disc brake

Parts No. 43512-05860 (RH)

43516-05860 (LH)

47710-08050 (RH)

47720-08050 (LH)





JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

J.A.F. 公認番号

T-187V-16

発効年月日

1975年3月31日

F.I.A. Homol. No 5437

10/8V

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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Make Toyota Motor Co., Ltd. Model Toyota Celica 1900, RA20L-KA
製造会社名 型式及び通称名
Modification's application starts with serial No. chassis 適用シャーシー型式番号 RA21-000001
適用エンジン型式番号 18R
Application of this amendment started the Jan. 1974
適用年月日
Commercial denomination after application of modifications Toyota Celica 2000, RA21
The modifications are to be considered as: Variant / normal modification of the type
変型 / 正常変型
Date amendment is valid from 1.7.75 List

Description of amendment 内容

Another type of engine and gear box can be selected as maker's option.

ENGINE

Photo. J

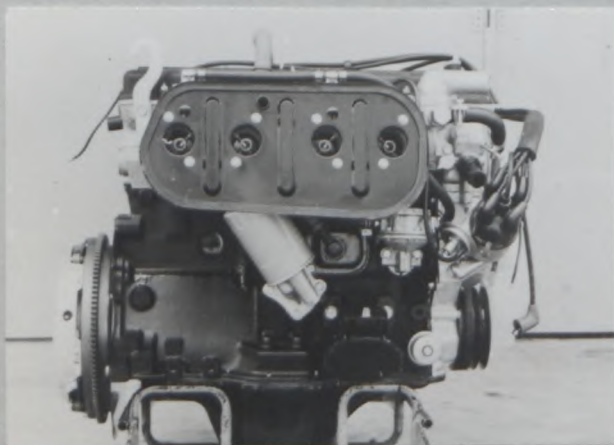
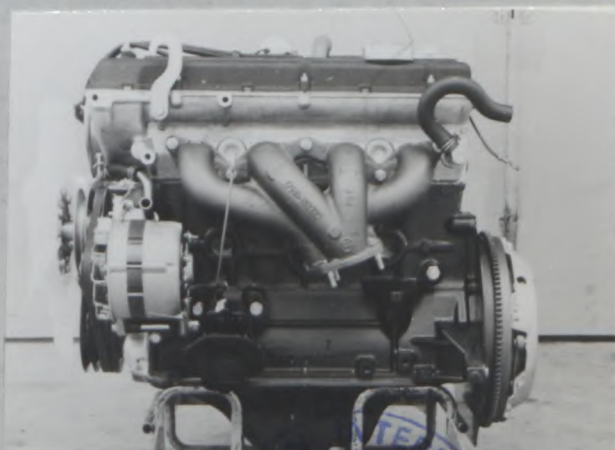


Photo. K



Weight of the car installed this engine (DOHC 2000cc Engine)

9. Weight 905 kg

1995 lbs

Stamp and signature of the JAF

JAF公認印及び署名

難波靖治

Yasuharu Nanba



Stamp and signature of the F.I.A.



ENGINE (photographs J and K)

139. Cylinder-head, material (s)	Aluminum-alloy
142. Compression ratio	9.4
143. Volume of one combustion chamber	73.4 cm ³
146. Distance from gudgeon pin center line to highest point of piston crown	45 mm
155. Capacity of cooling system	8.5 ltrs
156. Cooling fan (if fitted), dia	380 mm
157. Number of blades of cooling fan	6

Weights **

160. Flywheel (clean)	7.7 kg
161. Flywheel with clutch (all turning parts)	14.0 kg
162. Crankshaft	17.7 kg
163. Connecting-rod	0.78 kg
164. Piston with rings and pin	0.64 kg

FOUR STROKE ENGINES **, **

170. Number of camshafts	2
173. Type of valves operation	Direct

INLET (see page 4)

181. Diameter of valves	45 mm	1.77 inches
182. Max. valves lift	9.5 mm	0.37 inches
183. Number of valve springs	1	
186. Tappet clearance for checking timing (cold)		0.29 mm
187. Valves open at (with tolerance for tappet clearance indicated)	B.T.D.C	33° ± 10°
188. Valves close at (with tolerance for tappet clearance indicated)	A.B.D.C	89° ± 10°

EXHAUST (see page 4)

196. Diameter of valves	37 mm	1.46 inches
197. Max. valves lift	9.5 mm	0.37 inches
198. Number of valve springs	1	
201. Tappet clearance for checking timing (cold)		0.34 mm
202. Valves open at (with tolerance for tappet clearance indicated)	B.B.D.C	67° ± 10°
203. Valves close at (with tolerance for tappet clearance indicated)	A.T.D.C	43° ± 10°



Make Toyota

Model
型式

RA20L-KA

J.A.F.公認番号 T-187V-16

F.I.A. Rec. No. 5437

10/8V

CARBURETION (photograph N)

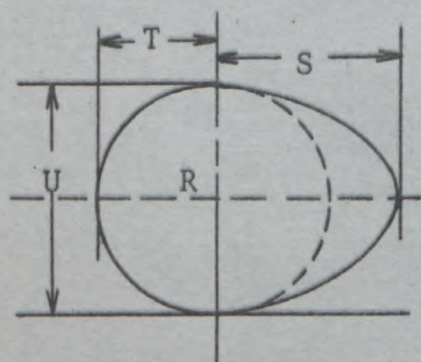
- | | |
|--|------------|
| 210. Number of carburettors fitted | 2 |
| 211. Type | Side draft |
| 212. Make | Mikuni |
| 213. Model | 18R-G |
| 215. Flange hole diameter of exit port(s) of carburettor | 40 mm |
| 216. Minimum dimensions of mixture pasage(s) | 32 mm |

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

- | | |
|--------------------------------|--|
| 250. Max. engine output 145 ps | (type of horsepower: JIS) at 6400 rpm. |
| 251. Maximum rpm 6800 rpm | output at that figure 140 ps |
| 252. Maximum torque 18.0 kg-m | at 5200 rpm |
| 253. Maximum speed of the car | 195 km / hour |



255. Cam profile



R = center of camshaft.

Inlet cam

- | | |
|-------------|-------------|
| S = 27.8 mm | 1.09 inches |
| T = 18.0 mm | 0.70 inches |
| U = 36.1 mm | 1.42 inches |

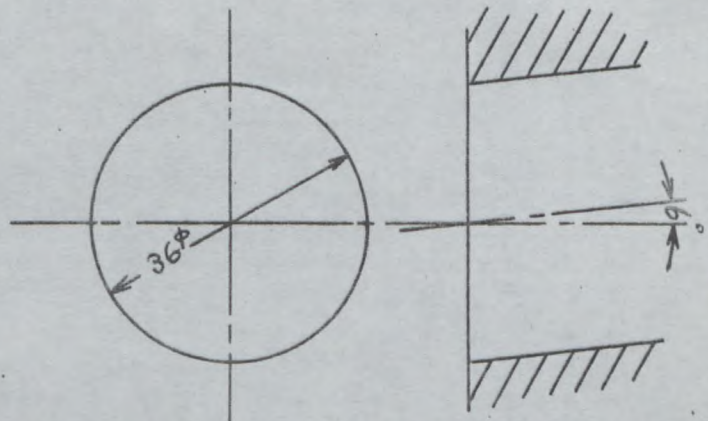
Exhaust cam

- | | |
|-------------|-------------|
| S = 27.8 mm | 1.09 inches |
| T = 18.0 mm | 0.70 inches |
| U = 36.1 mm | 1.42 inches |

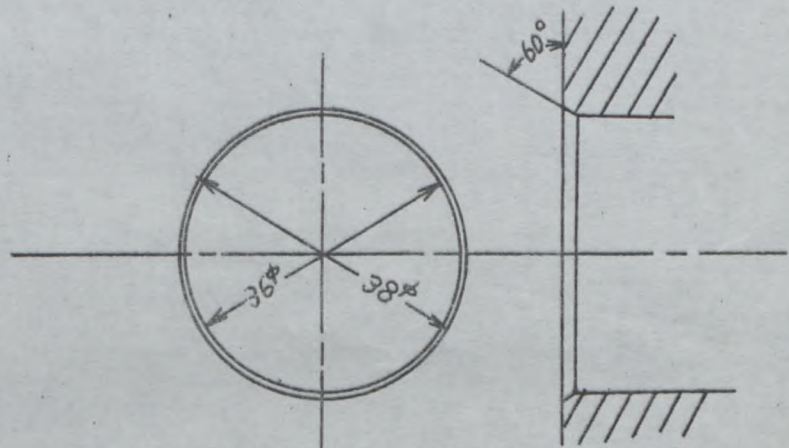


10/8V

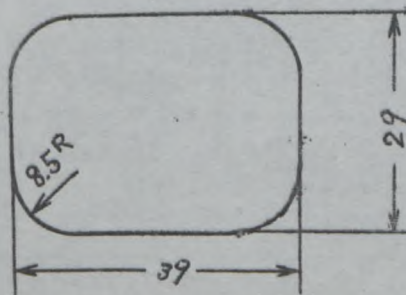
Drawing inlet manifold ports.
Side of cylinderhead.
Indicate scale or dimensions and manufacturing tolerance.



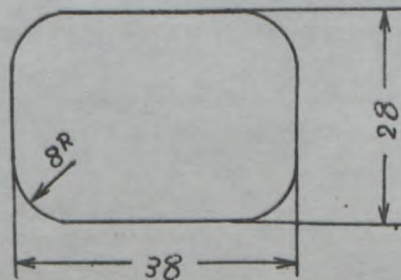
Drawing of entrance to inlet port of cylinderhead.
Indicate scale or dimensions and manufacturing tolerance.



Drawing 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.



Make Toyota

Model
型式

RA20L-KA

J.A.F.公認番号 T-187V-16

F.I.A. Rec. No. 5437

10/8V

L. combustion chamber

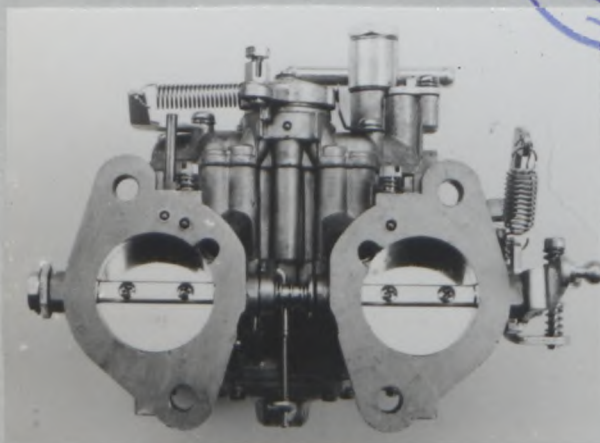


M. piston crown

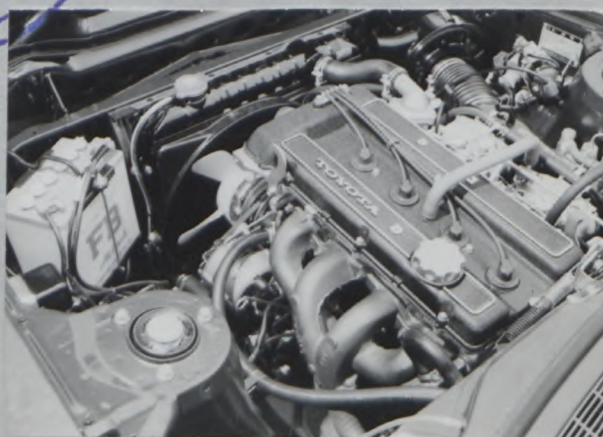


N. carburettor

(view from side of manifold)

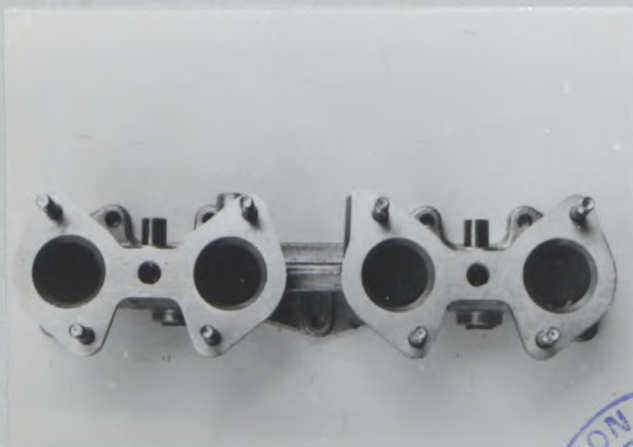


engine in car with all accessories,
bonnet open or removed.



10/80

P. inlet manifold



Q. exhaust manifold

I. silencer + exhaust pipes after
exhaust manifold.

◦ REBORING DIMENSION

* Max Bore	88.8	mm	3.496	inches
** Max capacity per cylinder	495.4	cm ³	30.23	cu.in
*** Max toral cylinder capacity	1982	cm ³	121	cu.in

◦ COMBUSTION CHAMBER

* Volume of one combustion chamber of cylinder head.

57.0 cm³ 3.48 cu.in

* Thickness of cylinder headgasket when compressed.

1.0 ~ 1.2 mm



Make Toyota

Model 77式 RA20L-KA

J.A.F. 公認番号 T-187V-16
F.I.A. Rec. No. 5437

GEAR BOX

Photograph type P parts No. 33020 - 14081

10/8V



271. No. of gear box ratios forward 5
272. Synchronized forward ratios 1, 2, 3, 4, 5
277.

	Manual		Alternative manual	
	Ratio	No. teeth	Ratio	No. teeth
1	3.53	$\frac{31}{23} \times \frac{34}{13}$	2.63	$\frac{29}{25} \times \frac{34}{15}$
2	2.05	$\frac{31}{23} \times \frac{33}{21}$	1.64	$\frac{29}{25} \times \frac{31}{22}$
3	1.40	$\frac{31}{23} \times \frac{29}{28}$	1.21	$\frac{29}{25} \times \frac{26}{25}$
4	1.00		1.00	
5	0.86	$\frac{31}{23} \times \frac{21}{33}$	0.86	$\frac{29}{25} \times \frac{23}{31}$
Reverse	3.76	$\frac{31}{23} \times \frac{39}{14}$	3.23	$\frac{29}{25} \times \frac{39}{14}$

FINAL DRIVE

293. Final drive ratio 3.91 5.125
Number of teeth 43/11 41/8



Make Toyota

Model RA20L-KA
型八

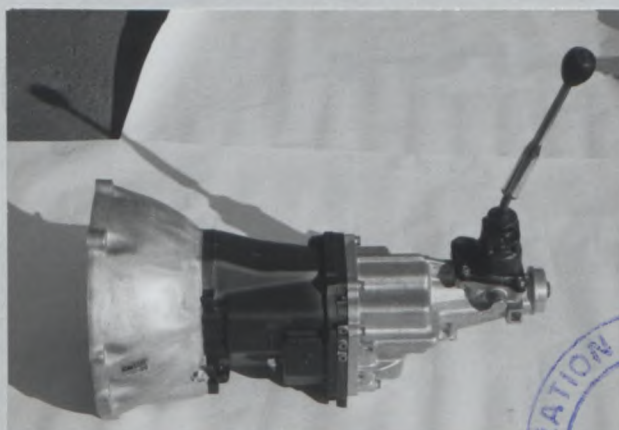
J.A.F. 公認番号 T-187V-16

F.I.A. Rec. No. 5437

GEAR BOX

10/8V

Photograph type W parts No. 33020 - 14071



271. No. of gear box ratios forward

272. Synchronized forward ratios

277.

1, 2, 3, 4, 5

	Manual		Alternative manual	
	Ratio	No. teeth	Ratio	No. teeth
1	3.29	$\frac{29}{20} \times \frac{34}{15}$	2.40	$\frac{29}{25} \times \frac{31}{15}$
2	2.04	$\frac{29}{20} \times \frac{31}{22}$	1.59	$\frac{29}{25} \times \frac{30}{22}$
3	1.39	$\frac{29}{20} \times \frac{25}{26}$	1.16	$\frac{29}{25} \times \frac{25}{25}$
4	1.00		1.00	
5	0.85	$\frac{29}{20} \times \frac{20}{34}$	0.88	$\frac{29}{25} \times \frac{23}{30}$
Reverse	4.04	$\frac{29}{20} \times \frac{39}{14}$	3.23	$\frac{29}{25} \times \frac{39}{14}$

FINAL DRIVE

292. Type of limited slip differential

friction

293. Final drive ratio

3.91

4.875

Number of teeth

43/11

39/8





JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

J.A.F.公認番号 T-187 V-19
発効年月日 昭和51年7月31日
F.I.A. Homol. No 5437 M19V

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition accordance with
Appendix J to the International Sporting Code.
国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

02799 06.3.76

INTERNATIONALE

Make Toyota Motor Co., Ltd.

製造会社名

Modification's application starts with serial

Model

型式及び通称名

Toyota Celica 1900, RA20L-KA

No.

chassis

適用シャーシー型式番号

RA21

engine

適用エンジン型式

18R

Application of this amendment started the
適用年月日

1st. May 1974

Commercial denomination after application of modifications

Toyota Celica Series

The modifications are to be considered as: Variant / abnormal evolution of the type

変型

-1.OCT.1976

List

Description of amendment 内容

VALID FOR GROUP 2 ONLY

OPTION

BRAKE (Disc brake on front)

- 53) Number of cylinders per wheel
- 54) Bore of cylinder(s)
- 58) Width of brake lining
- 59) Number of pads per brake
- 60) Total area per brake

2

52.4 mm

53 mm

2

7700 mm²

Photo F: Front brake, disc with callipers



Part No. (47710 - 05860 (RH)
47720 - 05860 (LH))

"Valable en Groupe 2 uniquement."
"valid for Group 2 only"

BRAKE (Drum on rear)

- 54) Bore of cylinder(s)

20.6 mm & 22.2 mm

Stamp and signature of the JAF

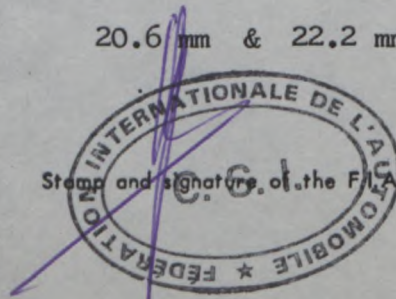
JAF公認印及び署名

難波靖治

Yasuharu Nanba



Stamp and signature of the F.I.A.



会社名
Make TOYOTA

型式
Model RA20L-KA

FIA Rec. No. 5437

REINFORCED FRONT LOWER ARM

Photo: Reinforced front lower arm



Part No. (48068 - TA051 - A (RH))
(48069 - TA051 - A (LH))





JAPAN AUTOMOBILE FEDERATION

社団 日本自動車連盟
法人

J.A.F. 公認番号 T - 187V-18
発効年月日 昭和51年7月31日

F.I.A. Homol. No 5437 12/10V

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition accordance with
Appendix J to the International Sporting Code.

国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

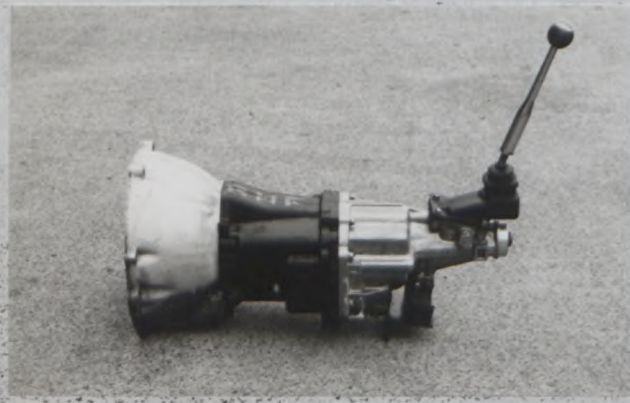
Make Toyota Motor Co., Ltd. Model Toyota Celica 1900, RA20L - KA
製造会社名
Modification's application starts with serial No. chassis 適用シャーシ型式番号 RA21
適用エンジン型式 18R
Application of this amendment started the 1st. May 1974
適用年月日
Commercial denomination after application of modifications Toyota Celica Series
The modifications are to be considered as: Variant / ~~variant~~ ~~exclusion of the type~~
変型 / ~~XXXXX~~
Date amendment is valid from -1.OCT.1976 List

Description of amendment 内容

OPTION

GEAR - BOX

Photo: Gear - box (profile)



(Part No. 33020 - 14081)

Stamp and signature of the JAF

JAF公認印及び署名

難波靖治

Yasuharu Nanba



Stamp and signature of the F.I.A.

会社名
Make

TOYOTA

型式
Model

RA20L-KA

FIA Rec. No.

5437

93) Number of gear-ratios Forward
96)

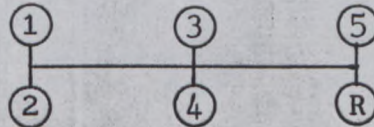
5

	Alternative manual	
	Ratio	Nr. teeth
1	3.53	$\frac{31}{23} \times \frac{34}{13}$
2	2.05	$\frac{31}{23} \times \frac{32}{21}$
3	1.40	$\frac{31}{23} \times \frac{29}{28}$
4	1.00	
5	0.86	$\frac{31}{23} \times \frac{21}{33}$
Rev.	3.76	$\frac{31}{23} \times \frac{31}{14} \times \frac{39}{31}$

215) Number of forward synchronised ratios

1,2,3,4 & 5

GEAR CHANGE GATE



会社名
Make

TOYOTA

型式
Model

RA20L-KA

FIA Rec. No.

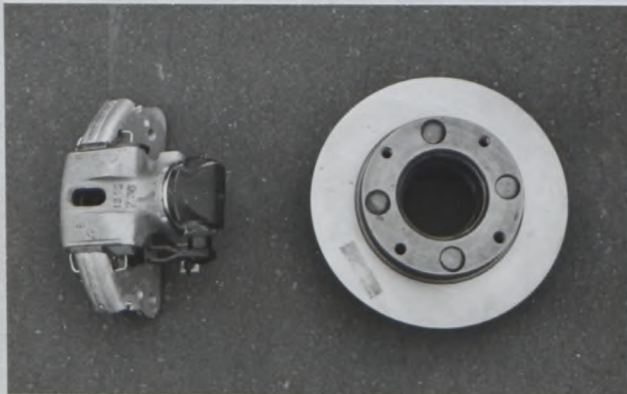
5437 13/11V

BRAKE (DISC BRAKE ON REAR)

54) Bore	41.3 mm
58) Width of brake linings	30 mm
59) Number of pads per brake	2
60) total area per brake	5516 mm ²

Calipers, incorporating mechanical hand brake mechanism.

Photo : caliper with disc



100) : Disc diameter: 230 mm

Disc

Part No, 43512 - 08050

Caliper

Part No, 47810 - 08050 (RH)
47820 - 08050 (LH)

"valable en Groupe 2 uniquement"

"valid for Group 2 only"





JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

J.A.F. 公認番号

発効年月日

T-187 V-21
昭和52年10月30日
F.I.A. Homol. No 5437 14/12J

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition accordance with
Appendix J to the International Sporting Code.

国際スポーツ法典付則J項及びJAF国内競技車両規則に従った公認書式。

Make Toyota Motor Co., Ltd. **Model** Toyota Celica 1900 , RA20L-KA
製造会社名 型式及び通称名
Modification's application starts with serial No. chassis 適用シャーシー型式番号 RA21
適用エンジン型式 18R
Application of this amendment started the 1st. Oct. 1977
適用年月日
Commercial denomination after application of modifications Toyota Celica series.
The modifications are to be considered as: Variant / ~~normal evolution of the type~~
変型 / ~~XXXXXX~~
Date amendment is valid from -1 FEB. 1978 **List**

Description of amendment 内容

REINFORCED REAR AXLE
photo ; reinfocec rear axle



Part No, 42110 - 08051

"valable en Groupe 2 uniquement"
"valid for Group 2 only"



Stamp and signature of the JAF

JAF公認印及び署名

難波靖治

Yasuharu Nanba



Stamp and signature of the F.I.A.

[Signature]

会社名
Make

TOYOTA

型式
Model

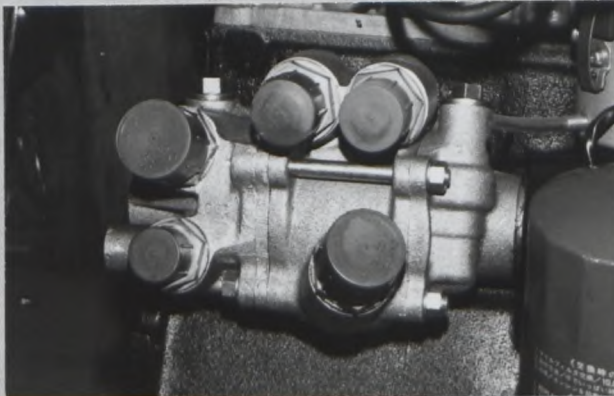
RA20L-KA

FIA Rec. No.

5437 14/12V

80) Lubrication system ; Dry sump

Photo : oil dry sump system



Pump assy oil

Part No, 15100 - 09250

Cooler assy oil

Part No, 15710 - TA001

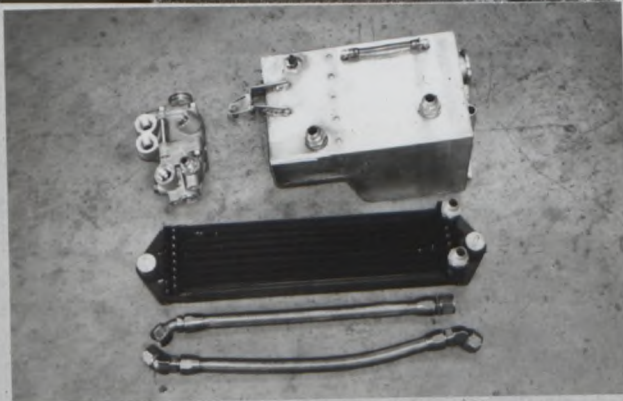
Tank assy oil

Part No, 15740 - 26010

Flexible hose

Part No, 27009 - 2H004

27009 - 2H005



"valable en Groupe 2 uniquement"
"valid for Group 2 only"



会社名
Make

TOYOTA

型式
Model

RA20L-KA

FIA Rec. No.

5437

14/12J

REAR SPOILER

photo ; rear spoiler



Part No, 64005 -TA001

96) GEAR BOX

"valable en Groupe 2 uniquement"
"valid for Group 2 only"

Alternative manual		
	Ratio	Number of teeth
1	2.26	$\frac{29}{20} \times \frac{28}{18}$
2	1.51	$\frac{29}{20} \times \frac{27}{26}$
3	1.18	$\frac{29}{20} \times \frac{22}{27}$
4	1.00	
5	0.88	$\frac{29}{20} \times \frac{20}{33}$
Rev.	4.04	$\frac{29}{20} \times \frac{31}{14} \times \frac{39}{31}$



FINAL DRIVE

103) Number of teeth

37/7, 43/8, 40/7, 37/6

104) Ratio

5.29, 5.38, 5.71, 6.17





JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

REPORT ON MOTOR VEHICLE PRODUCTION

生産証明書

Sub-Commission of Recognition

Date 13th July 1976

International Sporting Commission

年月日

FEDERATION INTERNATIONALE OF AUTOMOBILE

Manufactured by

Toyota Motor Co., Ltd.

製造者名

Name of the Car

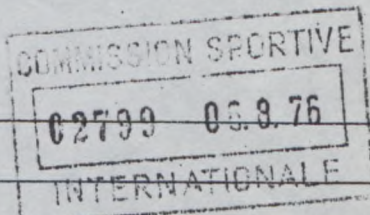
Toyota Celica 1900 , RA20L - KA

適用車名, 型式

Production Number of

the car with following optional equipment.

生産台数



Month/ Year 年月	NUMBER				
	A	B	C	D	E
Jun. '75	1702				
Jul. '75	1814				
Aug. '75	1796				
Total 合計	5312				
Remarks 注					
A : the car with another type 5 speed manual transmission.					

I hereby swear that the production of this name of the car

上記の通り確かに生産したことを

has been certainly done as above.

証明いたします。

Signature

署名

KOOICHI TANAKA

Position

所属, 役職

Manager

Toyota Motor Co., Ltd.

Signature

Position

Certified by

JAPAN AUTOMOBILE FEDERATION

難波靖治

Yasuharu Nanba



JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

REPORT ON MOTOR VEHICLE PRODUCTION

生産証明書

Sub-Commission of Recognition

International Sporting Commission

FEDERATION INTERNATIONAL OF AUTOMOBILE

Date 25th Oct. 1977
年月日

Manufactured by
製造者名

Toyota Motor Co., Ltd.

Name of the Car
適用車輛名, 型式

Toyota Celica 1900 RA20L-KA

Production Number of
生産台数

the car with following optional equipment.

Month/ Year 年月	NUMBER				
	A	B	C	D	E
Apr. '75	114				
May '75	126				
Jun. '75	118				
Jul. '75	122				
Aug. '75	119				
Sep. '75	102				
Oct. '75	105				
Nov. '75	122				
Dec. '75	116				
Total 合計	1044				
Remarks 注 the car with the gear-box.					

I hereby swear that the production of this name of the car with the gear-box.
上記の通り確かに生産したことを

has been certainly done as above.
証明いたします。

Signature
署名

Genyo Murase
GENYO MURASE

Signature

Position
所属, 役職

Asistant Manager
Technical administration Dept.
Toyota Motor Co., Ltd.

Position

Certified by

JAPAN AUTOMOBILE FEDERATION

難波靖治

Yasuharu Nanba



JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

REPORT ON MOTOR VEHICLE PRODUCTION

生産証明書

Sub-Commission of Recognition

International Sporting Commission

FEDERATION INTERNATIONAL OF AUTOMOBILE

Date 25th Oct. 1977
年月日

Manufactured by
製造者名

Toyota Motor Co., Ltd.

Name of the Car
適用車名, 型式

Toyota Celica 1900 RA20L-KA

Production Number of
生産台数

the car with following optional equipment.

Month/ Year 年月	NUMBER				
	A	B	C	D	E
Aug. '75	212				
Sep. '75	218				
Oct. '75	199				
Nov. '75	201				
Dec. '75	190				
Jan. '76	148				
Total 合計	1168				
Remarks 注 the car with the air spoiler.					

I hereby swear that the production of this name of the car with the air spoiler.
上記の通り確かに生産したことを

has been certainly done as above.
証明いたします。

Signature
署名

Genyo Murase
GENYO MURASE

Signature

Position
所属, 役職

Asistant Manager
Technical administration Dept.
Toyota Motor Co., Ltd.

Position

Certified by

JAPAN AUTOMOBILE FEDERATION

難波靖治

Yasuharu Nanba